The Impact of Academic Advising Using a Learning Centered Model on the College Experience and Advisor/Advisee Relationships Among Traditional-Aged College Freshmen

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THE IMPACT OF ACADEMIC ADVISING USING A LEARNING CENTERED
MODEL
ON THE COLLEGE EXPERIENCE AND ADVISOR/ADVISEE
RELATIONSHIPS AMONG TRADITIONAL-AGED COLLEGE FRESHMEN

A DISSERTATION

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Montclair State University in partial fulfillment
of the requirements
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by
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Upper Montclair, NJ
2014

Dissertation Co-Chairs: Dr. Larry Burlew & Dr. Matthew Shurts
MONTCLAIR STATE UNIVERSITY
THE GRADUATE SCHOOL
DISSERTATION APPROVAL

We hereby approve the Dissertation

THE IMPACT OF ACADEMIC ADVISING USING A LEARNING CENTERED
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RELATIONSHIPS AMONG TRADITIONAL-AGED COLLEGE FRESHMEN

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ABSTRACT

THE IMPACT OF ACADEMIC ADVISING USING A LEARNING CENTERED MODEL ON THE COLLEGE EXPERIENCE AND ADVISOR/ADVISEE RELATIONSHIPS AMONG TRADITIONAL-AGED COLLEGE FRESHMEN

by Sarah Vandermark

Academic advising is becoming an increasingly important resource on college campuses for purposes of retention, persistence, and student satisfaction. Researchers have found that an academic advisor can play a key role in the academic and personal lives of undergraduate students. If engagement with students matters for learning and persisting towards graduation, then there is a need to identify and evaluate quality academic services, including academic advising, and what are effective methods to enhance student learning and acclimating to a university. In this study, I focused on academic advising using the learning centered approach to advising, which was implemented through a freshmen seminar. Academic advisors taught their own advisees during the fall semester in the freshmen seminar course which met weekly. This qualitative action research study was designed to learn about freshmen students’ perception on the overall experience with their academic advisor both teaching and advising them during their fall term and if this had an impact on their advisor/advisee relationship as well as helped them navigate their college experience. Through both quick-writes and focus groups, students described how comfortable they felt with their academic advisor, and that the adjustment to college created some angst throughout the semester for most. Students explained this angst
through their adjustment and realization that college was nothing like their high school experience. They were beginning to establish their college identity through this process of adjusting and acclimating to a new way of learning and processing information. Students also expressed what they thought was helpful and beneficial in freshmen seminar and changes they would recommend for further consideration. Practical implications for academic advisors, student affairs professionals, and counselor educators are provided as well as future research to consider.
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to spend some time, hold pinkies and eat peanut butter, and of course, run out of things to say to one another.

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DEDICATION

To my dad. This is in loving memory of you. I did it! Dr. Sarah Vandermark.
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CHAPTER ONE
The Impact of Academic Advising Using a Learning Centered Model
on the College Experience and Advisor/Advisee Relationships
among Traditional-Aged College Freshmen

Academic advisors can play a key role in the academic and personal lives of undergraduate students. They are often at the frontline and the first point of contact for undergraduate college freshmen students when they enter a university, and their work with students has been shown to contribute to retention (Jordan, 2000; Pascarella & Terenzini, 2005). Cuseo (2003) defined academic advising as a relationship “that helps students become more self-aware of their distinctive interests, talents, values and priorities and sharpens their cognitive skills for making these choices, such as effective problem-solving, critical thinking, and reflective decision-making” (p. 15). While the benefits and importance of providing quality academic advising to college students is well documented (Campbell & Nutt, 2008; Drake, 2011; Habley & McClanahan, 2004; Hunter & White, 2004; Light, 2001; NSSE, 2005), the effectiveness of various approaches to academic advising is not as well documented.

Academic advising is a process that ideally creates a relationship with a university professional that lasts throughout a student’s college experience (Hunter & White, 2004). It is important for academic advisors to establish a consistent relationship from a student’s first semester on campus, and maintain the consistency throughout the student’s college career. During this consistent relationship, they can teach and assist their students both developmentally and intellectually (Ishler & Upcraft, 2005; Smith & Allen,
According to Hunter and White (2004), “academic advising, well developed and appropriately accessed, is perhaps the only structured campus endeavor that can guarantee students sustained interaction with a caring and concerned adult who can help them shape such an experience” (p. 21).

Because there are links between developing a personal relationship with an academic advisor and students’ satisfaction, success, and persistence (Hale, Graham, & Johnson, 2009; Schnell, 1988; Winston & Sandor, 1984), university administrators should be interested in finding the most effective ways to understand students’ needs so that students persist in attaining their baccalaureate degree. Many students fail to persist until graduation. Although there have been actions taken to address retention, retention rates have not improved overall (Seidman, 2005). At public PhD granting institutions, approximately 22% of first-year college students drop out for their sophomore year (ACT, 2011). Only 45.2% of two-year college students return for their second year at the same institution (Keup, 2005). The typical six-year graduation rate for most public institutions in the United States ranges from 50-56% (Berkner, He, & Cataldi, 2003; Crosling, Thomas, & Heagney, 2008; Mortenson, 2005). Approximately 35% of students depart universities because of academic reasons, the other 65% leave due to non-academic reasons (Morrow & Ackerman, 2012). If Hunter and White’s (2004) belief that a “sustained interaction with a caring and concerned adult” (p. 21) may contribute to reduce the drop out rate for traditional-age college students, then administrators should be looking for advising models and approaches that enhance such a relationship.
Clearly, the relationship between advisor and advisee can be very important in helping students have a successful college experience. Advising can be more than curriculum choices; it can help create a seamless environment that links student’ in-class and out-of-class experiences and focus on both academic success and student learning (ACPA, 1996). If engagement with students matters for learning, persisting to graduation, and experiencing greater success after graduation, then there is a need to identify and evaluate the quality of academic services, including academic advising, and its effect on student learning and on their college experience (Astin, 1984, 1993; Kuh, 2003; Pascarella & Terenzini, 2005). However, with respect to academic advising, more research is necessary to determine what advising methods work to enhance the college experience of students, to help with student learning, and to create a sustained advisor/advisee relationship. My research examined the experience of traditional-aged college students involved in a learning centered approach to academic advising, particularly focusing on their reported feelings related to overall college experience and the advisor/advising relationship.

**Statement of the Problem**

This research explored the use of a learning centered approach to advising with traditional-age college students. This specific learning centered approach provides a unique opportunity for students with their academic advisors both teaching and advising them throughout their first semester freshmen year. The research also explored students’ perceptions on whether this impacts the advisor/advisee relationship as well as the perceived impact on their college experience.
Purpose of the Study

The goal of this study was to examine whether traditional-age freshmen students who take a freshmen seminar course taught by their academic advisors perceive that the experience has any impact on their overall college experience and the advisor/advisee relationship. This study was conducted at a Science, Technology, Engineering and Mathematics (STEM) institute. The course represents an approach to the learning centered approach of advising, and this study examined whether using this approach helps students with building a relationship with their academic advisor, choosing a major, navigating their college experience, and making them more aware of what is needed throughout their college experience. Although other approaches to academic advising (prescriptive, developmental, and intrusive) are more fully understood, the learning centered approach to academic advising (being the most recent approach) is still being developed and researched. Research conducted on this type of approach can inform institutions about the impact (if any) of using such an approach on the development of college students.

Background Research

This study is about academic advising and the impact that a learning centered approach of advising has on the college experience of traditional-aged freshmen. Additionally, I explored the reported effects of this advising approach on the advisor/advisee relationship. During the four to five years that a student typically attends college, engagement matters for learning during her/his college experience, which is both developmental and exploratory, creating persistence toward graduation and experiencing
greater success after graduation (Astin, 1984, 1993; Chickering & Reisser, 1993; Kuh, 2003, Pascarelli & Terenzini, 2005; Pike, 2004; Tinto, 1997). Throughout this period, students go through significant changes in their thinking, feeling, behaving, and valuing, and how they relate to themselves and those around them. Ideally, they also build a better sense of who they are, experience a deeper level of curiosity, develop self-confidence in their abilities, and grow in their thoughts toward future careers and opportunities (Chickering & Reisser, 1993; Crockett, 1985; Drake, 2011). However, this is not done in isolation, and a strong consistent relationship with an academic advisor may help the ideal become a reality as a personal relationship is known to matter (Campbell & Nutt, 2008; Schnell, 1984; Tinto, 1993; Winston & Sandor, 1984). Exploring whether or not academic advising through a learning centered approach enhances the chances for college students to have a more successful college experience can only contribute to the knowledge base about effective academic advising.

**Theoretical Framework**

The basic premise of my research is the perceived impact of a learning centered approach to academic advising on college students’ and their college experience. Although there are different methods and models to potentially operationalize “good academic advising,” I used the theory related to a learning center approach for advising to guide this research. In turn, Chickering’s (1969) college student development theory was used as a model for operationalizing the college experience. The integration of the two theories might be viewed as a funnel; the outer layer of the funnel creates the consistent interaction between advisor/advisee somewhat built into the learning centered approach
to advising, while the inner layer includes the various developmental vectors proposed by Chickering (1969) as the constant development (i.e., college experience) of college students.

**Learning Centered Model**

The goal in a learning centered model is to have students be the central focus of higher education and create an engaging educational process (Campbell & Nutt, 2008; Hemwall & Trachte, 2005; Lowenstein, 2005). This model can be applied to academic advising because advisors can teach students about the educational community, the critical role they have at the university, the importance of their college experience to future goals, and the global market they will enter upon graduation. The phrase *advising as teaching* entered academic advisement in an article written by Crookston (1972). Although mentioning “teaching,” Crookston did not discuss much about advisors and teaching or shed much light on how advising is like or seen as teaching (Lowenstein, 2005). The learning centered approach is also referred to as advising as teaching. These two phrases are used throughout the literature simultaneously. With a learning centered approach, the expectation is for students to begin to think critically about their education and plan accordingly for their own future (Hemwall & Trachte, 2005). Therefore, from the learning centered approach, advisors would want students to construct their own learning and college experience with the guidance of an advisor.

Using a learning centered model for academic advising allows advisors to play a key role in fostering students’ learning outcomes. The developmental model was ignoring the academic learning that takes place on a college campus (Hemwall & Trachte, 2005).
Academic advising is more than guiding and developing students through their college career. Academic advisors can be utilized as teachers and individuals who create both a helping and an educational relationship with their advisees (Addus et. al, 2007; Cleveland-Innes & Emes, 2005). Through a learning centered approach, students engage in effective strategies of learning, including types and outcomes of student involvement, student effort, approaches to learning and various types of social and academic interaction (Cleveland-Innes & Emes, 2005; Hemwall & Trachte, 1999, 2005; Lowenstein, 1999). Such an approach creates students who can become their own educational planners, who have learned to think critically about their roles and responsibilities as students, and who are prepared to be educated citizens of a democratic society and global community, thereby aligning with a learning centered model of advising (Melander, 2005; Cleveland-Innes & Emes, 2005; NACADA, 2006). This leads students to be lifelong learners and begins to think critically about their college career and future (Chickering, 1994; Cleveland-Innes & Emes, 2005; Melander, 2005).

**College Experience**

The college experience of traditional-age students can be exciting, complex, and multi-faceted in terms of how their college years impact their overall development. In order to better understand the college experience and growth of students, Chickering (1969) developed his psychosocial developmental theory involving seven personal and interpersonal vectors that are impacted by an individual’s college years. Chickering’s psychosocial development theory is one of the most influential theories of college student development (Foubert, Nixon, Sisson & Barnes, 2005; King & Kerr, 2005). Kuh et al.
(2005) stated the dimensions of the college experience involve both student behaviors and institutional conditions. Encouraging students to take advantage of their learning opportunities, which are designed to challenge their intellectual and social development and add value to the college experience, is central to good academic advising and at the heart of student engagement (Kuh et al., 2005). Therefore, the work of advisors and the relationship that they build with their advisees can directly impact students’ college experience as operationalized by Chickering’s (1969) model of student development.

In his original work, Chickering (1969) created seven vectors of college student development: (a) developing competence, (b) managing emotions, (c) developing autonomy, (d) establishing identity, (e) developing interpersonal relationships, (f) developing purpose, and (g) developing integrity. Chickering emphasized that development and growth occur along the seven vectors depending on the student, the environment, and their choice of college, with all students at some point during their college experience traveling through the seven vectors (Chickering & Reisser, 1993). Chickering’s vectors are an important theoretical perspective in academic advising because it can provide a structure for identifying how and if academic advising plays a role in students overall development during their college experience. Practicing advising from a learning centered perspective allows the advisor to facilitate their advisees’ development through these seven vectors, rather than cuddling their students and not allowing them to learn for themselves.

**Academic Advising**

Joe Cuseo (2003) defined an academic advisor as one who:
Helps students become more self-aware of their distinctive interests, talents, values, and priorities; who enables students to see the “connections” between their present academic experience and their future life plans; that help students discover their potential, purpose, and passion, which broadens students’ perspectives with respect to their personal life choices, and sharpens their cognitive skills for making these choices, such as effective problem-solving, critical thinking, and reflective decision-making. (p. 15)

Colleges and universities are focusing more on retaining their current students and those students’ persistence toward graduation (Keup & Barefoot, 2005; Strayhorn, 2009; Thompson, Orr, Thompson, & Grover, 2007). Effective academic advising has been shown to assist with retention of students and student satisfaction (Cook, 2009; Drake, 2011; King, 1993; Tinto, 2002), suggesting this is an important time to question the definition and role of an academic advisor on college campuses to maximize the potential for positive impact. This examination should include questions like: Are academic advisors being utilized adequately and with the students’ best interests in mind? What advising methods and approaches are most effective in helping students be successful during their college experience? This section focuses on the current status of academic advising, specifically the purpose of academic advising, current models of academic advising, and the impact of academic advising.

**Purpose of Academic Advising**

When viewed as an educational process and done efficiently, academic advisors play a critical role in connecting students with learning opportunities to foster and
support their “engagement, success, and the attainment of key learning outcomes” (Campbell & Nutt, 2008, p. 4). They support key institutional missions that promote student success. Such missions include setting high expectations, providing support, offering feedback, and facilitating involvement in learning through frequent contact between student and faculty and/or staff (Campbell & Nutt, 2008; Drake, 2011; Light, 2001; Tinto, 2002). Academic advising is one of the only structured services that can guarantee a student is interacting with a caring, concerned individual at his/her institution (King, 1993).

In an attempt to support their advisees and provide high-quality services, academic advisors can become involved in a number of activities with their advisees. Ideally, advisors teach students how to make thoughtful and effective decisions about their future and their current situations, to navigate their institution, which can be confusing and stressful, to adapt to their new learning and social environment, and to embrace the academic skills that are necessary and the knowledge needed to succeed moving forward, such as time-management skills (Drake, 2011). Advisors also will guide students to make their academic, personal, and career plans consistent with their interests and abilities (Drake, 2011).

Models of the Advising Process

In 2002, Cuseo conducted a comprehensive review of the literature for connections between academic advising and student retention. This comprehensive review showed a need for improved academic advising as good advisement has an impact on higher rates of student retention (Cook, 2009). Currently, the most commonly utilized
advising models are categorized as prescriptive, developmental, or intrusive (Hale, Graham, & Johnson, 2009). Prescriptive models involve scheduling students’ courses and are seen as less effective in fostering a relationship or educational and social integration in the institution (Hale, Graham, & Johnson, 2009). Developmental models, as well as intrusive models, are seen as building an interpersonal relationship within the advising process and not only focusing on content of courses and the curriculum (Hale, Graham, & Johnson, 2009; Jeshke, Johnson, & Williams, 2001; Light, 2001). Finally, the learning centered model requires a more comprehensive approach to advising, incorporating a holistic approach to student development, and thus requires more frequent interactions with advisees (Campbell & Nutt, 2008; Hagen, 1994; Hemwall & Trachte, 2005; Lowenstein, 1999, 2005, & Strommer, 1994).

Impact of Academic Advising

Noel-Levitz’s (2004) National Student Satisfaction Report, which was based on responses from 796 higher educational institutions, indicated that academic advising is a key variable in student satisfaction. Students ranked academic advising as the second most important factor with institutional effectiveness ranked first. Academic advising was ranked ahead of the registrar, campus safety, and support services to name a few (Coll & Draves, 2009). Additionally, Uhlik & Jones (2008) found that advisors have a positive impact on students’ persistence in college, development of academic skills, career decisions and educational aspirations, and satisfaction with their college experience. Keup and Kinzie (2007) noted,
The quality of the academic advising experiences is one of the most powerful predictors of engagement in and satisfaction with the college environment, yet first-year students report limited contact with faculty and academic advisors, report varying degrees of satisfaction with this interaction (particularly at community colleges), and thus may not be reaping all the educational benefits of advising. (p. 34)

Clearly, universities that build a sound academic advising system can enhance students’ engagement in their college experience, thus improving the chance for more efficient progress toward their program or degree completion.

**Student Satisfaction.** An increase in student satisfaction is important because it will lead to persistence and, a sense of belonging and greater chances for students to graduate. Therefore, if students feel advisors are making a difference in their lives and that a concerned university representative is mentoring them, then student satisfaction is likely to increase (Keup & Kinzie, 2007; King, 1993; Noel-Levitz, 2004). Beal and Noel (1980) found academic advising to be one of the three major areas promoting student satisfaction and retention across 947 institutions of higher education. Since this study, Tinto (1998) argued that the importance of academic advising within universities has increased and has gained more visibility as a critical component of student development during the college years. According to Corts (2000), advising is seen as a critical component and a necessity, and student satisfaction is inversely related to student complaints regarding advising and career preparation.
**Student Retention.** Researchers (Finn & Voelkl, 1993; Hemwall & Trachte, 2005; Hunter & White, 2004; Kuh & Love, 2000) have shown that retention is significantly affected by the *sense of belonging*. Other factors such as early academic performance, attitudes towards higher education, goal and institutional commitment, social and academic interaction, residence life experiences, faculty and staff interaction with the student, and the student’s sense of community also affect retention. Academic advising can play a key role in student retention, as well as in their overall college experience, if consistent quality advising services are provided and help lead to a sense of belonging (Hester, 2008; Hunter & White, 2004). The retention of students is important because the costs of retaining current students are less than the expense of recruiting new students (Haag, Hubele, Garcia, & McBeath, 2007). In its most recent survey of colleges and universities, American College Testing (ACT, 2004) reported, one-fourth of all students at four-year colleges do not return for their second year of school.

Many students who depart prematurely from college have stated they had a poor academic advising experience, and therefore, one important component of any retention program is an excellent advising program (Tuttle, 2000). Pascarella and Terenzini (2005) claimed that institutions need to focus on integrated ways that students can actually learn, and not just in the classroom. If Chickering’s (1969) model is accurate and students are acquiring knowledge and learning about interpersonal and intrapersonal aspects of themselves, then quality and consistent advising using a model that addresses a fully functioning person is important in the learning process (Campbell & Nutt, 2008; Drake, 2011; Habley & McClanahan, 2004; Hunter & White, 2004; Light, 2001). In turn, if
students feel that a caring university representative such as a good advisor is nurturing them, then they are more likely to persist to graduation (Blimling & Whitt, 1999; Pascarella & Terenzini, 1994, 2005).

Research Question

The major research question for this study is: With academic advisors both teaching and advising their students, how do students perceive this impacting the advisor/advisee relationships as well as helping students navigate their college experiences?

Significance of the Study

Beal and Noel’s 1979 publication, What Works in Student Retention, was the first to report that inadequate advising was a significant factor in students choosing to leave college, and that the formation of a noteworthy relationship with an adult at the school was the most important factor in retaining students. Despite the consistent statements from various researchers (e.g., Campbell & Nutt, 2008; Drake, 2011; Habley & McClanahan, 2004; Hunter & White, 2004; Light, 2001 Tuttle, 2000) that successful academic advising helps students satisfaction and increases retention, there still is a large caseload of students verses academic advisors which often causes advisors to focus on problem solving and putting out fires instead of development and engagement of learning (Hale, Graham, & Johnson, 2009; Tuttle, 2000). Therefore, considering the limited time advisors may have for individual advisees, more research is needed to examine what approaches to advising can effectively help as many advisees as possible be successful in their college experience.
To date, there is a lack of research on how to best utilize academic advisors. There is limited research on the effectiveness of advising practices and the impact this can have on student success (Gordon et al., 2008), which perpetuates a lack of understanding how to best utilize academic advisors for as many students as possible. Additionally, there is a lack of literature available on the process of relationship formation between student and advisor, and the importance of the advising relationship itself to student success (Campbell & Nutt, 2008; Drake, 2011; Habley & McClanahan, 2004; Hale, Graham, & Johnson, 2009; Hunter & White, 2004; Light, 2001; NSSE, 2005; Schnell, 1988; Winston & Sandor, 1984). It is important to question whether advising has an impact on students with their information gathering and to first ask, does the relationship exist? Therefore, I examined the strength and the impact advising relationships using a learning centered approach can have with students and their information gathering and overall college experiences.

For example, little research exists on various advising practices including how academic advisors teaching a first semester seminar course (i.e., a learning centered method) and the outcomes of such on the advisor/advisee relationship and a student’s college experience. As Hunter, Henscheid, and Mouton (2007) indicated, the relationship between first year seminars and academic advising presents an area of needed research. While we know that academic advisors have an impact on student retention, satisfaction, and persistence (Campbell & Nutt, 2008; Drake, 2011; Habley & McClanahan, 2004; Hunter & White, 2004; Light, 2001; NSSE, 2005), we are not as clear with respect to the type of service that will best serve the students through their college experience. As
universities continue to focus on efficient ways to retain students while knowing that students rank academic advising as the second most important aspect of their college experience (Coll & Draves, 2009; Cook, 2009; Drake, 2011; King, 1993; Tinto, 2002; Uhlik & Jones, 2008), more research is needed to determine how academic advisors can be more effective despite advising an average of 267. This research will add to the literature by examining if academic advising through a learning centered approach effectively impacts traditional-aged college students’ perceptions of their college experience or in anyway enhances the advisor/advisee relationships.

**Definition of Terms**

*Academic Advising* - Helps students become more self-aware of their distinctive interests, talents, values, and priorities; that enables students to see the “connections” between their present academic experience and their future life plans; that help students discover their potential, purpose, and passion, which broadens students’ perspectives with respect to their personal life choices, and sharpens their cognitive skills for making these choices, such as effective problem-solving, critical thinking, and reflective decision-making (Cuseo, 2003, p. 15).

*Academic Success* - According to the guidelines of the university being used in this study, the status of completing a fall, spring, or summer term of study in satisfactory academic standing (2.0), or graduating. Overall student success can be defined in many ways, depending on the type of institution, its nature and mission, its student population, and the needs of its students which may include “improved GPA”, “student
engagement”, and “achievement of students' educational goals” (US Department of Education, 2007).

**Advisee** - A student who meets with an advisor in pursuit of educational, personal goals (Tinto, 2007).

**College Experience** - Using Chickering’s (1969) theory to define college experience, college students develop competence, learn to manage their emotions, move toward independence, develop mature interpersonal relationships, establish identity, develop purpose, and integrity in the process of becoming educated adults.

**Learning Centered Model** - Learner-centered teaching places the emphasis on the person who is doing the learning (Weimer, 2002). Learning-centered teaching focuses on the process of learning.

**STEM** - Science, Technology, Engineering and Mathematics.

**Traditional College Age Students** - The commonly held definition of a traditional aged undergraduate student is one who enrolls in college immediately after graduation from high school, pursues college studies on a continuous full-time basis at least during the fall and spring semesters, and completes a bachelor’s degree program in four or five years at the age of 22 or 23. Traditional students are also typically financially dependent on others, do not have children, consider their college career to be their primary responsibility, and are employed only on a part-time basis if at all during the academic year.
Personal Reflection

My immersion and interest in academic advising comes from my own experience as an involved undergraduate student and being a part of student affairs and academic advisement for the past 17 years. I truly loved my undergraduate experience and connection that I made with my student affairs professionals, which shaped my career path into higher education. This wonderful experience brought me to pursuing my master’s degree in higher education and counseling. During this time, I had an internship in academic advising and became excited and intrigued by this field. Over the years, I noticed that advising could be quite prescriptive by only informing students what courses they need to take for the following semester and beyond. However, my most memorable moments are with the students that I connected with throughout their college experience. I truly cared about their college life as well as setting them up for success in the years beyond college. Therefore, many lasting relationships were created.

As the years went on in my career, I began to wonder if there was a way that I could get to know my students and their needs earlier on, in turn, having a better understanding of why they leave the institute or stay. With this passion, I was able to create one-credit courses within my college where academic advisors would be teaching their advisees. I feel that these courses have had an impact, however, I have not yet assessed what the students’ experience has been. I know I have a strong relationship with many students I have taught throughout this course; however, I know assessment must occur with having an advisor both teaching and advising students needs and finding out the students’ perception of this approach.
Organization of Study

The remainder of this dissertation is as follows: Chapter 2 presents a comprehensive literature review addressing the following: the needs and understanding of the traditional-aged college student including minority and STEM populations; Chickering’s Psychosocial developmental model; academic advisement and my theoretical framework; student perceptions of advisement; partnerships through freshmen seminar and how this can impact retention; and the importance of assessment. Chapter 3 details the research methodology. Chapter 4 provides information related to the data analysis and results. Chapter 5 represents the conclusions, discussion of the findings and implications for practice.
CHAPTER TWO

Review of the Literature

Academic advising is an important function on college campuses, and a strong advisor/advisee relationship may contribute positively to various aspects of students’ college experiences (Campbell & Nutt, 2008; Cuseo, 2003; Drake, 2011; Jordan, 2000; Habley & McClanahan, 2004; Hunter & White, 2004; Light, 2001; NSSE, 2005; Pascarella & Terenzini, 2005). However, with respect to academic advising, more research is necessary to determine what advising methods work more effectively to enhance the college experience of students, to help with student learning, and to create a sustained advisor/advisee relationship. This study will explore academic advising and the impact a learning centered advising model has on the college experience of traditional-aged freshmen.

Different methods and models exist to understand “good academic advising” and the way students develop and grow throughout their college experience. The learning-centered model is one approach that suggests advising is a form of teaching yet allowing students to construct their own learning and college experience (Barr & Tagg, 1995; Bosch et al. 2008; McDaniel et al. 2000; O’Banion, 1999). While suggested as a viable approach to advising, little research has occurred to identify the effectiveness of such an approach. Therefore, the learning-centered model will be examined in this study, particularly as it relates to the advisor/advisee relationship and students’ college experience.
Chickering’s (1969) college student development theory will be used as a model for operationalizing the college experience, while a freshmen seminar course taught by advisors will represent the learning-centered approach of advising. This study will examine whether using this model helps students build a relationship with their academic advisors, choose a major, navigate their college experience, and become aware of what is needed throughout their college experience.

This chapter explores Chickering’s psychosocial developmental theory as a lens to explore the potential impact of the learning centered model’s approach. To accomplish this, Chickering’s vectors are explained, as well as the relationship between academic advising and his developmental theory. To clarify the overall goals of academic advisement, the needs of current college students, including STEM and minority students, are described. Next, the history and evolution of academic advising is explored, including faculty and professional academic advisement and the prescriptive, developmental, intrusive, and learning centered approaches or models of advisement (these will be referred to as models moving forward). Students’ perceptions of their experience with academic advising are then discussed. The review of the literature concludes with the theoretical framework on advisement, a detailed look at the learning centered model, possible ways academic advisors can both teach and advise through a freshmen seminar and finally, a summary.

**College Students**

**College Student Development - Chickering’s Psychosocial Developmental Model**

With a learning centered model of advising, the expectation is for students to
begin to think critically about their education and plan accordingly for their own futures (Hemwall & Trachte, 2005). Therefore, under the parameters of the learning centered approach, advisors assist students in constructing their own learning and college experiences. The learning centered approach may be effectively used for undergraduate students (Campbell & Nutt, 2008; Hemwall & Trachte, 2005; Lowenstein, 2005; Strommer, 1994); however, the approach needs to be studied more extensively to show whether this approach has an impact on the students’ overall college experience.

Arthur Chickering’s developmental model addresses the issues and concerns that relate to teaching and learning, college environments, and student development (Chickering, 1969, 2006, 2008). It also centers on how to create life-long learners and students who can begin to think for themselves. Finally, Chickering’s model focuses on important areas during which an academic advisor can influence students through teaching and advising. Chickering (2008) feels that an increasingly important area in education in our country is learning throughout one’s life, specifically later in life (Chickering, 2008). Arthur Chickering created a developmental model in 1969 focusing on traditional-aged college students and the developmental stages they typically experience during their college experience. One key aspect of the learning centered model is to help students become critical thinkers and be more reflective and thoughtful about how they process and learn best (Campbell & Nutt, 2008; Chickering, 2006; Hemwall & Trachte, 2005; Lowenstein, 2005; Strommer, 1994). Student development is an enhancement of identity, which Erikson (1968) defined as the sense of continuous self, towards complexity, integration, and change (Komives, Mainella, Longerbeam, Osteen,
There are seven vectors in Chickering’s model and this research will explore four: developing competence, managing emotions, moving through autonomy to interdependence, and developing purpose and goals. Chickering refers to vectors as directions and areas of development a student will go through during their college experience. Chickering’s vectors focus on the student as a whole and can help explain the growth of students throughout their college career. Student’s personal development will be explored through these four vectors. The total personal development of a student is important in helping him/her achieve academic success – therefore, colleges must be committed to the academic, personal, intellectual and social development of each student (Chickering, 2006).

Chickering’s vectors of development create awareness for higher education administrators to view their students and their courses more clearly (Chickering & Reisser, 1993). According to Chickering and Reisser (1993) “Students’ overall sense of competence increases as they learn to trust their abilities, receive accurate feedback from others, and integrate their skills into a stable self assurance” (p. 46). The seven vectors cover key developmental areas for students regarding their thinking, feeling, behaving, valuing, and relating to others and oneself during their college experience (Chickering & Reisser, 1993). If a consistent relationship exists, academic advisors can help as student undergo these qualitative changes throughout their four or five years of college because the advisor can build a lasting, caring relationship with their advisees which can nurture them through the developmental process (Bitz, 2010; Campbell & Nutt, 2008; Drake,
Chickering’s vector one, developing competence, includes intellectual, physical, and interpersonal competence. Students are exposed to different frames of reference and begin to understand other points of view, while learning how to listen and communicate effectively. This vector has three components: intellectual skills, physical and manual skills, and social and interpersonal skills. Drake (2011) stated the importance of advisors guiding students through learning, making choices, applying decision-making strategies as well as developing thinking skills all help in developing competence.

Competence is the individual’s ability to cope with crisis and successfully attain his or her goals (Chickering, 1969; Chickering & Riesser, 1993). Having intellectual competence is using one’s own mind (Chickering, 2006). Students’ competence increases as they learn to trust their abilities, receive accurate feedback from others, and know how to integrate new skills (Chickering, 2006). Students begin to build a better sense of self as well as develop self-confidence in their abilities (Chickering & Reisser, 1993; Crockett, 1985; Drake, 2011). An incoming freshman in a new environment that receives structured support from a caring, supportive academic advisor may build confidence both inside and outside of the classroom. This support may also help students cope with the second vector, managing emotions.

In the managing emotions vector, students learn appropriate ways to respond to their feelings, manage anger and anxiety, and learn how to balance positive and negative emotions (Chickering & Reisser, 1993). Many students will feel anger, anxiety, desire,
guilt, shame, boredom, hurt and longing at different times in their college careers. A particular concern in college student development is the ability to control aggression and sexual impulses (Arbuckle & Gale, 1996; Bandura, Millard, Peluso, & Ortman, 2000; Jordan, 2000). Chickering (1969) viewed growth in the second vector as the opportunity to reflect on and increase individual awareness, while developing more effective means of emotional expression. Advisors and students should not ignore strong emotions, which, if not addressed, can lead to more serious emotional distress. Some of these emotions may include homesickness, depression, loneliness, isolation and a lack of confidence. Rather, the challenge for students is to get in touch with these feelings and learn how to exercise self-regulation, self-control and appropriate self-expression rather than repression (Chickering, 2006; Pascarella & Terenzini, 2005). Balancing their personal lives along with their education is another potential measurement of success (AAC&U’s 2007 report). Students go through significant changes in their thinking, feeling, behaving and valuing, and how they will relate to themselves and those around them (Chickering & Reisser, 1993; Crockett, 1985; Drake, 2011; Pizzolato, 2008).

The third vector is moving through autonomy toward interdependence. The key aspect of this stage is that students learn how to be self-sufficient and take responsibility for achieving their goals (Cleveland-Innes & Emes, 2005; Kuh et al., 2005; Melander, 2005; NACADA, 2006). Similar to the first vector, developing competence, the third vector is composed of three elements: emotional independence, instrumental independence, and interdependence. An emotionally independent student is free from the need for continued reassurance and approval from others (Chickering, 1969).
Instrumental independence is the ability to perform specific activities and resolve problems with little or no assistance. The third component, interdependence, is the culmination of autonomy, or a student who is aware of and understands his or her environment and responsibilities (Kuh, et al., 2005).

In the second edition of *Education and Identity*, Chickering and Reisser (1993) shifted their emphasis from developing autonomy to moving through autonomy toward interdependence. Establishing autonomy, students can be independent thinkers and have the freedom to make their own informed, non-coerced decisions. Student success is about encouraging curiosity and wonder and supporting those college experiences that create, foster and cultivate this engagement of learning (Tinto, 2002; Campbell & Nutt, 2008; Hemwall & Trachte, 2005). Moving through autonomy toward interdependence has become more challenging for student’s yet is critical for leading a satisfying and productive life (Alexitch, 1999; Chickering & Braskamp, 2009; Drake, 2011; Pizzolato, 2008). Students learn lessons on reciprocity, compromise, sacrifice, consensus, and commitment to the larger community, which can refer to their learning institution, their hometown and their global community. To achieve interdependence, students will need to gain an understanding of other cultures, ethnicities, religiosities, and sexual orientations as well as empathize and learn how to communicate (Chickering & Braskamp, 2009; Jordan, 2000; Karabenick & Knapp, 1991; Newman & Schwager, 1995).

By utilizing academic advisors as both teachers and advisors, students may be able to assist themselves and their peers in developing autonomy and the tools needed to
move forward in the college experience. This may also aid students in understanding their curriculum and taking ownership in their future courses and career planning. Developing autonomy enables healthier, more productive forms of interdependence. The expectation is for students to begin to think critically about their education and plan accordingly for their own futures (Hemwall & Trachte, 2005).

The final vector I focus on in this discussion (numbered sixth by Chickering and Reisser) is developing purpose; this vector involves students becoming more deliberate in looking beyond college. At this stage, students take their ideas to a new level by going beyond immediate goals to a larger, more meaningful purpose in life (Gardner & Barefoot, 2012). Goals and action plans should integrate three major elements: “1) vocational plans and aspirations, 2) personal interests, and 3) interpersonal and family commitments” (Chickering & Reisser, 1993, p. 50). The relationship between advisor and advisee can be important in helping a student be successful beyond college in helping create a seamless experience linking students both in and out of the class (ACPA, 1996). Developing purpose concerns the person’s ability to develop direction in his or her life. Developing purpose may be one of the most difficult tasks that advisors encounter with undeclared students (Chickering, 1969, 1994; Chickering & Reisser, 1993; Cleveland-Innes & Emes, 2005; Crockett, 1985; Drake, 2011; Melander, 2005). Many undeclared students are confused about what they would like to study as well as their career options. It is important to begin to establish competence and autonomy with undecided students for them to then begin to focus on their purpose around their future career, interests and commitments.
The remaining vectors are not included in the theoretical framework in this research; however, a brief description of each will be provided to give a complete overview of Chickering’s Psychosocial Developmental Theory. The fourth vector, *developing mature interpersonal relationships*, involves a tolerance and appreciation of differences amongst others and the capacity for intimacy (Chickering, 1969). This includes respecting others and their differences. Discussing and addressing cultural diversity is important in both moving toward interdependence and developing mature interpersonal relationships. The fifth vector is *emotional identity*. Identity development requires an individual to reflect on his or her sense of self. The student will develop a sense of self in response to feedback from others, as well as social, historical and cultural context. This fifth stage is greatly impacted by progress during the first four vectors (Chickering, 2006). The final vector is developing integrity. This is similar to *establishing identity and clarifying purpose* but involves “three overlapping stages: 1) balancing one’s own interests with others’ interests, 2) affirming one’s own values while respecting those of others, and 3) ensuring one’s values are congruent with behavior” (Kuh, et al. 2005, p. 51).

The seven vectors of development provide counselors and advisors the opportunity to view students holistically and to interact with each student individually as she/he proceeds through these stages of development. First year students experience a life-changing transitional period once they leave high school and enter college. Through the college experience students may struggle and need assistance around any of Chickering’s vectors. These vectors are fluid as students’ transition through them
throughout their college experience. Therefore, supportive caring administrators can be
critical at any stage in a student’s college career.

Current College Students

Administrators and student personnel professionals need to understand students
entering college today and the needs of these students. These needs can influence
students’ overall developmental process, effecting where students will need assistance.
McGrath and Braunstein (1997) suggested that because every college and university has
its own admission standards and policies that result in unique student demographics,
research on persistence and retention should be conducted on individual campuses. This
allows administrators, staff, and faculty to understand their student population better.

To understand the needs of students at each individual university, administrators
would need to know many factors that contribute to their overall make up of their student
population (Astin & Antonio, 2012; Kuh et al., 2005). Unfortunately, the majority of
higher education administrators know little about their own populations (Thompson et al.,
2007). The university has a record of many identifying characteristics (e.g., high school
GPA, SAT scores, demographic background) that administrators can utilize. Through
some university services, such as freshmen seminar, peer advisors, and learning
communities, information can be provided about students that may not be as tangible;
such as social, behavioral and cognitive development. Therefore, more information than
what students provide on their application is important to better understand their needs
and the factors impacting their overall college experience. To address these changes and
students’ perceptions of the impact on their college experiences, administrators, staff, and
faculty must have a better understanding of the new generation of freshmen students, as well as the specific demographics of students on their campuses.

When considering the needs of current college students, one must consider that the characteristics and demographics of college students as a population have changed in the past 30 years. One factor influencing the experience of college students is the increased use of technology both inside and outside the classroom (Greenhow, Robelia & Hughes, 2009). Other changing trends are age, race, ethnicity, enrollment status, family structure, gender, sexual orientation, residence, international students, and students with disabilities impact campus demographics in different ways, thus requiring different services to meet student needs based on campus demographics.

Higher educational professionals are currently working with millennial students (the term for the current generation of traditional-aged students) (Dorsey, 2010). These students are from a generation that has been raised with access to computers, high tech cell phones, the Internet, Facebook, Twitter, texting, and blogs (Dorsey, 2010). This generation wants to make their lives holistic, incorporating work, family and leisure together (Debard, 2004). Therefore, these students may need more guidance and consistent advising to help them decipher where they fit in both their future professional and personal worlds.

Institutions have responded to student retention issues by implementing programs and services such as freshmen seminar and learning communities; however, retention rates have not improved, 50-56% graduation rate in six-years, as much as hoped for (Seidman, 2005). This low retention rate creates an economic burden with students
leaving early, not paying bills and the ability of a nation to having to compete in the
STEM degrees in an ever-changing global economy (Seidman, 2005). Since 1991,
Terenzini and Pascarella (1994) have studied the contribution of students staying engaged
and persisting to graduation. Pascarella and Terenzini (2005) purported that academic
advising plays a role in students’ decisions to persist and also affects their chances of
graduating. They concluded that universities are becoming more fragmented with silos
of specializations, so that even faculty and student affairs professionals are not
collaborating. All these factors can affect student success and retention (Blimling &
Whitt, 1999).

Included in Table 1 are data about graduation rates at public 4-year institutions
Table 1

Graduation Rates at Public 4-Year Institutions – Demographic, State, Overall

<table>
<thead>
<tr>
<th>Gender/Ethnicity</th>
<th>New Jersey</th>
<th>United States</th>
</tr>
</thead>
<tbody>
<tr>
<td>All</td>
<td>66.5%</td>
<td>56.0%</td>
</tr>
<tr>
<td>Men</td>
<td>61.8%</td>
<td>53.0%</td>
</tr>
<tr>
<td>Women</td>
<td>70.8%</td>
<td>58.5%</td>
</tr>
<tr>
<td>American Indian</td>
<td>42.4%</td>
<td>37.0%</td>
</tr>
<tr>
<td>Asian</td>
<td>73.8%</td>
<td>66.3%</td>
</tr>
<tr>
<td>Black</td>
<td>53.0%</td>
<td>38.3%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>56.8%</td>
<td>47.8%</td>
</tr>
<tr>
<td>White</td>
<td>69.7%</td>
<td>58.9%</td>
</tr>
</tbody>
</table>

Minority & STEM Populations

Access and achievement gaps disproportionately affect low-income and minority students (Orkodashvili, 2010; Peske & Haycock, 2006). Historically, these are the students who have encountered the greatest academic and financial challenges accessing and completing college. According to the National Center for Education Statistics (2003), equal opportunity is far away as the National Assessment of Educational Progress consistently reports that the average 8th grade minority student performs at about the level of the average 4th grade white student. Many of these students will be the first in their families to enroll in institutions of higher education. Despite years of funding student aid programs, family income and the quality of high school education remain major factors in college-level access and success. “By age 25-29, about 34 of every 100
whites obtain bachelor’s degrees, compared to 17 of every 100 blacks and just 11 of every 100 Latinos” (Spelling Report, 2006, p. 9).

The Advisory Committee on Student Financial Assistance estimated that financial barriers would keep approximately two million low-and middle-income college bound students from attending college (Spellings, 2006). Today, access remains an issue for higher education in the U.S. Institutions face the challenge of adjusting to new demographic trends, increased ethnic diversity, and increased enrollments with limited and complicated federal resources and difficult federal aid systems (Orkodashvili, 2010). The question that remains to be answered is to what degree the federal government will continue its commitment to providing that will improve access and opportunity in higher education (Gladieux, King, & Corrigan, 2005).

Because of these factors, graduation and retention have been a major focus throughout the past several years on most college campuses. There are major concerns of retention and graduation of racial and ethnic minority students throughout the country. Over one half of the Latina/o and Black students who enter four-year colleges will not graduate with a bachelor’s degree within six years, while the completion rate of White students is much higher (Baum & Payea, 2005; Berkner, He, & Cataldi, 2003).

The academic gap between White and African American students enrolled in college widened between 1974 and 2003 (NCES, 2005). According to a 2010 report from the Schott Foundation for Public Education, only 47 percent of Black male students graduated from high school in 2008 with peers in their entering cohorts (Harper & Kuykendall, 2012). Researchers have found that Black undergraduate men are less
prepared for college rigors than their peers (Bonner & Bailey, 2006; Palmer, Davis & Hilton, 2009). Researchers (e.g., Constantine, Miville, Warren, Gainor, Lewis-Coles, 2006; Harris, Palmer & Struve, 2011; Walpole, 2008) show that reasons that students drop out may be related to low social economic status, overall lack of engagement in the classroom and problems connecting to the university. Black students feel a lack of belonging, less engaged, unwelcome environment, inadequate preparation, and racism/cultural differences in predominantly White institutions (Cuyjet, 1997; Harper, Carini, Bridges & Hayek, 2004; Walpole, 2008). In the Constantine et al. (2006) study, one student participant stated, “My academic advisor questioned whether I should be an engineer. He said it was a difficult major and didn’t want me to flunk. He had no idea whether I could do the work or not” (p. 9). African American students who stay connected, create bonds with other students and administrators, and are held accountable persist better on college campuses (Harris, Palmer & Struve, 2011).

In a study conducted by Walpole (2008), results indicated that low SES students reported less contact with faculty, spent less time studying, reported less participation in organizations, worked more, and achieved lower grades than their higher SES peers. One reason the participants were spending less time studying and becoming involved was because they were working approximately 16 hours a week, which was more hours than their high SES peers.

Existing literature suggests that campus environments exert an important influence on college students’ experiences and outcomes (Cabrera, Nora, Pascarelli, Terenzini & Hagedorn, 1999; Eimers & Pike, 1997; Hurtado & Carter, 1997; Hurtado,
Carter & Spuler, 1996; Museus, 2007, 2008; Pascarella & Terenzini, 2005). While minority and low SES students may struggle in achieving success during their college experience, administrators, student affairs professionals, and faculty can be instrumental in helping them be more successful. For example, research has shown that the effects of academic advising are clear and consistent and positively impact both retention and graduation rates (Campbell & Nutt, 2008; Cuseo, 2003; Drake, 2011; Habley & McClanahan, 2004; Hunter & White, 2004; Jordan, 2000; Light, 2001; NSSE, 2005; Pascarella & Terenzini, 2005). Apparently, a more consistent and personal relationship between the advisor and advisee leads to more student satisfaction, success, and persistence (Hale, Graham, & Johnson, 2009; Schnell, 1988; Winston & Sandor, 1984). In relationship to advising, more studies need to be conducted on how advisors and advisement practices and approaches to advising can contribute to racial and ethnic minority students’ success. In a qualitative study with 45 undergraduate participants, Museus (2009) found it was important for advisors to humanize the practice of academic advising. He suggested that advisors adopt a multifaceted approach and delineated the importance of proactive advisement.

The STEM (science, technology, engineering and mathematics) population is a unique one. STEM universities often have majors in areas such as engineering (computer and electrical engineering, mechanical, industrial, biomedical), biology, applied mathematics, computer science and applied physics. These majors require a strong prior knowledge in both mathematics and science through a student’s high school preparatory education (Bettinger, Boatman, & Long, 2013). Given the importance of math skills, one
would assume there are good math teachers throughout grade school and high school within low income and minority children’s schools. Nearly half of the math classes in both high poverty and high minority high schools are taught by individuals that have not majored or minored in math and do not have a math related background, such as math, engineering or physics (Peske & Haycock, 2006). This, once again, affects persistence and retention in the overall STEM majors.

Data received from the National Center for Education Statistics showed in 2004, 26.8% of high school seniors completed “high level” academic coursework, defined as four years of English, three years of mathematics (which included at least one year of a course higher than algebra II), three years of science, three years of social studies, and two years of a single non-English language (Bettinger, Boatman, & Long, 2013). Although all students will face challenges when entering higher education, STEM students who are underprepared confront more urgent problems (Bettinger, Boatman, & Long, 2013). The students are beginning to adjust to a new environment while simultaneously working on acquiring college-level academic skills that can lead to difficulties in the classroom, not only complicating their academic life, but their social and financial adjustments as well (Raab & Adam, 2005). These demands can then lead to low self-esteem, greater frustration, and higher dropout rates (Bettinger, Boatman & Long, 2013).

Along with experiencing a unique college environment, STEM students’ reasons for attrition may also be distinct. For example, engineering students’ attrition is related to the following factors: academic and career advising, faculty, curriculum program, culture,
and high school preparation with their math and science skills (Haag et al., 2007). These factors can relate to other STEM majors as well. A major obstacle for students trying to attain engineering degrees is poor academic advising especially with curriculum preparation (Haag et al., 2007). Engineering students have previously reported experiencing high levels of uncertainty and they often rely on their academic advisors for guidance and support (Levin & Hussey, 2007; e.g. McCuen et al., 2009). These are mainly due to factors such as pressure to select a major that best meets their interests, feelings of isolation, and competitive classroom climates. “The advisors are a vital part of the program. They keep you on track, they help you get classes, and they get to know information about my interests. They also teach you to build a schedule” (Sutton & Sankar, 2011, p. 76). As early as 1992, Astin and Astin reported that less than half of the students who originally entered engineering majors actually graduated with an engineering degree. Additionally, the number of foreign students within this major was on the decline; therefore, campuses need to identify ways to retain engineering students for the future workforce (Hunter & White, 2004).

Since the late 1980s, national reports have called for reform in undergraduate science, mathematics, and technology education (AAAS, 1990; NRC, 1997, 1999; NSF, 1996; Sweeder & Strong, 2012). Students need to be motivated early in their college experiences to continue their interests in the sciences (Sweeder & Strong, 2012). For example, fewer American students are graduating with a STEM background, and there is a general attrition of STEM students in higher education. Forty to 60% of undergraduates leave the majors of science and engineering to pursue different majors (Bhattacharjee,
2009; Gilmer, 2007; Seymour & Hewett, 1997). This attrition seems to be among groups including higher achieving students, women, and students of color (Bhattacharjee, 2009). Because of the loss of students in these fields, educators have advocated for possible solutions to connect students together through their programs within the sciences through seminar courses (AAUW, 1994; Gilmer, 2007).

Academic advising literature regarding engineering students is sparse; however, it is clear that advising is an important component for students’ overall experience. Poor academic advising is a key factor contributing to the high attrition in engineering programs (Jain et al., 2009). Poor academic advising involves advisors providing inaccurate information about course requirements; not taking enough time with their advisees; and not sharing information about special programs, sources of financial help, and career opportunities (McCuen, Gulsah, Gifford, & Srikantaiah, 2009). Many engineering students have high levels of uncertainty and often rely on their advisors for guidance and support (McCuen et al., 2009). Clearly STEM students need not only accurate and consistent advising, but also motivation and tools to continue with their selected majors if appropriate. More research needs to occur on what advising approaches and methods will accomplish these goals moving forward.

**Academic Advising**

Cuseo (2003) defined academic advising as a relationship “that helps students become more self-aware of their distinctive interests, talents, values and priorities” (p. 15). Academic advising, like other professions, is not stagnant; it continues to evolve, embracing new models that help focus on the needs of students. The duties and
responsibilities of academic advisors include some of the following: advising on general education requirements, guiding and mentoring students through their college experience, helping with major choices, serving as a liaison to academic departments and maintaining academic records, either coordinating or assisting with orientation programs, training advisors campus-wide, developing campus-wide advising handbooks, and participating on academic policy committees (DeSousa, 2009). Students are more satisfied with the advising process when a warm, caring academic advisor guides them. If advisors are providing quality services such as these, then the more likely students will see their advisors as important to their college experience (DeSousa, 2009; Propp & Rhodes, 2006; Uhlik & Jones, 2008).

To gain a better understanding of academic advising in general, the history of academic advising is discussed, along with distinguishing between faculty and professional advisors. Throughout the years, academic advisement has been provided through different models or approaches to advising. These most utilized models, known as the prescriptive, developmental, intrusive and learning centered, are also discussed in more detail, as well as the impact advising has on student development and a students’ overall college experience.

**History of Academic Advising**

The changing needs of college students have influenced the development of academic advising in higher education. As college campuses have handled the needs of increasingly diverse student bodies, more varied curricula and students with specialized needs, their services for students have adjusted accordingly (Cook, 2009). The first
academic advisor position was established in 1876 at Johns Hopkins University; it consisted of a faculty advisor system to help students with their major coursework and curriculum (Bishop, 1987; Grites, 1979; Tuttle, 2000). By 1930, most colleges had established their own organized advising systems that were faculty based. In the 1940s and 1950s, faculty primarily conducted academic advising (Lynch, 2004). When colleges began to act \textit{in loco parentis}, or, \textit{in place of a parent} the small number of students, strict curriculum, and few choices of major allowed faculty to advise and focus on the individual needs of each student attending their colleges.

After World War II, the GI Bill of Rights was passed. This bill, which allowed veterans to attend college at no cost, created an influx of students on college campuses (Cook, 2009). Faculty roles began to change with this diversification of curricula and students, and the need for specialized services for students also grew. Faculty members were still the primary advisors, but they were no longer able to give as much individual attention to each student. The field of student affairs began to emerge and included different types of counseling services, such as vocational, educational, and personal adjustment counseling (Cook, 2009). Academic advisement began to assume an important role on college campuses. In the 1940s and 1950s, faculty members were still the primary advisors, however, the huge growth in enrollment throughout the 1960s and 1970s, which led to the development of community colleges, federal aid, increasing curricular offerings, and majors, created many new ways to advise college students (Cook, 2009; Jeshke, Johnson & Williams, 2001; Tinto, 2000). During this two-decade period, the two new advising systems that were introduced were the centralized advising
center and peer and paraprofessional advising. The need for professional advisors and more comprehensive advising systems began to emerge as universities grew and there was an increasing concern for retention (Frost, 1991).

This created a variety of models of how to conduct academic advising, including approaches with faculty, professional advisors, and/or peer advisors. Today, faculty and professional academic advisors are expected to assist students in many areas including but not limited to selecting majors and general curriculum courses, understanding academic regulations and requirements, and completing undergraduate degrees (Baker & Griffin, 2010). In addition, students may seek general mentoring and career guidance from their advisors. Academic advising has evolved and been recognized to meet students’ needs, which can help college campuses continue to adjust their programs to meet future challenges.

In 1979, The National Academic Advising Association (NACADA) was established (Cook, 2009). Institutions of higher learning displayed an interest in academic advising on a more holistic level. Although some colleges began to utilize professional advisors, it was still a small number of universities (Cook, 2009). In 1979, Grites introduced the following definition of academic advising:

Academic advising in American higher education has evolved from a routine, isolated, single-purpose, and faculty activity to a comprehensive process of academic, career, and personal development performed by personnel from most elements of the campus community. This evolution has resulted from changing enrollment patterns, a new diversity of college students, increased student
involvement in academic process, and the recent economic and labor conditions of the country; it has been reflected in the attitudes toward advising, a changing definition of advising, and a limited number of theoretical models of advising. (p. 1)

Pascarella and Terenzini are two prominent researchers within college student development, beginning their research on student development in 1967 through 1989, covering over 2600 studies. Following these studies, they began another journey with 2500 studies from 1989-2002. In their 2005 volume, *How College Affects Students*, they show the importance of and the impressive growth in research in student development (Taylor, 2009). Pascarella and Terenzini (2005) stated that students who are the happiest and academically the most successful have developed a solid relationship with an academic advisor. A major goal of academic advising is promoting student success. Joe Cuseo (2003) more recently defined an academic advisor as one who:

Helps students become more self-aware of their distinctive interests, talents, values, and priorities; who enables students to see the ‘connections’ between their present academic experience and their future life plans; who helps students discover their potential, purpose, and passion, who broadens students’ perspectives with respect to their personal life choices, and sharpens their cognitive skills for making these choices, such as effective problem-solving, critical thinking, and reflective decision-making. (p. 15)

Beal and Noel (1980) found academic advising to be one of the three major areas promoting student satisfaction and retention across 947 institutions of higher education.
Since this study, the importance of academic advising within universities has increased and has gained more visibility as a critical component of student development during the college years (MacKinnon, 2004; Pascarella & Terenzini, 2005). According to Corts et al. (2000), advising is seen as a necessity, and student satisfaction is inversely related to student complaints regarding advising and career preparation.

The decision to stay or leave for a student is based on those early on connections, interactions and interventions a student has during his/her college experience. It is the daily action with other members of the university; both formal and informal in the academic and social domains and how the student perceives these interactions which effects whether they are retained (Tinto, 1987). Four decades of research have shown that there are three critical elements regarding students’ persistence toward graduation/degree. These are: advisors and administrators connecting students early on to support programs such as tutoring services, first year programming (learning communities and freshmen seminars), and continuous academic advising which is the vital piece to retention (Cook, 2009; Drake, 2011, Pascarella & Terenzini, 2005; Tinto, 1987).

The advisor can have positive impact on students’ persistence in college, development of academic skills, career decisions and educational aspirations, and satisfaction with their college experience (DeSousa, 2009, Hunter & White, 2004; Propp & Rhodes, 2006; Uhlik, 2004). To promote student success, advisors can assist students and engage in activities on campus, inside and outside of the classroom (time management skills, clubs, etc.). There are many factors that an advisor will want to know
and explore with a student. Student’s overall performance is connected to many other factors that are occurring during their college experience, such as peers, family, romantic relationships, professors, as well as their physical, emotional and mental status. They also can have test anxiety, financial needs that are not being met, and post-graduation anxieties that can be an overall factor that will need to be explored (Petress, 1996).

According to Hunter & White, (2004) “academic advising, well developed and appropriately accessed, is perhaps the only structured campus endeavor that can guarantee students sustained interaction with a caring and concerned adult who can help them shape such an experience” (p. 21).

Moving to the 21st century, there has been an increase in the number of students attending universities but a decrease in the number of individuals, both faculty and professional, conducting academic advising (Teitlebaum, 2000). Advisors are challenged to create the same warm, supportive, high-quality services with a larger number of students to advise (Teitlebaum, 2000). As the awareness increases to create a supportive, structured environment for students, there are different programs on engagement through academic advising as well as other formal systems. Habley and McClanahan (2004) found that freshmen students taking seminar/University 101 for credit, tutoring, and advising interventions were the top three identifiable campus practices that had the greatest impact on student retention.

While a sustained interaction between advisor and advisee is recommended, many current academic advisors may only meet with their advisees during registration (Keup & Barefoot, 2005; Tuttle, 2000). The period of registration occurs once per semester, and it
might be the one designated required time to meet. The pressure to serve large numbers of students individually, accurately, and comprehensively is a common complaint (Tuttle, 2000). “In the real hours of real days advising often becomes whatever can be done to get through most expediently,” commented Strommer (1994, p. 92). According to the 2011 National Survey of Academic Advising, the median caseload of a full-time advisor is 441 advisees at community colleges and 260 advisees at public four-year colleges (Carlstrom). Due to the overall large number of advisees, advisors may spend as little as 15 minutes with a student which may shift the conversation from developing the student to problem solving, prescribing curriculum for their upcoming semester, and firefighting (Hale, Graham, & Johnson, 2009; Tuttle, 2000). This belief in developing a long-term relationship with sustained interaction and concern for the whole student is difficult to make a reality if only meeting once or twice a semester for such a short time period (Hunter & White, 2004). Hester (2008) found a positive relationship between frequency of advising sessions and good advising. Therefore, other advising approaches and methods should be considered and assessed in the attempt to develop this sustained relationship with more frequent contact between the advisor and her/his advisees.

As developed by The National Academic Advising Association (NACADA: The Global Community for Academic Advising), an “academic advisor synthesizes and contextualizes students’ educational experience within the framework of their aspirations, abilities, and lives, to extend learning beyond the classroom, campus boundaries, and timeframes” (Drake, 2011, p. 10). The advising interactions are intentional to help and encourage students to “value the learning process, to apply decision-making strategies, to
put their college experience into perspective, to set priorities and evaluate events, to
develop thinking and learning skills, to make choices, and to value the learning process”
(Drake, 2011, p. 10).

When students receive high quality, sustained attention from an institutional
administrator who can guide and mentor them, there is a greater chance for those
universities to have higher student satisfaction, persistence, and graduation rates (Hunter
& White, 2004). The challenge becomes creating an academic advising system that
students, faculty, staff, and administrators view as effective and essential to the
educational experience (Hunter & White, 2004). Institutions will have to look at the way
they currently are utilizing advisors and with shrinking budgets and more students,
identifying other ways of becoming more efficient. Allen and Smith (2008) stated that
researchers should examine the implications for student satisfaction, and ultimately
retention, of the various models for delivering advising.

**Faculty and Professional Advisors**

Faculty-student interaction outside the classroom has consistently been shown to
contribute to positive student outcomes such as retention, persistence, educational
attainment, as well as cognitive and social development (Dillon & Fisher, 2000;
Pascarella & Terenzini, 2005). Academic advising is a major resource through which
out-of-class contact between faculty and students can occur (Habley, 2004; Kennemer &
Hurt, 2013). However, in national surveys academic advising is consistently among
those services with which students are dissatisfied (Corts et al., 2000; Keup & Stolzberg,
2004). Faculty does not necessarily feel responsible for all of the kinds of academic
advising believed to be important for students to receive. Quality advising encompasses five domains: integration of academic, career and life goals; referral to campus resources; degree requirements as well as policies and procedures; individuation; and shared responsibility and helping the student gain decision-making and problem solving skills (Allen & Smith, 2008). Therefore, they often cannot provide quality academic advising due to their other responsibilities, lack of training as well as reward (Smith & Allen, 2006, 2008; Habley, 2004, 2004; Kennemer & Hurt, 2013; Vowell & Farren, 2003). This may be due to the intricacies of academic advising and that faculty cannot take on extra work required as some feel this is an add-on obligation to their already busy schedule of research, teaching and service (Blake & Griffin, 2010; Dillon & Fisher, 2000; Vowell & Farren, 2003).

Habley (2004) conducted research on advisement for over 20 years. He noticed a trend beginning in 1987 with institutions moving away from an advising model involving faculty only due to faculties’ rigorous schedule of teaching, research, grants, to a model that includes both faculty and student affairs professionals. This gap in advising services can be bridged through faculty and student affairs partnerships (Allen & Smith, 2008).

Faculty often regard advising as a “low status activity or as an add-on to a faculty load already full with the obligations of teaching, research, and services” (Vowell & Farren, 2003, p. 66). They believe that academic advisement is not valued by upper administration or that advisement does not carry much weight with tenure or promotions. This is not surprising as, according to Habley (2004) only 31% of all universities
recognize faculty for helping with academic advising through recognition, reward, or compensation.

Increasing diversity of students and calls for improvements in retention have prompted an ongoing debate regarding whether faculty or professional staff provide the most effective academic advising for students (Coll & Draves, 2009). With the diverse population and needs of current students, academic advisement is both time consuming and challenging (Smith & Allen, 2006). Students often view faculty members as unresponsive or inaccessible, or believe that they do not hold student advising as a high priority (Allen & Smith, 2008). On the other hand, faculty members are experts in their disciplines and academic programs, which may make them most effective at advising students regarding course selection and curriculum planning (Coll & Draves, 2009). As students seek advising regarding career options and campus support services, these needs may best be met by professional advisors who are most familiar with campus resources and who are typically trained in facilitating student development (Lynch, 2004).

Habley (1994) conducted a comprehensive survey of students at 110 colleges and universities regarding their perceptions of faculty and professional staff advising, and found little difference in student perceptions and satisfaction between the two groups. Lynch (2004) conducted a more recent survey of student advising perceptions at a mid-sized public university and found that students were more satisfied with professional advisors regarding degree and program requirements, campus policies, mentoring regarding long-term plans, and ability to provide referrals to other resources. In general,
students reported higher levels of satisfaction with professional advisors versus faculty advisors (Lynch, 2004; Mottarella, Fritzche, & Cerabino, 2004).

**Types of Advising**

Enhancing the quality of academic advising is essential in meeting the expectations and needs of today’s students. Compelling evidence links student engagement, academic success, and persistence with good academic advising (Steingass & Sykes, 2008). Many institutions have not realized or maximized the full potential of academic advising. Advising provides a role in increasing access to, improving retention and graduation rates, as well as decreasing the time students take to earn their degrees (Drake, 2011).

There are no standardized methods, assessments or goals of advising systems on which to evaluate the effectiveness of advising programs (Melander, 2005). The models that have received the most recognition are the prescriptive, developmental, intrusive and learning centered models. In the prescriptive model, curriculum requirements are similar to a roadmap with all of the directions clearly outlined. The dominant philosophy of advising is the developmental model (Lowenstein, 2005). Lowenstein (2005) described developmental advising as “a two directional dialogue (instead of a monologue) in which the student and advisor interact, and the student is an active (rather than passive) participant. In the ideal case, the student is changed by the process; that is, his or her personal development is enhanced” (p. 67). Intrusive advising is action oriented to involve and motivate students to seek help when needed (Earl, 1988). Glennen (1995) acknowledged that intrusive advising uses a variety of interventions where the academic
advisor is more involved in the affairs of the student.

The two most commonly used paradigms of advising, the developmental model and the prescriptive model, differ both in the methods used to encourage student learning and the characteristics exhibited by the advisor. The developmental approach encourages advisors to be warm and supportive. These characteristics are not commonly associated with the prescriptive approach (Mottarella, Fritzsche, & Cerabino, 2004). Mottarella et al. (2004) believed that students might not develop a preference for a particular approach (prescriptive vs. developmental) if the relational elements they seek are woven into the advisor/advisee relationship.

Mottarella, Fritzsche, and Cerabino’s (2004) study identified which factors students in academic advising value most. Four hundred sixty eight participants read scenarios of 48 different advising sessions. Participants were asked to rate the level of satisfaction they would feel as a student in each particular advising session. The five cues that were manipulated during the study included; advisor gender, advisor type (peer, faculty or professional), depth of the advising relationship, type of approach used (prescriptive vs. developmental), and the emotional nature of the advising relationship.

Mottarella, Fritzsche, and Cerabino (2004) found that the depth of the advising relationship was a factor that was important to all participants as well as the emotional nature of the relationship and type of advisor. The least important variable was the approach that the advisor used. Although it has been assumed that the prescriptive model does not universally incorporate warmth and support, the authors believe that the foundation of the advising being warm, solid, and supportive can occur regardless of the
approach the advisor may take toward advisement. In the gender category, students
preferred female advisors, as they were found to be more empathic and supportive than
male advisors. The authors recommended that advisors shift their focus towards
establishing and strengthening relationships with their advisees, and that the approach
should not be the main concern for the advisor because it does not weigh as heavily in
students’ perception of the advising session and feelings towards the advisor.

Pascarella and Terenzini (2005) found that students who are the happiest and the
most academically successful had developed a solid relationship with an academic
advisor. Academic advising is all about student success. Recently, presidents from small
four-year colleges, community colleges, and the nation’s largest universities have
publicly advocated that strong advising programs are crucial to the central mission of
their institutions (Drake, 2011). For instance, Ann Weaver Hart, president of Temple
University created funding to hire ten new advisors because she values the role that
academic advisors play in helping students achieve success. During a recent National
Academic Advising Association (NACADA) conference, Tony Kinkel, president of
Pikes Peak Community College, noted the key role that academic advising plays to
student success and the mission of his college, stating, “In the end, strong academic
advising programs signal an institution’s commitment to the success of its students and
should never be left to the vagaries of chance of sitting precariously on the chopping
block” (Drake, 2011, p. 12).

Lowenstein (2005) believed that the developmental model is more advanced than
the prescriptive model, but the learning-centered model surpasses both approaches.
Melander (2005) also proposes that “advising-as-educating” is the right approach to take when developing an advising system in higher education. Addus, Chen, and Khan (2007) suggested that the learning-centered model is superior to both the prescriptive and developmental models of advising. The learning-centered model is discussed in more detail, as it is an important component of the theoretical framework for this research study.

**Learning Centered Model**

Pedagogical theory has shifted the emphasis from the teacher (what does the teacher know and do?) to the learner (what does the learner need to know and do, and how will she/he achieve that goal?) (Berling, 1999). In student-centered learning, the goals of the course are defined around what assignments, experiences and explorations the students will have and complete. For learning to empower students, a course’s assignments and activities should encourage students to explore their own interests (Berling, 1999).

The Arizona Faculties Council (AFC) of the Arizona University System (2000) defined learning centered education as that which “places the student at the center of education. Learning centered education advocates a student-focused teaching and learning environment and the learner-centered environment facilitates the exploration of meaning and content knowledge through personal and interpersonal discovery” (p. 1). The mission of learning centered advising programs is to develop learning goals for the students to master within the academic advisement relationship. In viewing advising as
educating, tools utilized by teachers in the classroom can be modified for use in advising (Barr & Tagg, 1995; Bosch et al. 2008; McDaniel et al. 2000; O’Banion, 2000).

Although advisors periodically will be required to impart information and strive to develop their students, neither of the aforementioned models offers ideologies that define the optimal role(s) of the advising profession (Addus et al., 2007). The learning centered model of advising represents advising as teaching. The central focus of learning centered advising is to assist students in developing an understanding of their curriculum (Addus et al., 2007; Campbell & Nutt, 2008; Hagen, 1994; Hemwall & Trachte, 2005; Lowenstein, 1999, 2005, & Strommer, 1994). The advisor plays the role of the teacher, assisting the students in learning the necessary skills to be their own educational planners (Melander, 2005). This focus is similar to a teacher’s responsibility of ensuring that students understand the content of a particular course (Addus et al., 2007). According to Melander (2005), this paradigm encourages students to develop higher-order thinking skills and to become the author of their own knowledge construction. The ultimate goal of learning centered advising is to help students develop into lifelong learners who are capable of advising themselves.

According to Lowenstein (2005), there are obstacles to implementing the learning centered model of advising. Since the developmental model is widely used, advising positions likely will be given to counselors trained according to this model. Also, professional advisors who are not faculty members will be required to be more involved with the faculty in order to understand the learning goals faculty establish for their students. This will allow advisors to offer guidance that is in line with the faculty’s
intentions. Although these obstacles are not impossible to overcome, they require those involved in the advising process to dedicate a considerable amount of time and effort as well as cooperation, during the transition to the learning centered model of advising.

An obstacle for faculty in higher education is the dedication of a considerable amount of time and effort to transitioning to the learning centered model of advising. Studies within the last decade have shown faculty members are responsible for 75 to 90% of advising duties on college campuses (Habley, 1994, 2004). Faculty members often regard advising as a low status activity added on top of the time-consuming obligations of teaching, research, and service (Blake & Griffin, 2010; Vowell & Farren, 2003). Some faculty members believe that advising is not valued by upper administration or that it carries much weight in tenure decisions. The use of faculty-delivered models of advising might be limited by the promotion and tenure policies of institutions if they tend to emphasize research and publication (Kennemer & Hurt, 2013; Pardee, 2004).

One model that has been introduced at Virginia Commonwealth University (VCU) can be seen as a learning centered model of advisement. In this study evaluating VCU’s model, first-year students advised through the new University College show higher levels of engagement and academic success persist at higher rates (Steingass & Sykes, 2008). VCU made four major changes in their advisement prior to this study. The first change was creating University College, which is a centralized home for the new core curriculum and campus-wide academic support programs. These advisors assumed all responsibility for first year students regardless of their majors. A total of 30 full-time advisors, half of whom were newly hired, were assigned to the University College. By
hiring new advisors, the student load went from 300 first year students to 175 per academic advisor. The second change was requiring each advisor to submit an individual advising plan to a supervisor. The purpose of this was ensuring that each advisor would meet the objectives of the new advising program. The third change was focusing on proactive advising. In the learning centered model, advisors engage the students and are proactive about their learning experience. Advisors are continually in contact with their students. When a student exhibits at-risk behavior, the advisor will contact the student to address the issue in a proactive manner. The fourth change was adding extensive training for all advisors. The training consisted of policy changes, campus resources, information on the curriculum, and any other skills that would help advisors work with students. Therefore, the advisors were more informed and can assist the student through their knowledge.

In their study, Steingass & Sykes (2008) discovered that students who were advised through the University College showed higher levels of engagement and academic success and persisted at higher rates. They reported a 14% increase in the number of students who expressed high levels of satisfaction with academic advising and a 6% increase in the number of students making more informed educational decisions compared to previous NSSE administration, a primary goal within the learning centered model. “Students are more apt to succeed academically, establish clearer educational and lifelong objectives, and tailor their educational experience toward their goals and aspirations when they receive ongoing and meaningful academic advising” (Steingass & Sykes, 2008, p. 18), which is one example of a learning centered model.
The interventions at VCU confirm that the more students meet with their academic advisors, and the more proactive and engaging the advisors are, the more satisfied they are with the advising services that they receive. Based on this knowledge, VCU changed their academic advising to address retention rates, lower levels of student engagement, and the high proportion of students who experience academic difficulty. These results suggest that if other institutions were to adopt this advising model, student retention, persistence, and satisfaction may markedly improve.

Kelley (2008), an advocate for the “advising as learning” philosophy, believes that advisors can utilize some of the same tools that teachers use in the classroom. If advising is a form of teaching, then students should be able to master learning objectives, as they do in the classroom (Hurt, 2007). The ideas presented in the following paragraphs describe concepts that were developed for teachers and apply the general principles to advising.

“Viewing academic advising as an educational process moves it from a paradigm of teaching that focuses on information or inputs to a paradigm of learning that focuses on outcomes for student learning” (Campbell & Nutt, 2008, p. 4). Retention and persistence are important, however, another potentially better measurement of success and progress is whether a student has learned what they need to know to be successful in a growing global economy as well as balancing their personal lives, according to the College Learning for the New Global Century (AAC&U, 2007). Therefore, as important as retention and graduation is, if institutions were to focus on actively engaging their
students and developing their own learning skills, graduation and retention may then follow.

Quality academic advising is at the core of successful student initiatives (Tinto, 1998, 2007). In 2006, the National Academic Advising Association (NACADA) developed the Concept of Academic Advising to relate academic advising to student engagement in learning. This concept regards academic advisors as integral to both teaching and learning and shows their role in fulfilling the mission of higher education:

Through academic advising, students learn to become members of their higher education community, to think critically about their roles and responsibilities as students, and to prepare to be educated citizens of a democratic society and a global community. Academic advising engages students beyond their own worldviews, while acknowledging their individual characteristics, values, and motivations as they enter, move through, and exit the institution. Regardless of the diversity of our institutions, our students, our advisers, and our organizational structures, academic advising has three components: curriculum (what advising deals with), pedagogy (how advising does what it does), and student learning outcomes (the result of academic advising). (p. 5)

These three components can be critical to a student’s overall college experience. One way of addressing these components as well as utilizing academic advisors through a learning centered model is by having the advisor both teach through a freshmen seminar course as well as these students in their freshmen seminar becoming their advisees.
Freshmen Seminar

Issues that negatively impact retention include loss of a sense of community of campus, and lack of consensus about the primary mission of the institutions (Gardner, 1995). In an effort to address these issues, as well as keep pace with rapidly increasing enrollments, universities began adding first year seminars in the 1980s (Upcraft, Gardner, & Barefoot, 2005). Although the first-year seminar took on many different forms, the shared goal of all such programs was to address diversity concerns and preparedness among first year students. Many colleges and universities refer to seminars tailored for first year students’ needs as “The First Year Experience.”

White, Goetz, Hunter & Barefoot (1995) were among the first researchers to describe the first year experience intervention strategy. They suggested the design should include opportunities to interact socially with peers as well as faculty, introduce students’ to the campus, staff, student affairs offices as well as other faculty during advising sessions (White et al., 1995). The number of institutions taking steps to respond to first year students’ needs more than doubled. By 1995, 82% of institutions of higher education reported attempts to address retention, promote learning, satisfaction, and persistence through inclusion of first year seminars (Barefoot, Warnock, Dickinson, Richardson, & Roberts, 1998; Gardner, 2001; Hunter, Henscheid & Mouton, 2007). From a more recent study done by the Policy Center on First Year of College showed that 94% of accredited four-year colleges and universities offer a first year seminar course to at least some students and over half offer to 90% or more of their incoming freshmen class (Policy Center on the First Year of College, 2002).
Entering college is a major transition for most high school students who will experience a new environment and begin their freshmen year. Freshmen seminars were created to assist with this transition to college life (Hsu & Bailey, 2011). Astin et al. (2002) completed a 35-year study of first-year seminars, and how important they are for students’ adjustment and transition to being active learners in their college experience and for them to be successful. Pascarella and Terenzini (1991, 2005) have also studied and shown that first year seminars help with persistence as well as degree completion. Hendel (2007) found that first year seminars also influenced a greater sense of community, which may contribute to first to second year retention.

Sidle and McReynolds (1999) carried out a study on the relationship between a freshmen seminar and student retention success. Students who completed the semester course had a higher return rate for the spring semester than for nonparticipants as well as earning a higher grade point average. Williford, Chapman and Kahrig (2001) completed a ten-year study, and in eight of these years, participants of the freshmen seminar course returned at a higher rate than those who did not participate. Graduation rates were also higher in the last five years of the study.

There are many different versions of the first year seminar, including: extended orientation seminars; academic seminars and discipline linked courses; career linked courses; learning community or freshmen interest group seminars; study skills seminars; and hybrids, or two or more seminars. According to the Sixth National Survey on First-Year Seminars, 65% of respondents utilize a freshmen seminar studies course to address time management, study skills and other developmental needs as well as transitioning to
college and understanding the resources available to students on the college campus (Tobolowsky, 2005). This study also revealed that while over 80% of institutions reported that they offer first-year seminar, only 46.8% required all first year students to enroll and that 30.4% of those who responded indicated that professional academic advisors taught freshmen seminar.

The most successful programs involve outstanding faculty members, last a full academic term or longer, and are challenging and credit-bearing (Gardner, 2001). The purposes of the seminar is to present information and promote awareness regarding academic planning, academic assistance, early career planning, academic content of and knowledge on the majors available to the students, and other resources at the institution. Though some research suggested that faculty should play a role in the seminars, Hunter, Henscheid, and Mouton (2007) advocated for linking first-year seminars and advising, because it maximizes the effective delivery of both programs. Both first-year seminars and advising are constructed to support student learning and personal growth (Creamer, 2000; Hunter & Linder, 2005). Siddle and McReynolds (1999) found that students who enroll in freshmen-year experience courses tend to complete more credit hours, earn higher grades, and return to the university at higher rates than students who do not enroll in courses like these.

Richard Light (2001) conducted a ten year study at Harvard University interviewing seniors and came to the conclusion that good advising may be the most underestimated characteristic of a student’s successful college experience. The literature has shown that there is an importance of academic advising and frequency of contact with
their advisee. Therefore, through a course where the academic advisor can be the instructor once a week would seem to be a logical step to build the advisor/advisee relationship (Bitz, 2010). The first year seminar course can be geared towards helping students navigate their university, manage their time and financial concerns, and develop an academic and career plan while building a relationship with their academic advisor.

Porter and Swing (2006) investigated first-year seminars and ‘the impact of course content on early intent to persist using a survey of students in first-year seminars at 45 four-year colleges and universities (p. 90).’ Their research question was ‘what specific content areas of first-year seminars lead to greater intent to persist among first-year students?’ (Porter & Swing, 2006). They found that learning skills and health education had both statistically and substantively significant impacts on intent to persist to the second year of college.

Another study was conducted by Thompson, Orr, Thompson & Grover (2007) at the University of Arkansas. They wanted to examine the perceptions of freshmen students regarding their first year experience course. Their instrumentation measured the following six factors; goal setting, campus resources, stress, relationships, racial sensitivity, and belonging/identity (Thompson et al., 2007). They did not specify in this study who taught these first year experience courses, faculty, student affairs staff or academic advisors. However, in the discussion Thompson et al. mentioned “an investigation of institutions that offer a dedicated advising center to students for the freshmen-sophomore year should be studied” (2007). The results did find that students who feel they belong at the university are more likely to be retained which included
students living on campus (the majority of the survey was taken by students living on campus). They also found that students who said they were extremely stimulated by their courses rated advising higher than those who were not stimulated at all. Student’s who work closely with their academic advisors in selecting courses and is able to explore of their interests and skills, may be more engaged academically (Thompson et al., 2007).

Two of the most historically consistent efforts to transition students to the college experience have been academic advising and first-year seminars (Upcraft, Gardner, Barefoot et al., 2005). However, according to the ACT survey conducted in 2004, slightly less than half (47%) of all college officials identified a specific goal to increase first-year student retention (Act, 2004). These two endeavors, first year seminar and academic advising, continue to lead parallel existences on most college campuses. The integration of these two may lead to persistence and retention. Both freshmen-year persistence and degree completion are positively linked to the first-semester freshman seminar designed to familiarize the student to the institution and to teach valuable academic survival skills (Pascarella & Terenzini, 1991). The advisor/advisee relationship plays a significant role in a student’s social transition to their new environment and helps increase student persistence (Nutt, 2003). One of the primary factors influencing college retention is the quality of communication a student has with a caring (Habley, 2004).

Hunter, Henscheid, and Mouton (2007) also advocated for infusing academic advising and first-year seminar. Currently, only 30% of institutions offer academic advisors to teach their freshmen in a first year seminar course (Tobolowsky, 2005). One area worthy of study is the impact the decrease in faculty advisement and increase in
professional advisors has had on college students (Habley, 2004). The 2003 National Survey of First-year Seminar programs reflect course objectives (Tobolowsky, 2005). In these course objectives, researchers found goals that were related to academic advising (National Academic Advising Association, 2006; Council for the Advancement of Standards, Academic Advising, 2005), such as: “encourage personal development, familiarize students with campus resources, and introduce courses of study” (p. 102). The themes in what needs to be learned and understood in both first year seminar and academic advising also overlap; campus resources, academic planning/advising; career exploration/preparation; college policies and procedures; and specific disciplinary topics (Tobolowsky, 2005). The framework of both academic advising and first-year seminar are the same, to promote both student learning and personal growth (Creamer, 2000; Hunter & Linder, 2005).

While the field of academic advising seeks to establish advisement as teaching from a holistic and developmental process (Campbell & Nutt, 2008; Kramer, 2003), Hunter, Henscheid and Mouton (2007) made a case that this can be accomplished through a first-year seminar, arguing, “Moving our institutions toward a philosophy of advising as teaching has no more fertile ground than within the first-year seminar” (p. 104). The characteristics of millennial students shows them needing a more prescribed or structured environment in which they expect educators to tell them what to do (Keeling, 2004). The learning centered model of advising and teaching may be what is needed to motivate these students to take responsibility for their education.
Summary

Academic advising in higher education has been underutilized and criticized by students. This has led many scholars to analyze current models of advising and work towards the development of a model that will improve satisfaction with the advising process. Currently the two most popular models of advising, prescriptive and developmental, may not be the most useful in helping students develop the higher order thinking skills they need to become their own advisors and lifelong learners. In reviewing the literature, it is evident that many authors are advocating for the learning-centered model where advisors are viewed as teachers, helping students to navigate through and make sense of their academic experience. The mission of the learning-centered model is to develop learning objectives and goals for the students to master. In viewing advising as educating, some authors believe that tools utilized by teachers in the classroom can be modified for use in advising.

The literature did not reveal any research on current students’ perceptions of their academic advisors’ role in the freshmen seminar. The relationship between first-year seminars and academic advising presents an area of needed research (Hunter, Henscheid, & Mouton, 2007). Further research could reveal whether an increased role for advisors in these seminars would improve students’ experiences.
CHAPTER THREE

Research Methodology

Academic advisors can play a critical role in the development of college students; so much so that the advising relationship has been shown to contribute to student retention, satisfaction, and academic success (Hale, Graham, & Johnson, 2009; Pascarella & Terenzini, 2005; Schnell, 1988). While researchers (e.g., Barefoot, 2000; Sullivan et al., 2007; Tinto, 2004) agree that programs, such as first year seminars or one-credit courses, providing strategies to improve the first-year student’s transition to college are important for developing skills to facilitate academic success, additional research is still needed related to academic advising interventions that may be helpful in supporting student success during their first-year and beyond (Sullivan et al., 2007).

In this study, I explored how a learning centered model of advising, implemented through a freshmen seminar program requiring advisors to simultaneously teach and advise their advisees, impacted the college experience of incoming freshman. Additionally, I studied how this approach to advising, involving more than the typical once or twice a semester meeting with advisors (Tuttle, 2000), impacted the advisor/advisee relationship.

As noted, this research was conducted under the parameters that advisors are simultaneously advising and teaching their advisees (students they teach will be their advisees) through a first semester required freshmen seminar course at a northeast, urban mid-sized science, technology, engineering, and mathematics (STEM) institute. I have been an academic advisor and in the field of student affairs for approximately 16 years.
and have played a major role in developing the academic advising program where this study was conducted. Within the College of Computing Sciences, I developed and implemented an advising model, which is now being extended to the new Advising Success Center (ASC). Therefore, I am committed to determining if this approach has any impact on freshmen students’ college experience and the advisor/advisee relationship.

Because of my new position as Director of ASC and my ongoing desire to study, anything learned via this research will be fed back into the program toward its continued refinement. Therefore, I chose practitioner action research for the design of this study. This design allowed me to study the program and identify any related effects it may have toward students’ overall college experience and the advisor/advisee relationship, while continuing to identify ways to improve the program.

**The Choice of a Practitioner Action Research Design**

Action researchers are particularly well positioned and determined to bring an authenticity to research and the problem-solving process (Merriam, 2009), which can be seen as practitioner action research. I have always enjoyed helping my students navigate their college experience. Throughout my years as an advisor, I have noticed that students who connect with an academic advisor or another professional on campus stay connected and feel more open to express their college experience honestly. Therefore, early on in their career, I wanted to find ways to get to know my students and show them that they can come to my office anytime, as I am there to help and assist. I realized many other academic advisors felt the same way, and I wanted to incorporate a way for us to identify
our students early on and begin building a relationship as soon as possible.

To address this goal, I created a one-credit course with advisors teaching their advisees. I felt this would enable us to develop better relationships with them and more consistent contact throughout their college careers, which might help them navigate through their college experiences.

Since implementing this program in September 2010, I have been promoted to Director of the new Advising Success Center (ASC) as of July 2013, and I implemented this model in the new center. The university understands that academic advisement is an effective tool in both retention and persistence. By researching this learning centered approach of advising, I began to examine whether the approach to advising helps them navigate their college experience and if it had an impact on the advisor/advisee relationship. Because of this interest, as well as my professional philosophy of continuous reflection and my commitment to life-long, learning, I chose practitioner action research for my dissertation research.

I explored the experiences of undergraduate, traditional aged first-semester freshmen college students and their interpretation of being both taught and advised by their academic advisor and whether this was effective for relationship building and for enhancing their overall college experience. “Action research has as its goal to address a specific problem within a specific setting, such as a classroom, a workplace, a program, or an organization” (Merriam, 2009, p. 4). McKernan (1988) described action research as “a form of self-reflective problem solving, which enables the researcher to better understand and solve pressing problems in social settings” (p. 6).
Action research can also contribute to academic advisement as a field of study. I chose action research after being introduced to the design as a doctoral student. This is a participatory, democratic form of research where change or influence is desired in one’s own context (Chandler & Torbert, 2003; Herr & Anderson, 2005; Stringer, 1999). In this research, I viewed myself as a life-long learner hoping to influence the field of academic advisement and began examining a learning centered approach to advising. This research can contribute to the field, as well as change and influence ideas for the new Advising Success Center (ASC), and begin my journey of best practices within academic advisement.

**Context & Setting of the Study**

The university where this research occurred is in the northeast U.S. and has approximately 6,600 undergraduate students throughout five colleges. The university has a rigorous science and math curriculum, focusing mostly on science, technology, engineering, and mathematics (STEM) curricula and careers.

In the past year, a new strategic plan was written focusing on retention and persistence with ways to better improve academic advisement. Since the plan has been written, the Vice President of Student Affairs and I have been working on a related strategic plan, creating a new advisement center as well as creating consistency at the university for procedures and policies for academic advisement. The new center, ASC, currently consists of a Director, Associate Director, two Academic Advisors, a master’s level intern as well as peer advisors. For the first year of the center, the student population will consist of biology, undeclared STEM first year freshmen, and those
students who are considered “at-risk.” At this university, at-risk for STEM students will be those students who were not able to place into calculus as well as being two semesters behind in their math sequence.

As indicated, the institution is located in the northeast and is an urban, small, private STEM institute. In its 2013-2020 strategic plan, the university is focusing on how to enhance advisement as a tool for both retention and persistence toward graduation. Currently, 80% of students who enroll in their first semester continue on to the second year. Only 53% of students persist to graduation within six years at the university. The 2020 strategic plan is to have a 90% retention rate from freshmen to sophomore year and a 64% graduation rate in six years. Therefore, one of the ASC’s goals is to provide an approach to academic advising that will best serve the students, and in return, both help with retaining and persistence if this is what is in the best interest of the student.

I currently work at the institution that I have chosen as the site for my research. I have worked and been part of academic advising at my current institution for nine years. I have been part of creating the one credit course for our incoming freshmen known as CS 107. This course was granted through the university committee and the first cohort was in Fall 2010.

The institute has approximately 1,000 incoming freshmen each year. Each incoming student is assigned a freshmen seminar course. Most of these freshmen seminar courses consist of approximately 25 students from all different majors. Freshmen seminar throughout the university (excluding CCS) is a pass/fail course taught by anyone at the university who would like to teach a section and consists of students
from all different majors being together in a section. In fall 2012, the university embraced some cohorts within the same major, such as mechanical engineering, and the mechanical engineering academic advisor taught a cohort of her own students.

In Fall 2010, we were able to implement CS 107 for our specific cohort of students in CCS (majors in Information Technology, Information Systems, and Computer Science). For the past three consecutive fall semesters, the advisors have taught CS 107. This population is distinct at this university because the students are in a cohort, receiving college credit and instruction from their academic advisor throughout the 13-week fall term. I created this course to provide weekly meetings with students with their advisors, as well as to educate the students about the different degree options within CCS. I will continue with this approach to academic advising through ASC by having all undecided students in the same sections taught by their academic advisor throughout the 13-week fall term.

CS 107 began as an extension of freshmen seminar with added information, knowledge, and skills that I feel are needed for incoming freshmen to be prepared and successful to begin their own decision-making on their future as a college student. Freshmen seminar consists of time and stress management training, as well as skills to become acclimated to a new environment. CS 107 also consists of these components, however, we changed the format so that our academic advisors teach their own advisees, as well as educate students about the many majors within the College of Computing Sciences (CCS). Many of our students come to the university “thinking” they are a computer science major; however, they usually do not know what this entails. Therefore,
I saw a need to explain the different majors and transitioning within CCS or to another college within the university was acceptable and “okay.” Therefore, through the CS 107 course and cohort model, students were able to discuss alternatives to their majors with their academic advisors in a classroom setting which enabled discussion about any of the students’ concerns with their classmates as many were feeling the same way.

This approach to advising has been useful to the CCS department and now will be extended to the new Advising Success Center (ASC) for incoming undecided students through Freshmen Seminar that is in lieu of CS 107. CS107 will continue within CCS, however, I have the opportunity to begin this with more incoming freshmen. Academic advisors will teach and advise the undecided students through a freshmen seminar course and will infuse the different majors within the university and help them through their transition to college. I feel that this advising model is unique because academic advisors are teaching their own advisees and creating a relationship early on, helping the student become acclimated and know this is a consistent partnership with a caring administrator on campus.

**Research Question**

The major research question for this study: With academic advisors both teaching and advising their freshmen seminar students, how do students perceive this impacting the advisor/advisee relationships as well as helping students navigate their college experiences?
Data Collection

Within action research, a human being analyzes and interprets information. They are the main instrument of data collection in qualitative research (Merriam, 2009). Data collection techniques for this research study consisted of a demographic survey, quick-writes, and focus group interviews. I also kept a reflexive journal while collecting the data to begin to understand the learning centered approach with academic advisors both teaching and advising their students during the first semester freshmen year.

The instructor for each freshmen seminar class was an academic advisor from ASC. During the fall 2013 semester, there were approximately 110 students enrolled as biology and undeclared majors in three freshmen seminar classes. Three academic advisors were assigned these four sections. During the semester, students wrote quick-writes, which consisted of a short write up on their college experience throughout the semester in freshmen seminar, weekly journals and papers on their experience, attended on campus activities and provided feedback on how they feel their first semester is going.

The syllabus was the same for all three freshmen seminar classes I researched and included as Appendix A. In total, there were two focus groups with 8-12 students in each group. Each focus group met three times throughout the semester for approximately 60 minutes. Students offered to participate by filling out the informed consent prior to the quick-writes and then, if chosen to participate, were notified of the specific dates they were needed.

Population and Sampling Procedures

The sampling strategy was purposeful (Patton, 2005) in nature. Purposeful
sampling is “based on the assumption that the investigator wants to discover, understand, and gain insight and therefore must select a sample from which the most can be learned” (Merriam, 2009). Therefore, I chose purposeful sampling only from the three freshmen seminar classes within ASC. According to Maxwell (2005), there are at least four goals that purposeful sampling can achieve: 1) representativeness of the individuals selected, 2) adequately capture the heterogeneity in a population by defining the dimensions of variation that are relevant to a study, 3) deliberately examine the population that is critical for theory to be developed, and 4) establish particular comparisons to highlight the reasons for differences between participants. I used purposeful sampling because I was interested in studying incoming STEM freshmen who were beginning their college experience and the influence an academic advisor may have through both teaching and advising through a learning centered approach to advising.

I went into the three sections of freshmen seminar with the IRB approved script that I prepared to ask for students to participate, following up with distribution of the consent form. Each student was given a chance to participate in this focus group. There was no penalty for those who chose not to participate. Two focus groups met three times in the fall semester. The consent form, as well as my scripted explanation to students, provided all of this information for the student (Appendix B).

For purposeful sampling, I asked three to five students from each of the three freshmen seminar classes. Although the syllabus was the same for each academic advisor, the academic advisor styles as well as approach to teaching could be different. Therefore, I included students from the three different sections that the academic advisors
were teaching. It was important to make sure I had students from each teacher/advisor section. If I had more than 20 students and multiple students from an advisor’s group volunteer, I randomly selected the 20 that participated by simply drawing their names out of a hat.

**Demographic Surveys**

The demographic survey consisted of ten questions and provided me with a general understanding of the students participating in the focus groups. The survey collected background data such as current GPA, currently registered, gender, and race/ethnic background. The demographic survey is included as Appendix C. The fifty-six participants consisted of thirty three males and twenty eight female students. The majority of the students were 18 years of age (44) and twelve students were 19 years of age. Participants identified as the following; White (25), Asian (19), Hispanic (7), Black (4), Two Races (2), Race NA (1).

**Quick Writes**

For the Fall 2013 semester, students were given a freshmen seminar syllabus. All three instructors (academic advisor) followed the same syllabus, while incorporating their own teaching style and ideas to the classroom. The freshmen seminar taught through ASC utilized a circle format with students forming this circle for the duration of the class and the entire semester. Students were asked to complete a quick-write (Appendix D) four times during the semester on questions that helped with their focus groups (see Appendix E). Students volunteered for the focus groups, however, not all volunteers were selected. I received consent for all participation in both quick-writes and focus groups.
These quick-writes were only used for data from the students who agreed that I could use their information. The first quick-write was given during the third week of classes by their academic advisors at the end of class. I then collected these quick writes. The quick-write helped determine questions asked during the first focus group, through coding the data, themes emerged. After the audio recordings of the first two focus groups were transcribed, questions emerged that were constructed for the second quick write in week 7 and so on. I analyzed the data as I collected it throughout the study, which allowed me to be reflexive and utilized what I learned from previous focus groups to build semi-structured subsequent focus group questions. Through these quick-writes, themes were identified from the students’ experiences to form possible semi-structured questions, which were addressed more thoroughly during the group sessions. This was an iterative process. I continually fed ongoing insights from the students into other data gathering.

The first quick-write was simply an open-ended question; “I’m interested in your first three weeks at NJIT. I am also curious how your experience in freshmen seminar has been so tell me about that too.” I was able to review the participating students’ comments and noticed if there were themes that I could then bring up during the focus group to allow the students to elaborate and explain their thoughts on a specific topic. After transcribing the first focus group, I then created the second quick-write and began member-checking (explained in more detail later) throughout these three focus group meeting times. I followed this format throughout the research during the fall semester.
Focus Group Interviews

Focus-group interviews lasted approximately 60 minutes with 8-12 students in each focus group. The three focus groups meetings were scheduled during the fall 2013 semester. I gave the participants three times and dates that were conducive with their schedule. With my research question in mind, semi-structured interviews from their quick-writes were utilized during the time the participants met in the focus groups. This was seen as less of an interview than a discussion amongst peers. The focus groups were catalytic, with participants building off of each other’s comments during the session. Therefore, I began with the following open-ended questions:

1. How would you describe your experience in freshmen seminar so far?
2. Your academic advisor also teaches your seminar; how is that for you?

I allowed for follow-up and probing questions which occurred during the focus groups. I had other questions that emerged from the discussion as well as from the quick-writes. I began the discussion by creating a safe environment where they could feel open to discuss their experiences amongst their peers. Therefore, I may frame the first question as, “A lot of your classmates wrote that their freshmen seminar has been…” This allowed for a more open dialogue.

The initial questions changed depending on the findings from the first focus group meetings, the second quick-writes, etc. After the first focus group was finished, the audio recordings from the session were transcribed. From this transcription, I identified themes or observations that were mentioned during this first focus group that needed to be addressed in the second focus group. These insights were also built into the quick-
writes. This process was continued for all four focus group meeting times. I utilized open coding and constant comparative method for all the focus groups. I made notations and comments on the transcriptions and comparing both sets of focus groups with one another throughout the analysis to find emergent themes, determine patterns and relationships throughout the data (Merriam, 2009).

Field notes were written and reviewed after each focus group and observation. According to Patton (1990), field notes “contain descriptive information that (permit) the observer to return to that observation later during analysis and eventually permit the reader of the study findings to experience the activity observed through the research report” (p. 239). The field notes reflected what was observed, heard, experienced, and thought as data obtained through the participant focus groups were collected and analyzed. These field notes became part of the data to be analyzed and interpreted.

**Positionality**

Action research is centrally concerned with the issues of being an insider or outsider to your research. This is something that I considered throughout the study, as my work is conducted as an insider. “Action researcher is often carried out by organizational insiders who see it as a way to deepen their own reflection on practice toward problem solving and professional development as well as bringing about organizational change” (Herr & Anderson, 2005, p. 29). Merriam (1998) reminds us that the researcher, as primary instrument in the data collection and analysis of qualitative research, experiences positionality vis-à-vis the participants in the study that has both insider and outsider dimensions. Brannick and Coghlan (2007) advised inside
researchers to be “thoroughly reflective about the advantages and disadvantages of their preexisting knowledge in order to support both roles of researcher and manager” (p. 72).

As a professional academic advisor, the topic of academic advising is dear to my heart. I have worked passionately in this field for 16 years and I realize that I must find a way to be a reflective researcher in order to pursue this as a scholarly endeavor. As an insider, my perspective influences my understanding of the topic of this study. With this in mind, I used my own voice in the research when first person narrative was appropriate. I also have recently become a Director and leader in the field and to four academic advisors. My beliefs on how to conduct oneself as an advisor are strong after years of experience and now conducting research within the field. I continuously explored my own subjectivity by writing in the reflexive journal after my focus groups and observations and worked to address my bias. This will help dispel any pre-conceived notions I may have had. I worked to address research bias, reflecting objectively on my preconceived opinions.

I also confided in one critical friend, someone who was in higher education but outside my academic advising since I am so close to the research. This provided insight on areas I may have not considered. I talked to her regularly regarding my meaning making and understanding of what I had been learning, analyzing and presenting themes I felt were emerging. She questioned my beliefs as well as played the devil’s advocate, helping me explore areas that were blind spots due to my positions in both the university and my own positionality. I documented the meetings I had with my critical friend and reflected back on our conversations.
As an academic advisor who has taught CS 107 and freshmen seminar, it is critically important that I described my biases, experiential background and interest in the research topic. It was important that I constantly separated my opinion from the data. Although I recognized that my tacit knowledge may also be an asset to the study, I needed to allow the data, not my opinions guide the study. I continually interrogated myself regarding my beliefs and impressions and had discussions with my critical friend to push my thinking and observations.

**Data Analysis**

The data analysis began with the first quick-write and then word for word transcriptions of the audio-recorded focus groups. Making sense out of the quick-writes involved consolidating, reducing, and interpreting what the participants had said and what I, as the researcher, had seen and read- which began the process of making meaning (Merriam, 2009). The main characteristic of qualitative research involves its emerging knowledge as the study progresses necessitating continuous reflection and revisions to the interview questions (Merriam, 1998). I began jotting down notes, comments and observations with the quick-writes and asking questions to myself regarding what I am finding and always reflecting back to my research question. The quick-writes were the beginning of my study, helping me form semi-structured questions for my focus groups as well as hear for a larger number of students participating in freshmen seminar. This form of coding is called open coding (Merriam, 2009). I then began to assign these codes to pieces of data and begin to “construct categories” (Merriam, 2009). New themes emerged that I had not expected and explored further, resulting in a need for revisions.
and continuous reflection after each focus group.

In Figure 1, I have kept track of my methodology. This includes the data I have collected in a chronological order during the fall term; including the consent forms, focus groups, quick-writes, and critical friend meetings.

<table>
<thead>
<tr>
<th>Data</th>
<th>Date</th>
<th>Subject</th>
<th>Documentation</th>
</tr>
</thead>
<tbody>
<tr>
<td>PD</td>
<td>September 23</td>
<td>Proposal Defense</td>
<td></td>
</tr>
<tr>
<td>FG</td>
<td>Sept 24 &amp; 26</td>
<td>Attended 4 classes</td>
<td>Consent Forms</td>
</tr>
<tr>
<td>QW</td>
<td>October 1 &amp; 3</td>
<td>Attended 4 classes</td>
<td>Quick-Writes</td>
</tr>
<tr>
<td>TQW</td>
<td>October 5 &amp; 6</td>
<td></td>
<td>Transcribed QW</td>
</tr>
<tr>
<td>FG</td>
<td>October 16</td>
<td>First Focus Group</td>
<td></td>
</tr>
<tr>
<td>FG</td>
<td>October 18</td>
<td>First Focus Group #2</td>
<td></td>
</tr>
<tr>
<td>TFG</td>
<td>October 19-23</td>
<td></td>
<td>Transcribe FG</td>
</tr>
<tr>
<td>CF</td>
<td>October 30</td>
<td>Marybeth Boger</td>
<td></td>
</tr>
<tr>
<td>QW</td>
<td>November 5 &amp; 7</td>
<td>Attended 4 classes</td>
<td>Collected QW</td>
</tr>
<tr>
<td>TQW</td>
<td>November 9</td>
<td></td>
<td>Transcribe QW</td>
</tr>
<tr>
<td>FG</td>
<td>November 14</td>
<td>Focus Group #2</td>
<td></td>
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<tr>
<td>CF</td>
<td>November 14</td>
<td>Marybeth Boger</td>
<td></td>
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<tr>
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<td>November 15</td>
<td>FGroup #2 Group #2</td>
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<td>QW</td>
<td>November 19 &amp; 21</td>
<td>Attended 4 classes</td>
<td>Collected QW</td>
</tr>
</tbody>
</table>
The transcribed focus groups, observations and quick-writes were then organized using the method of constant comparative analysis developed by Glaser and Strauss (1967). The data was coded and recoded until I began to recognize themes emerging. The constant comparative method of data analysis is inductive and comparative and has been widely used throughout qualitative research.

I transcribed all focus groups and I assigned pseudonyms to each participant. All data from the demographic survey as well as transcriptions were stored in my computer as well as in a locked cabinet in my office. All transcriptions were organized by coding and creating themes that were then organized and stored in a binder. I utilized a filing system for categorizing each focus group to allow for greater flexibility in managing and accessing my data. I also listened to each transcription at least twice. I transcribed each focus group myself, getting a better understanding of who each participant was and the tone in which they stated their comments. All data from the transcripts and notes were entered and stored in my computer as well as in a separate folder, consolidating, reducing, and interpreting what I had found which lead to the acquisition of meaningful data. This was a complex process. As I identify emerging themes, I would go back into
the literature to read further on areas that would enlighten my data. The data and literature are in constant dialogue, with my data being informed by the literature as well as data pushing on what was previously known. The goal of data analysis is to find answers to my research question (Merriam, 2009). I presented themes from the data as rich, thick description including quotes for students that were applicable to my study and my themes and subthemes (Moustakas, 1994). The research question is; with academic advisors both teaching and advising their freshmen seminar students, how do students perceive this impacting advisor/advisee relationships as well as helping students navigate their college experience.

Validity and Trustworthiness

“Action researchers are interested in whether knowledge generated from the research is valid or trustworthy, but they are usually also interested in outcomes that go beyond knowledge generation” (Herr & Anderson, 2005, p. 49). Throughout my study, I addressed both validity and trustworthiness. As a practitioner action researcher, I had an ongoing dialogue to create a credible study (Anderson, Herr & Nihlen, 2007). There are different ways to meet the criteria during the research. Herr and Anderson (2005) linked five validity criteria that can be intertwined and addressed throughout this research; dialogical and process validity, outcome, democratic, and process validity.

Democratic validity is the ongoing process of collecting data and modifying it, adding and changing the interview questions/data along the way. Data was collected from many different sources, the quick-writes, reflexive journal, and the focus groups. This helped in accessing other points of view and making sure the students were all heard.
during the study and how to best capture their perspectives (Anderson, Herr, & Nihlen, 2007). Outcome validity was captured through the multiple focus groups throughout the fall semester. This is known as the action research spiral. The researcher learns through data gathering, which deepens the researcher’s understanding, and in turn, more research and data gathering occur. Process validity is capturing an adequate study which is understood by the practitioner action researcher and one that is not seen as flawed or a superficial research process (Anderson, Herr, & Nihlen, 2007).

According to Lincoln and Guba (1985), a study’s trustworthiness involves the demonstration that the researcher’s interpretations of the data are credible, or “ring true,” to those who provided the data. To be trustworthy, I continually practiced skills and created habits on being self-reflective as an action researcher. Bias and subjectivity are natural and acceptable in action research but must be critically examined and reviewed (Anderson & Herr, 2005).

There were different methods of establishing validity and trustworthiness that were in place throughout the data analysis. These approaches were through triangulation (using multiple methods of data collection and multiple data sources), reflexive journal, a critical friend, addressing dialogical validity (using a critical friend or devil’s advocate to ferret out researcher bias and to help the researcher focus on personal perspectives), and member checking (reviewing data, interpretations and conclusions with participants) (Whitt, 1991).

The notion of triangulation, or the inclusion of multiple perspectives, guards against viewing events superficially. Creswell (2009) defined triangulation as “the
process of corroborating evidence from different individuals, types of data, or methods of
data collection in descriptions and themes in qualitative research” (p. 266). Triangulation
also can refer to using a variety of methods—for example, observation and interviews—
so that one is not limited to only one kind of data source. Multiple data collection
methods (focus groups and observation) and multiple data sources (journals and quick
writes) were utilized to triangulate the data, establish trustworthiness, and ensure the rigor
of the study. According to Patton (1990), “triangulation is a powerful solution to the
problem of relying too much on a single source or method, thereby undermining the
validity and credibility of findings because of the weakness of any single method” (p.
193). Using these different methods helped ensure the accuracy of the study.

I kept a reflexive journal throughout the entire process. Lincoln and Guba, (1985)
define reflexive journals as “introspective journals that display the investigator’s mind
processes, philosophical position, and bases of decisions about the inquiry” (p. 109).
Glesne (1999) recommends after each interview or participant observation a researcher
take time for reflective and analytic noting. “This is the time to write down feelings, work
out problems, jot down ideas and impressions, clarify earlier interpretations, speculate
about what is going on, and make flexible short and long-term plans for the days to
come” (Glesne, 1999, p. 53). Since I am immersed in my site in many ways, I wrote
throughout the day my thoughts and feelings on my research. I did not only write during
data gathering, therefore, this was an ongoing reflexive journal.

As discussed earlier, a critical friend helped me with my biases, assumptions, and
thoughts throughout the analyses and data gathering (Anderson, Herr, & Nihlen, 2007). I
am immersed within my site as well as the topic, therefore, a critical friend provided perspective as well as challenged my assumptions (Anderson, Herr & Nihlen, 2007).

Member checking (Lincoln & Guba, 1985) is a technique that consists of continually testing with participants the researcher’s data, analytic categories, interpretations and conclusions. This creates a collective endeavor with the individuals that have participated. Member checks, according to Merriam (1988), involve “taking data and interpretations back to the people from whom they were derived and asking them if the results are plausible” (p. 169). This process was ongoing throughout the research and analysis phases through the quick-writes and the focus groups. Data was examined, verified, corrected, or challenged by the source of the data – the subjects of the study (Lincoln & Guba, 1985). “In keeping with the trusting, collaborative nature of the constructivist inquiry, the respondents must be involved in each step of the process” (Manning et. al, 1999, p. 24). I collected my data through the quick-writes and interpreted what themes and categories emerged, were purposeful with my reflexive journal as well as met with a critical friend. During each focus group, I brought my findings back to the focus group and solicited feedback on my findings. I will want to see if my interpretation “rings true” (Merriam, 2009).

Conclusion

First time freshmen students participated in this qualitative research study utilizing quick-writes and focus groups throughout the fall 2014 term. This design gave an understanding on the perception of students being taught in freshmen seminar by their academic advisors and how they perceived this impacting their advisor relationship as
well as help the students navigate their college experience. To add credibility to the study, I had multiple quick-writes and two simultaneous focus groups meeting throughout the fall semester. Each audio taped transcription was coded and analyzed thoroughly determining both emergent and sub-themes discussed in Chapter 5. I utilized member checking, a critical friend, reflexive journaling, and triangulation of the data which all contributed to the trustworthiness of this study. Results from this data analysis are presented in the following chapters.
CHAPTER FOUR

Findings of the Study

The focus of my study was on an approach to academic advising for freshmen students at a STEM university. Academic advising has been shown to have significance on students’ college success; therefore, more research is needed to better understand the role academic advising plays in a student’s college experience, as well as the importance of an advisor/advisee relationship. Additionally, more research is needed to explore various approaches to academic advising, which I addressed by using a learning centered model approach to advising. The findings reported in this chapter evolved over a period of a semester during which the freshmen participants were involved in a freshmen seminar that utilized a learning centered approach to advising.

As described in previous chapters, the main goal of this study was to understand the experiences of incoming freshmen students enrolled in a freshmen seminar taught by their academic advisor, and how students perceived this impacting the advisor/advisee relationship and potentially helping them navigate their college experience. To address this goal, I conducted two different focus groups of freshmen participants consisting of a total of 10-12 participants in each group, three times throughout the fall 2013 semester. Prior to conducting the first focus groups, I met with the five available freshmen seminar classes, requesting and receiving quick-writes from approximately 56 student participants. All 56 participants participated in the quick-writes; however, only 12 of the 56 students participated in both quick-writes and focus groups. These 12 were selected through purposeful sampling. These quick-writes were completed anonymously, but
helped develop the direction of my focus group semi-structured interview questions, as well as giving me insight into how the majority of the students were feeling during that week of the semester. These quick-writes were done three times prior to the focus groups during the fall term. The participant quotes from the focus groups were labeled with pseudonyms allowing anonymity to all participants.

The main areas of the research question were exploring the perception the freshmen had of their academic advisor relationship through the freshmen seminar course, as well as their experience navigating college. These were both explored through the use of an inductive model of data analysis. By exploring these areas through practitioner action research using qualitative data gathering methods, emerging themes and their component parts were identified and will be discussed in the following sections.

Findings

Through strategies used in action research, I asked freshmen student participants about the experience with their freshmen seminar course. Through coding, data analysis, triangulation, and member checking, I constructed themes that were created by working with the data given by the students. As noted in Figure 2, I labeled the predominant theme as Beginning College Student Identity, which supports Chickering’s psychosocial developmental theory. Beginning College Student Identity is the overarching theme and was the beginning of students forming a new identity as college students and shedding their high school identity. They are beginning the initial phases of identifying with new surroundings, expectations, friends and processing information. Students came to college with an understanding of how their social groups, norms and expectations were during
their high school years. This beginning college student identity was challenging these
norms and expectations and creating new social groups. Students were also learning in
this transition, how to balance their own needs and navigating this new college
experience. The overarching emergent theme is made up of several themes, which have
subthemes. These themes are Existential Angst, Developing Relational Networks and
Continual Transition. The basis for the first theme begins with existentialism. One of
existentialisms basic concepts is ‘our human capacity to transcend the immediate
situation’ (Yalom, 1981). Existence involves individual continual emergence in life
events, and learning from the past and now the present to reach future goals. Existence
literally means “to climb over and beyond,” which describes this new moment in a
student’s life, experiencing a new way of being as an individual. Through existentialism,
they are experiencing ‘death’ of their high school identity, ‘freedom’ to adjusting to new
responsibilities, ‘isolation’ and moving towards connectivity and trying to ‘make
meaning’ out of their new stage of life. Angst may occur while trying to make meaning
of these new beginnings. Angst refers to anxiety and a sense of freedom, which can be
both appealing and terrifying to a student. Existential angst refers to a student’s making
meaning and new choices in their life, which, for most, is creating angst. These students
were on a continuum with their individual existential angst. Through the data analysis, I
noticed these students were coming into their own realization and adjusting to the
university on different time frames. In this study, the changes that occurred influenced
the student’s sub-theme within existential angst; adjustment. Students were becoming
adjusted to a new set of standards with which they were unfamiliar. These adjustments


were in time management, study skills, procrastination, and acclimation to a new environment. The realization of the demands of college in regards to their math and science requirements, as well as how they had approached learning in high school, began to surface. What influenced the students’ experience was heard throughout both focus groups and quick-writes. Students began to realize their way of studying and preparing for exams was not sufficient to pass their classes. They experienced increased anxiety and making meaning of how to be a successful student in this new environment. Most students felt there was not enough time in the day to get all their homework and assignments done. In high school, they had a lot of free time, however, free time seemed non-existent throughout their first semester, and this was quite new in comparison to their old behavior and norms.

The second theme was Developing Relational Networks. Students were developing their network by the connections they were making across campus; with peers, peer mentors and academic advisors as well as others. Students were identifying with their peers and beginning to create a network of support. This synergistic relationship is one of the subthemes. Synergy represents the interaction amongst peers helping each other become acclimated to their overall college identity both socially and academically. Students began to form study groups, connecting with peers in their class and collaborating on their math and science homework. One example was students expressing how their peers helped them feel ‘not alone’ throughout this new college experience. The next subtheme within Developing Relational Networks is Implementing Supportive Relationships. This refers to the relationships created through programs and
resources that were implemented with helping freshmen become adjusted, which include academic advisors, peer mentors, freshmen seminar and other student affairs professionals and tutoring. These connections were helping them form their college identity as well as manage their emotions. This will be explained in more detail through the data collected in both focus groups and quick-writes within the subtheme, Implementing Supportive Relationships. The last theme is Continual Transition. A student’s college identity formation is a continuous process throughout their entire college career. These students have accrued life skills and life lessons to carry on throughout their experience which they can add to their repertoire. Within Continual Transition, students explained what they would like from their academic advisors moving forward into the spring semester as well as how they feel the structure of freshmen seminar could change to better help the next group of freshmen students. Because this process was ongoing, some students were beyond the existential angst, however, these themes were fluid and continuous throughout college. For the purpose of this narrative, I explain each entity separately in the next sections. Figure 2 provides a visual representation of the predominant theme and subthemes.
Beginning College Student Identity was the overarching theme. By this I mean students were learning a new way to identify themselves in many different categories including as a college student, amongst friends, advisors, faculty and in a new setting away from a familiar, home environment and high school. As students transitioned to this new college experience, they began to learn how to manage emotions and understand they were not alone in their feelings and experience. They began to bond with their peers and significant helping adults. Several areas captured the essence of their beginning college student identity. These areas were: students struggled with leaving their high school identity and adapting to a new way of structuring their time; approaching learning
and studying in new ways: exploration of their new major choices; and building relationships with advisors, peers and peer mentors.

Many students struggled at first as they began college. They knew how to ‘do high school’ but college life presented new challenges. Most of the student’s adjustment during this initial phase was complex and overwhelming to most. Students were feeling angst and disequilibrium with all of the changes that were occurring. They began to become aware of the strategies they brought in from high schools were not effective. Many students wondered if they were going to make it as college students and be successful. A number of things supported students shifting from this initial confusion and angst to begin movement toward more equanimity. While a work in progress, students began to gain and accept new strategies toward being more comfortable in this new learning environment. However, this was an ongoing struggle throughout the semester as they continued to transition from high school with students moving at different rates.

As students discussed their college experience, it was evident that the freshmen seminar and their relationship with their academic advisor contributed to their growing sense of comfort. In particular, they began to connect with their peers and advisors. However, as might be expected at this point in their college experience, they were still very much in transition and working to become acclimated to their new environment. These new experiences, however, were creating some dissonance with how they have known and defined themselves as students. Therefore, they are transitioning and beginning their emergence into college life.
Existential Angst

The first theme, Existential Angst, provides an overview of how most incoming freshmen were processing this new environment. One of existentialism’s basic concepts is our human capacity to transcend the immediate situation. Each individual student came in with his/her own personal perspective of life and how quickly he/she may acclimatize and adjust to college life varies widely. Each student, to some degree, was feeling angst due to the difference between their current reality and their hoped for image of a new reality in which they feel important, fulfilled, and have created accomplishments; therefore, bringing meaning to this new college life (Ellsworth, 2012). Students began to realize their old strategies were not sufficient to ensure success in a STEM environment. Students began to understand they needed to recalibrate. When students realized that others had the same hurdles, questions, periods of disorganization, and the desire for the acceptance of their peers, they began to adjust and acclimate. There was a wide range of how quickly students were able to manage this sense of adjusting to college life.

Students came to realize this was not an extension of high school, but in fact, a different and more demanding learning environment. As Amit stated, “This isn’t the next grade of high school.” During this transition time, students were figuring out how to juggle multiple demands within the new context. For example, students expressed balancing their social life as well as classes and how the demands were a lot different than high school with many distractions, as well as a less structured environment. As Wendy stated:
I’m in college, I’m dorming here and I basically go out and there are so many things to do, like go to the campus center and hang out, play volleyball. I’ll go to someone’s dorm and watch movies; so there are a lot more distractions from homework as I would have at home. So, I struggle a little bit in the beginning, because I procrastinated too much but now it is getting a little better. I have been getting ahead at least so its not as bad.

Another student, Anna reiterated this concern:

I think it is a lot different (from high school) because you are always with your friends, well, I’m living here so I’m living with my friends, which is a lot different from high school, because in high school you could just go home. You kind of had to do your work because there is no one else around other than your family which aren’t as distracting and it’s a lot more work than high school and less structured because you kind of structure your own life.

Previously, as high school students, it was easier for the students to successfully manage their time and meet the demands of school because there was more structure. Now, they had to create their own structures and many students found this difficult.

**Subtheme 1: Adjustment**

As students realized this was not an extension of high school, but was in fact, in a rigorous STEM environment, they were unsure how to handle the new demands. The students had a false perception of what college courses and life would be like; they assumed it would be easier than the actual experience. They were unfamiliar and unsure of how to handle being a STEM college student. This sense of adjustment was
particularly evident as they discussed their study habits and time management. They were discovering what worked in high school did not work in this new environment. Participants discussed three areas regarding their adjustment which were mentioned throughout the focus groups. This adjustment influenced their first few weeks of their college experience. First, students discussed in depth the study and time management habits they created and brought from high school into their college experience. In order to be successful academically, they realized that these high school habits needed to be adjusted if they were going to be successful in college. Second, they explained how they felt about themselves during this process, which included self-doubt. Finally, they addressed the distractions (living on campus) and procrastination that occurred throughout the semester, especially in the beginning of their college careers. Students realized they needed to adjust to these new distractions in order to balance their time and learn how to fit in these new experiences, such as free time, friends, and living on campus.

**Study and Time Management Habits.** In general, students stated that they did not study much in high school. One student in his or her quick-write wrote about high school, “I never studied but passed with flying colors.” Another student stated, “Not accustomed to studying more than an hour a day on homework.” These students entered a STEM university that has an intense math and science curriculum. In the face of a new, more demanding school, students realized the rigors of this new environment and that they would need to approach studying in new ways to be successful in a math and science intensive university. This was a new way of thinking which was not something they were
prepared for. They did not enter college expecting such a big learning curve in terms of how much and when to study. The shift into this more demanding culture was frequently expressed in both the quick-writes and focus groups. For instance, Chris stated, “In high school, you finish an essay, you are free to go and do what you want. The work here doesn’t end, you are here all day with homework assignment; it is all I ever do. You don’t ever get a break.”

Most students felt that high school hindered them and did not prepare them for the overall college experience. There was not a focus in high school on study habits or time management. Most students expressed never studying in high school, and they found it difficult to comprehend a professor stating that 7-9 hours per week of studying would be required for one subject when they would study for a few minutes prior to their test in high school. They were not taught how or why studying was important.

For instance, Wendy stated:

*Compared to like high school. Kind of high school we have been babied a lot. Come to college you have to teach yourself you don’t have the teacher holding your hand through every single course you basically have to take a textbook out or go on YouTube and look at something to teach yourself with. It’s not enough to just go to class and come back you have to actually study. I’m not used to it because I’m not used to studying. I don’t really know how I guess because I don’t know how people can study for 7 hours over the same material; it doesn’t make sense to me. Back in high school I never did any of my homework and*
studied at least ten minutes before that test but now I’m actually like getting my homework done.

When asked, did they study in high school, a few students stated, “I crammed. I would study the period before - a quick look over the notes,” which clearly did not support the preparedness they would need moving them through a successful college experience. They were struggling in the beginning to form these new habits. However, they were adjusting and realizing their old habits were no longer effective and making necessary changes. For example, Jerry explained how he learned through his own mistakes. He was attending class and not reading the chapters that were assigned for the lecture. He did not know it was important to go to class prepared. He was used to just going to class and learning the material the teacher presented. However, this would not suffice in college.

In the beginning I thought in lecture I am going to learn lecture and learn new things but I realized I couldn’t do that. I learned I have to read a whole section before going to lecture to understand what is going on in the lecture so once I did that I started understanding more.

This realization really hit home when the students took their first math and chemistry exam known as the common exam. The common exam was taken by all freshmen in both math and chemistry. They were given five dates throughout the semester when their common exams would be held and every student took the same exam on this day, depending upon which math or chemistry courses they were in. These were the only grades for the class; no participation or homework was included. Many students
performed poorly on both of these exams with many students failing. Students had gone into the exam thinking they were well prepared. However, when they received failing grades, they realized their preparation was not sufficient. For example, After taking the first math common exam held in the fourth week, Jerry stated, “I took the first common (laughing) then I realized I needed to get my stuff together because in high school I didn’t do half the stuff needed and study as much.” They began to understand that their high school preparation and study habits were not enough to pass their first exam.

In general, students struggled with managing their time. These students were used to attending class and not having to put in any study hours outside of the classroom. Sharlyn stated, “Yeah, like I never really studied much unless it was AP biology. You pretty much had to teach yourself in my school.” The expectation at a STEM university is much more rigorous with many study hours outside of the classroom.

In talking with other students after the common exam and realizing many of their peers had done poorly as well, they began to shift their behaviors. In particular, they began to reconsider how they were spending their time.

**Self-Doubt.** The adjustment for these students and coming into a new environment was both freeing and stressful. In the beginning, many students were feeling self-doubt and lacking confidence with their adjustment to college life. They were wondering whether or not they could be successful as STEM students. The students were unsure if they could meet what was expected of them on a weekly basis. The students also expressed trying to manage the time they had which was becoming increasingly difficult in the face of their class workload. As Sharlyn expressed in the
focus group, “I’m learning there are not enough hours in the day to do everything, like homework, sleeping, eating, and then if you want to add a bit of free time in there to relieve some stress. I don’t know, it’s becoming impossible.” This feeling was vocally expressed during the freshmen seminar class. Because the seminar was a class of their peers, they began to realize they were not alone with this self-doubt.

Other students felt a sense of false confidence with their study habits and time management from high school until they took an exam. They learned some of this material in high school, therefore, did not feel the need to study the material they were learning in their classrooms in depth. Here is an example of Natasha feeling falsely confident;

That’s how physics was. I saw the syllabus and was like I already learned all this stuff in high school so I don’t have to do anything, and the lecture was easy so I was like, oh, and the Iclicker quizzes I would get like a 100 or get one wrong and then the first common I was like oh god this is so different. Oh, yeah, I failed, the physics common.

She was unfamiliar with the expectation of the classroom and professor. She was not yet part of a student network that could have clued her how to prepare. This exemplifies the sense of being too independent from information given by others and the need for interconnectedness.

During the focus groups, most students discussed the pace of the classes and how quickly the material was being taught which could be overwhelming. They were used to materials being taught to them in a slow, easily comprehensible pace. The students had
no idea how fast paced the professors in college would expect them to learn and know the
material being taught to them, both in and out of the classroom. For example, Tim stated,
“Chemistry as opposed to high school, in high school, one chapter here we would do in a
whole month of high school, and chemistry is much, much faster paced here than it ever
was so it is a lot more.” Wendy stated, “For high school we have three days verses one
day which is um, one of the reasons in high school I never studied.” Students understood
the pace, however, some found the pace difficult and unsure if they could handle the
workload and did not become acclimated in the first few weeks, which caused them to lag
behind throughout the semester and created self-doubt. There were many contributing
areas that added up to students not feeling prepared and realized adjustments were
necessary.

**Distractions & Procrastination.** Many students expressed the many distractions
on the college campus compared to when they were in high school. Both the commuters
and residents stated the many ways they could be distracted and procrastinate on their
assignments and studying, such as, living on their own, their friends, and the distractions
in their home environment. In the beginning, students often reported that they
procrastinated and were distracted which only made the semester harder as it continued
and they took more exams. They also realized in high school they could gain grades by
minimal work, for instance, homework, participation, etc. In college, they are only
graded on their exams and have no “buffer” to which they have grown accustomed.

They were inexperienced with managing their lives on their own. They learned in
the beginning how not to navigate their college experience as they struggled with
managing a new freedom with time. Constantly being around their friends, was a fun, new experience, but at times, distracting. In support of this, Anna stated:

It’s a lot different because you are always with your friends, well I’m living here so it’s like I’m living with my friends. Which is a lot different from high school because in high school you could just go home and like, you kind of have to do your work because there is no one else around other than your family. Which aren’t as distracting and it’s a lot more work than high school and less structured because you kind of structure your own life and in high school everyone starts at the same time and ends at the same time and has lunch pretty much at the same time and then you either have practice or a club or you go home after you do your homework. But college, you kind of just do it throughout the day and work when you have time.

Commuters also discussed how their patterns shifted after a few weeks in college. They were in a fixed mindset of having to go home after classes were over as if they were still in high school. However, the need to go home shifted after a few weeks. They began to realize at home they were not getting as much homework completed. They came to the realization that they did not have to work alone. They understood they could stay on campus with friends until their work was completed.

Commuters also discussed the many distractions at home, such as the internet, family, their bed, and just falling asleep because they were tired. Realizing that home can also be a distraction, they began to stay on campus as late as they could and have at least one or more friends working with them. Together they got their homework and
assignments done. Students began to adjust and put some structures in place for themselves. They began to shift their focus from home to college. Students began to move from their family affiliation to a peer affiliation. They began to find peers to connect with and be accountable with. However, this shift seemed to be happening after a few weeks of school were in session which, combined with being underprepared, led to a poor beginning for many students, as evidenced by their first common exam. One student explained this well during a focus group. Amit stated:

I mean in the beginning of the semester, I was kind a like that cause a lot of people for the most part hang out after class or dorm here so they are here regardless. So, the fact that I commute is annoying because I would get out of class and it would be like 4 o’clock so I would just be like, alright I’m going home. When I go home I end up just getting tired and just going to sleep and not getting any work done. So recently I have been staying later. At first I didn’t have a social life, I made friends, but I didn’t hang out with them because I was never around and if I was around I would be in the library by myself doing work but then I realized I could just do both, I guess, and it was easier to be with friends.

Amit reiterated what many of the commuters were feeling. They began to break their high school routine of going directly home by staying late on campus. They also began to understand that they could mix studying with hanging out with their friends. Students began to realize their friends could be both a distraction and a support. It was
up to them to establish structures, such as study groups where they could be with friends in ways that also supported their learning.

Some students were living on campus and learning how to structure their own time. The high school and home environment had been well structured and students did not need to think about studying or time management. Now, being on their own, these structural responsibilities were solely up to them and how they choose to address them.

However, by the last focus group many explained how they felt they had adjusted to their new schedule and what was needed to be successful in their courses and pass their classes. They did not express success as much as adjustment to a new way of thinking. I realized, adjustment does not mean the student will have a successful first semester grade-wise. For instance, Jerry stated that he procrastinated in high school and would complete all his work last minute but now he is ‘four hours ahead.’ The students are adjusting, however, is being four hours ahead going to create success? They may acclimate and connect with peers and advisors, however, they will need more time to adjust to the rigors of a STEM university.

**Developing Relational Networks**

Developing Relational Networks refers to students creating relational connections with individuals on campus as well as relational resources provided to guide and assist and foster success including: peers, academic advisors, peer mentors, faculty, administration and resources throughout campus. The students were developing their network through many sources, such as; orientation, freshmen seminar, classes, and residence halls. Through these networks, students began to rely on those around them for
support, encouragement and assistance, coming to understand they were not alone in this new culture. These relational networks were developed by the students on their own as well as through tools implemented by the university. This leads to the subthemes: synergistic relationship and implementing supportive relationships.

**Subtheme 1: Synergistic Relationships**

The subtheme synergistic relationship describes the relationships peers began to make with one another to help them create a comfortable and supportive college environment. Synergistic refers to ‘acting together’ and working together in a creative, productive manner. Students began to bond with their peers regarding their experiences both in and outside of the classroom. They all realized and found a common purpose and cooperating with one another through study groups and their classroom experiences was beneficial to their college experience. By working together, students were creating relationships with their peers, which went beyond the study groups towards friendships and accountability partners. Students were able to hold one another accountable where they may feel they were lagging behind. These connections were happening through orientation, freshmen seminar, and the residence halls as well as through the classroom. Peers began to discuss their homework and class assignments and form study groups; collaborating and working together to pass their classes and understand assignments better. This relationship was organic and began to happen as students entered college, finding like-minded peers who understood their struggles and needs. These connections with their peers created this synergistic relationship that helped students not feel alone in this, at times, overwhelming college experience. This was a common thread throughout
all the focus groups as well as quick-writes. This connection they felt with their peers created a sense of belonging and feeling that their peers were going through the same struggles and concerns they had been going through. Some quick-writes supported this idea of not being alone, including:

- Helped me realize I am not the only one going through this struggle.
- Fortunate to have people relate to my problems.
- I am not alone in my college freshmen struggle.
- It sizes down the issues and really puts things in perspective. Helps relieve the stress.
- I personally love freshmen seminar. Since it’s a small class size we all relate with one another and really talk and express ourselves.

The ability to make friends was seen through the quick-writes and focus groups as the smoothest transition for most students. This sense of belonging helped them navigate and move through this first semester of college. They realized they would not just be studying but able to make true connections within the first few days and weeks of the semester. Forming these synergistic relationships are important for the integration into this new environment. They felt that freshmen seminar was the easiest place to meet peers to connect with and do homework with since many were taking the same courses and in freshmen seminar together. Many of the students expressed how they combined both studying and socializing together. For example, Amit stated, “So you don’t have to say, oh, I can’t hang out with you because I have to finish my essay because it is right in
front of you, kind of doing both.” They understood they could both study and socialize at the same time.

The majority of students also discussed forming study groups. These study groups involved biology, chemistry, and math to name a few. They formed study groups during the entire semester and others during their common exams. As Amit stated,

You have someone to go do it with so you have more than one opinion and a lot of times when I do homework assignments by myself, I don’t get it, and I put it away; it’s easier to have someone with you and have a different perspective on everything, so including like a math problem, you look at it one way, she looks at it a different way, she might have a better, you know.

The study groups as a form of supportive relationships also emphasizes the synergistic nature of these relationships and the ability to develop relational networks. These connections with their peers were helping them gain confidence in their assignments. They began to rely on one another to complete their homework and felt talking the assignment through with another peer benefited them. Amit stated:

You just got back to doing homework by yourself, feel lost, and first I don’t want to do it but if I’m with someone then that kind of encourages me to figure out how to do it or what’s wrong, things like that. You deal with it with someone in a way, you have someone to talk to.

Samantha expressed the reliance her and her roommate had on one another. They became accountability partners, which was helpful since they were in the same classes and major.
Before college I was really bad with time management and I procrastinated a lot. But my roommate is like really organized so I was like we are the same major, we are in the same classes so I will stick with you. But now I find myself telling her, let’s do this today because you keep me on top, but now I’m on top. To her she helped me at first and now we help each other. We do our homework together and we stay on top of things. We will meet at this time and get this done so it helps me and it helps with doing homework as well.

Chris stated how it was useful having a class with freshmen and her/his peers:
I know for me like I thought I was the only one who was like bad at chemistry and who wasn’t getting it and then I found out everyone else was too which felt good; it’s not good but at the same time it was comforting knowing I wasn’t the only one. I had no idea what was going on.

Students felt their peers helped with their confidence, procrastination, and being held accountable. The synergistic relationships, particularly helped students support each other both emotionally and academically in a positive way. Developing relational networks seemed to be an important part of successful adjustment to the college experience. Zion stated, “I feel like peer help is the best thing if you have gone through it or going through it with someone regardless if we have different sections we have the same work, it’s helpful.” Included below are a few additional quick-write comments illustrating students experiencing the positive support evident in a synergistic relationship:

Fortunate to have people to relate to my problems.
Finding others who are having the same troubles and work together.

Good time to unwind and understand there are other people going through the same thing.

I wasn’t the only one dealing with stress – not alone in the process.

I am not the only student who has questions and doubts.

See the same people – brought me with people that were going through the same experience as I was, so I felt like I wasn’t alone with my problems – made the transition possible.

**Subtheme 2: Implementing Supportive Relationships**

This STEM university implemented programs to both support and guide freshmen during their first semester of college. These programs are implemented to create guidance and a supportive relationship amongst the peers and the helping adults on campus, such as academic advisors. One of these support programs is freshmen seminar. Every student at the university is enrolled in freshmen seminar. However, offered through the Advising Success Center, those students enrolled in freshmen seminar were taught by their academic advisors. Additionally, upperclassmen served as Peer Mentors/Advisors as part of the seminar. These supportive implemented relationships were addressed throughout the focus groups and quick-writes. The support of the academic advisors, as well as the freshmen seminar course overall, was perceived to have a positive impact on a student’s overall level of comfort and adjustment to college life and their relationship with the academic advisor.
These relationships are all important. Having the academic advisor teach freshmen seminar was an implemented structure to begin the relationship with their advisees. From the literature, having a caring and warm, supportive adult on campus helps with a students’ overall college experience (Campbell & Nutt, 2008; Drake, 2011; Light, 2001; Tinto, 2002). Therefore, freshmen seminar is a great platform to infuse both the academic advisors and peer mentors into this supportive, informational structure, which can create positive relationships with helping adults. Students also learned through freshmen seminar and other resources, other supportive structures on campus to help them succeed, such as tutoring and counseling. These supportive relationships will all be discussed in depth below, beginning with academic advisors, peer mentors, the effects of freshmen seminar and resources students found out about and began to use for their adjustment needs to college.

The overwhelming response through both quick-writes and during the focus groups from the students was the word comfort regarding the relationship made with their academic advisors. The more they met and saw their academic advisor, the more the word comfortable was used repeatedly. They also expressed how helpful their academic advisors were during the freshmen seminar course as well as outside the classroom for one-on-ones. Ravi stated, “I really like my advisor and she is really helpful and I feel like if I had a problem or something she would be really helpful and like help me fix anything. I feel comfortable to ask her anything.”

The students often expressed how their academic advisors created a good support system. They wondered if and how they would get helpful information on campus
resources and felt if it was not for their academic advisors and freshmen seminar, they would not have received this information. During freshmen seminar, the academic advisors explained information about their current major as well as alternative options at the university. Because the freshmen seminar class was grouped together through their majors (biology, undecided engineering), the advisors were able to go into more detail regarding their major and the requirements. When describing having an academic advisor as the instructor for freshmen seminar, Amit stated during the focus group “Well, if they weren’t we wouldn’t know half the things we know in freshmen seminar. There is no one that is just going to come up to us and be like, you can do this instead of x.” The student was referring to finding out that the biology majors can switch from a BS degree to a BA degree which requires much less math and was still considered a great degree to enter a Master’s or Medical school. Many students at this STEM university felt that a BA degree was “less than” or “looked down upon” compared to a BS degree. The students felt that the freshmen seminar was a great forum to discuss these issues as a group because many were struggling with their math courses and switching to a BA degree as they were inexperienced and misinformed about the differences between the two degrees.

They were able to bond over their experiences and also discuss openly how they felt about changing their major. One student wrote in his/her quick-write regarding freshmen seminar, “Valuable information regarding my major requirements which I would have otherwise not known until later in my college experience.” This created an open dialog of agreement between peers, advisors and peer advisors, which took the fear or feeling of failure out of the equation by hearing from both their academic advisor as
well as their peer advisors that switching majors was ‘okay’ and they could still be a
success. This is a good example of students navigating their college experience through
connecting with others and working through their feelings and emotions in regards to
their major.

They also reported that the relationship with their academic advisor became more
informal because of their comfort level over the progression of the semester, which
probably contributed to this feeling of connection. They met each week and the advisor
would have the students sit in a circle format. Each class started with a ‘high’ and ‘low’
exercise. This exercise was to help create a more open dialogue and safe environment for
students to express how they were truly feeling about their college experience. Haneen
stated:

I think when we first started freshmen seminar our advisor opened up to us, we
were talking about our personal lives and like we all got to know each other on a
personal level, and it had nothing to do with academics yet. You still want to be
professional with her but like at the same time you know you can open up to her
just because she knows what we have been going through, so it is not as informal.

The circle format was an intentional strategy utilized by the academic advisors.
The circle format created more of a group dynamic, allowing students to talk to one
another. The academic advisors were also part of this circle, embracing relationship
building with their advisees. Students revealed that having the academic advisor as their
teacher helped to create a bond due to having class every week. In support of this
finding, one student, Purvi stated, “If they are your advisor but they are also your teacher
you might not have gotten to see them that much. I only went to see her as my advisor once to register for classes but generally I knew her because she’s my instructor for class so that’s a benefit.” Samantha stated, “It’s good that they know who we are, because when you go into the meetings, it’s not awkward.” Students felt more comfortable and less awkward as the semester progressed. The advisors became familiar and less formal as time went on. The students did not know they would need or appreciate this relationship in the beginning of the semester. As the semester continued, students felt that the better the relationship with their academic advisor, the more the advisors would advocate for them. The relationship building, overall, was beneficial to the students. The advisors were creating a comforting role, which at times resembled a parenting role. Natasha stated:

I know it doesn’t sound like it would be important they know you personally - they will help you more because they want what’s good for you, like but when you get to know you and they know how you are and everything they kind of want to help you a little bit more.

Clearly, experiencing an early sense of connection to their academic advisors helped students build this important relationship, understand the need for utilizing tutoring and peers/peer advisors for assistance, and feel comfortable in sharing their feelings regarding their concerns, questions and fears about their overall college experience.

Most academic advisors on this campus do not teach freshmen seminar. Some students began to reach out to these departmental academic advisors within their colleges
and departments. One student expressed his meeting with a departmental advisor. He was moving from that initial disorientation he felt, and now, with some established university relationships, was able to branch out, taking advantage of other resources on campus. Other students were still feeling the initial angst stating, “I don’t know them and it would be intimidating to go and talk to them (meaning departmental advisors).” Maya expressed, “I think it is easier to talk to D (her/his academic advisor). I think talking to K (another advisor who didn’t teach freshmen seminar) was intimidating sometimes because you don’t really know her.” Some students were still feeling uncomfortable branching out to new individuals on campus. Others handled this transition smoothly. Purvi expressed how it is good to have two different advisors “which is really helpful because they are both experienced but we have one which is more experienced and they have different perspectives.” Other examples occurred of students branching out to their resources outside of freshmen seminar. Students were finding a new space within freshmen seminar with which they became comfortable. They started using this base to further explore other campus resources that were available to them.

Here is an example of Amit branching out beyond freshmen seminar and his academic advisor:

We were all comfortable with D because we saw her every week and rarely spoke to K (another academic advisor). When I actually did speak to her it was a little bit better. She really isn’t that busy, especially when you do get to know her; she makes time for you if you’re just a student. This is something that upper classmen have told me that she is like, also a human being; so don’t just go for her just for
help. But when I spoke to her, I spoke to her a lot of things not even school related we just had a conversation with her and when you do get to know her she does make time for you she does know you. How do you expect her out of all of the amount of students to go out of her way for someone she doesn’t really know? You do something for her she does something for you she is a human being she is not a robot that you just insert your grades or something she doesn’t just do that one thing.

Within freshmen seminar, an academic advisor’s role needs to be clarified. Some students did not understand the role of academic advisors and what their purpose was. By having academic advisors in freshmen seminar, a relationship with their advisees can begin early on in the beginning of the semester and throughout. Students do not need to ‘seek them out’ as much because the advisor is weekly present. However above, Amit showed the importance of creating relationships outside of the academic advisors. Students began to advocate for themselves and feel more comfortable branching out to other administrators on campus, creating these connections outside of freshmen seminar and their academic advisor.

Many of these students did not have a relationship like this with an advisor or high school counselor (which is described below) and did not realize that there may be a need for ‘advising’ throughout their college life. Some students expressed not knowing that their freshmen seminar instructor was their academic advisor and what this truly meant for them. Since they had never heard of or met with an advisor prior to college, the role of an academic advisor needs to be clarified better moving forward. For
instance, Purvi stated, “I didn’t exactly know what her job was and then later, I realized what it was.” Clarification of the role an academic advisor plays throughout a student’s college life is important and should continually be addressed over the course of the semester and beyond.

While it might be assumed that personnel in high schools, such as teachers or school counselors, help prepare students for the college experience, this did not seem to be the perception of the majority of the focus group participants. In response to the question, “Did you have an experience like this (meaning developing a comfort level as they seemed to be doing with their college advisors) in high school?” 11 out of 13 students through the quick-writes reported experiencing a poor relationship or a nonexistent relationship with their school counselors. Tim stated, “My guidance counselors were awful. Like really terrible, really really terrible and useless,” Jeremy added, “They don’t really know us at all, like, not at all.” Another student, Howard, explained how it was easier to talk to his academic advisor at this university than it was to his high school counselor. He stated his school counselor used to “freak him out.”

This was not an area I was thinking or curious about. What cued me to ask this question was his reaction to the question, “Do you have a relationship with your academic advisor here at this university.” Also, I was assuming school counselors would have a relationship with their students during high school. Tim seemed frustrated and gave the above response, followed by all the other focus group participants nodding their heads in agreement. Who was then preparing them for the rigors of a STEM education? I
felt this information was pertinent to their identity as college student as well as their preparedness to understand what was expected of them in this new environment.

This relationship the students were experiencing with their academic advisors was new to the students, which probably caused some of the initial confusion about the role of academic advisors. Eventually they started feeling a sense of comfort and support with respect to their academic advisors as both advisor and instructor.

Additionally, a majority of the participants discussed the difficulty of meeting with their school counselors and their lack of availability. Jim stated, “Finding my guidance counselor itself was difficult. I could never find him and he was never in his office. If you like bring up something to make him do more work than he has to he usually tries to like go the other direction and refuses to help.” The students seemed frustrated while talking about their non-existent relationship with their school counselor. This feeling came out while describing their new relationship with their academic advisors and beginning to understand this was one of their first relationship at college with a helping adult. The purpose of placing the academic advisors in the classroom was to create a relationship with their advisees. The students were not expecting an academic advisor to play a major role since this had not happened in their previous high school relationships with a helping adult. Students did not understand the importance of an academic advisor in their life at first, however, this structure forces the relationship until they ‘got it’ and the relationship became beneficial to them.

During the focus group, participants continued discussing their feeling of disconnection with their high school counselors:
Until you’re like a senior, it doesn’t matter because you don’t really talk about anything. It’s kind of weird, they just write notes about your activities and stuff and for senior year, it’s just for applications and applying for college. That was the only time I really knew my counselor. (A)

I hate how she wrote me a letter of recommendation and she doesn’t even know me. It was the most generic piece of garbage I have ever read in my life. (T)

On the other hand, two students reported a great experience with their high school counselors. They both expressed how these individuals prepared them for college as well as built a relationship with them over time. One school counselor would come into one of the student’s classes every three weeks to give the students advice on college applications, deadlines, and other resources they needed to be successful. The second student expressed the same feelings, his guidance counselor was “always around” and gave advice on scholarships and felt like part of his high school career. These guidance counselors spent time and integrated themselves into the classroom. They had a presence on their school grounds.

Another implemented support structure were the Peer Mentors (also called Peer Advisors) who were assigned to each of the freshmen seminar courses. The connections made with peer advisors seemed to help students ask questions, open up and learn more about navigating college. The students felt that the peer mentors were extremely helpful with their transition and offering advice throughout the semester. They were able to provide a student’s perspective having gone through the freshmen experience themselves. For example, Amit felt that “G has helped me a lot, there for advice.” The peers were
seen as upperclassmen and able to give examples about their own struggles and time management issues. They stated they learned from the mentors’ experiences the best because it was relatable compared to their academic advisors. They also felt it was better than listening to a peer as Amit stated so well: “Two blind sheep running into each other giving advice.” Wendy emphasized the support from her peer advisor:

Peer mentors are really helpful, they actually help you and give you time and they go to study time and the library which is actually good and it’s also helpful because I am undecided and she was like, these are the needed classes per major and I thought that was really really helpful.

These peers were able to connect on a different level than administrators and academic advisors. They were relatable. The peers were seen as mentors and the students paid attention to what they had to say regarding study habits and managing their time.

The students shared how freshmen seminar helped them with connections across the campus. They felt the class was more of a useful resource than an actual class. This was the one resource this university offered to help with their transition. The knowledge of the buildings and getting around campus was truly helpful to the students. They expressed how important it was and that their freshmen seminar instructors told them as well as took them on a tour showing where the library, CAPE and other tutoring centers were. Some students in their quick-writes felt freshmen seminar was the only class they really looked forward coming to, and it put them at ease before and after the class.
Generally, students experienced freshmen seminar as a place “where I don’t need to be alone.” The students were able to express themselves with their peers and felt a sense of belonging. Freshmen seminar helped students hear from their peers that they were not the only one feeling stressed and struggling with their acclimation. Developing relational networks fostered a relationship with their academic advisors through freshmen seminar, helping impact their overall college experience. Their networking development began the movement toward a sense of belonging. This sense of belonging was illustrated in a quick-write statement, “I am not the only one hitting this brick wall.” Most students in their quick-writes described freshmen seminar, “[It is] a very stress-free environment and we can talk about our problems. It sizes down the issues and really puts things in perspective.” Chris stated during the focus group so brilliantly, “We can all be lost together.”

Although a lack of preparedness for the college experience was apparent, many students adjusted and began using resources they learned about in the freshman seminar. Most students stated they had or were receiving extra help through the many tutoring options on campus, such as, math tutoring, Center for Advancement and Performance Enrichment (CAPE), study jams and chemistry. They learned about all of these resources through orientation, freshmen seminar, peers, and their peer mentors. Because they had not had experience yet studying or preparing for college exams, they initially did not see the importance of receiving tutoring or asking for help with their assignments. This lack of preparedness, as well as still not seeking or knowing how to seek help, was somewhat evident throughout the semester. This was noted during some of the focus group
conversations. During the last focus group, two individuals were talking about seeking help through the tutoring center CAPE and still seemed confused:

N - I went to CAPE three times and there was no one there to help me and they say there is and I need help with physics. There’s like no one there.

Al – You gotta make an appointment.

N – What, how do I do that?

Al – Talk to Barry in charge or just email him, he’s nice.

N – I have to relearn.

Although these students were becoming acclimated, they were not yet asking for help and reaching out when in need. They were still in the beginning phases and continued to need guidance with where help can be found as well as how to ask for help.

Although the majority of students found freshmen seminar to be a great resource and quite helpful, within the quick-writes, five out of fifty six students felt it was a “waste of time.” They expressed in the quick-writes that it gave them additional unnecessary, homework and added to their stressful workload, taking away from their other studies. This was a small group, however, these issues and concerns are addressed in Chapter 5 through the implications for practice.

Students began to explain their other approaches to learning outside of the classroom, using other resources not necessarily developed or offered by the university. Some of these included online services while others were the influence of interdependence and connections with their peers. Some students explained the need to find outside sources on their own, such as YouTube videos as references. Amy explained
how she utilized khanacademy.com, a site she found really helpful. Other students in the focus group agreed with her. She also explained how she could not find anything online regarding computer science and had been looking in order to teach herself. More than half of the students mentioned studying and learning material online. Students utilized many resources to create success and learn outside of the classroom. They were taking responsibility for their own learning and being resourceful with outside tools that were effective.

Students were realizing there were different teaching styles in college and larger classroom sizes. They began to question whether or not the styles the professors utilized helped them learn the material being taught. Natasha explained how her math professor was influential because he teaches them in steps and solves problems with them and included them in the problem and process. The math professor always asked if any students had questions from their homework. The students began to feel comfortable and asked questions. This particular professor would include someone to help him as well as continuously ask the students if they had questions. The students expressed the desire for a connection with their professors. Students expressed wanting to be engaged through asking questions and including them throughout the discussion during class. These students did not feel there was an impact or a better understanding of the material when there was no engagement. For instance, most students agreed that professors who only taught through PowerPoint slides were ineffective and not engaging. Jerry stated and others agreed, “What’s the point in going to class and lecture, in some cases I don’t go to his class because he posts them on Moodle so I could just download it and it’s the same
thing as going to his lecture and reading off the slides.” Students are expressing the desire for a connection with their professors in order to understand the material and pass their classes. The students felt what was the point of attending class if the material was nothing new or the professors were not going to talk to them and include them but just ‘talk at them.’ They could learn the material on their own if only given a PowerPoint presentation. Amy also reiterated and expressed her difficulty with one of her college professors and him only using PowerPoints to teach the class:

It’s kind of hard like to have a professor that doesn’t teach well. In high school I had some teachers that weren’t that great so I learned how to teach myself but in college it is even worse – going through PowerPoint’s doesn’t really help me, talking and not explaining things well. So I’m learning more on how to teach myself.

In summary, the idea of developing relational networks throughout campus helped students adjust and have a more successful college experience. This was illustrated continually through the focus groups and the quick-writes. By implementing these structures, the academic advisors began the process of knowing their students and the students felt comfortable with their academic advisors. The freshmen seminar, academic advisors and peer mentors were all seen as helpful and informational resources on campus. The students were able to develop all of these relationships through a forced system, freshmen seminar. However, this was seen as a beneficial and positive experience for the students and their new relational networks. Included below are a few examples taken from the quick-writes of the types of connections being made:
I feel as though they’ve [peers, peer mentors, academic advisors] irrevocably changed my life.

My HUM101 professor helped me achieve an upcoming job interview.

I now know where to go if I ever need help.

If it weren’t for these connections, I wouldn’t have had all these experiences.

They (i.e., the connections) have made my experience much more enjoyable.

**Continual Transition**

Labeled as “Continual Transition” in Figure 2, the final theme is continual transition, which refers to the idea that the participants are still in their beginning phases of their college identity and will continue their process of adjustment and developing relational networks, as well as determining the type of assistance they would like from their academic advisors and others during their spring semester and beyond. Students are still transitioning and learning about their study habits, time management, self doubt as well as procrastination. The students beginning phases created awareness and the students began adjusting, however, they are still a work in progress and will need appropriate, ongoing support. They began to realize what kind of ongoing support they believed they would need. They also realized they wanted their relationship with their academic advisor to continue into the spring semester and beyond; helping with major choices, course selection, accountability and just a check-in to talk about how they are acclimating overall. They gave suggestions on how we can improve freshmen seminar. In their continued transition with their college student identities, these students have
many areas which have evolved for the better and other areas that still need to be explored.

One area they understood they would need ongoing support was choosing their future majors. Students wanted to continue their exploration regarding their major choice with assistance from their academic advisor. Many of these students came in to their freshmen year as undeclared majors; therefore, exploring majors at the university with an academic advisor was important. Students are just beginning their transition and acclimation to the university. Through all these connections (academic advisors, peers, peer mentors, etc.) they continue to explore a major to choose or whether or not they are in the right major to begin with.

Many students were still unsure of what major they would choose. Other students did not do well on their commons and will need to switch majors. One student discussed coming in as an undecided major and first wanting international business, and now she was exploring interior design. These students were unsure about their major and needed guidance from a helping adult at the university. This university currently accepts students into a particular major without exploration. Students being exposed to new areas, people and possibilities help them broaden their horizons. This is appropriate and important for students as they are emerging adults and able to see other possibilities and alternatives to the majors they chose when entering the university. Many STEM universities accept students at a lower level math course than the first semester-required course, Calculus. A student considering engineering as a major but who is two levels below the standard first semester math course, Calculus, needs the university structure to
allow for some exploration until the student successfully enters Calculus. This sets a student up for exploration and success, rather than a student being denied their current engineering major because they have failed to pass the first two math courses before Calculus. Students then have options and alternatives and were not ‘accepted’ as engineers and then denied this right due to not getting into Calculus. It is important for university structures to be congruent with where and when the students appropriately are in making a decision regarding choosing a major.

Students are still misinformed about what specific majors mean as well as what a career in their current chosen field looks like. Many students come to college believing they understand what a major entails. However, what they think the major is and what the reality regarding the major is are totally different. Many students do not understand, for instance, what an engineer or a computer scientist does on a daily basis. The students are misinformed about the major as well as the job market. For example, Amit stated:

The majority of mechanical engineers I was talking to were saying how mechanical engineering could apply to any engineering job in general, like, electrical engineering can only apply to electrical engineers, and mechanical can apply to other types of engineering. That was one of my worries in today’s economy was finding a job back in the day honestly because I am very indecisive whatever degree you would have had you would have done fine financially so I figured one of my things like, if the employment rate is low, that’s risky for me so I don’t want to take that risk so I went into mechanical engineering because there would be more jobs so there is obviously a lot of math but I am fine with math.
After hearing this statement from the student, I realized how confusing and difficult navigating their beginning phases of college can be as incoming freshmen and the need for continual processing throughout the spring and beyond. Another student, Natasha, who was currently undeclared, also expressed a need to continue exploring her major; “In a sense yes and in a sense no. I like interior design and architecture I guess. I think the classes that I am taking now made me realize I don’t want to do anything physics related or higher level math related.” She is beginning to understand and narrow down her choices moving forward. She is making choices and listening to peers, mentors and her academic advisors. However, earlier in the same focus group Natasha stated the following:

Everyone asks a girl if they are a bio major. I would say no, I’m undecided and then everyone would tell me what they were and then you start to see the classes that you are taking and think, ‘oh maybe I would like to take this.’ Then you think about it again and you are like, ‘no I like this more’ and then it’s a process. I’m a little skeptical about what I wanted to do; civil engineering switched to international business. I went back and forth with a lot of things because everyone had a different major. You get to see what they think about their classes and I’m taking chemistry now, and everyone else is taking. You get to fit yourself in somewhere you would like - that class would you not like that class and could you do that for the rest of your life.

She was beginning to discuss her options, classes and experiences with her peers.
She evaluated her thoughts and feelings on these different majors by hearing from and learning through her peers. She was asking and exploring all the right areas and beginning her journey of self-exploration, however, has yet to make meaning out of where her future career/major is headed. This is a great example of why university structures need to be more flexible and embrace students entering the university undeclared in the beginning of their college careers. This flexibility can reflect the needs of fluidity and allow a student to feel comfortable with broadening their interests and discover other major choices.

There was so much pressure to choose a major when entering a STEM degree and to have it all figured out sooner than later. Academic advisors as well as peer mentors can help with this transition and exploration phase. With academic advisors learning about their students and the continuation of their exploration phase, there is a need for continual contact and support throughout the spring semester to explore how their current classes are as well as are they struggling in any areas socially and academically.

Many of the students who come to this university were successful high school students with good GPAs. For some, their first semester grades in college can be a transition that many students do not expect. These first semester grades can determine whether a student pursues a STEM degree or not. Many freshmen students do not do well their first semester at this STEM university. Additionally, most students in these freshmen seminar sections were (and will be) re-examining the major they thought they were initially pursuing. Many students, as stated above, think they understand what a major entails, however, they will still have more exploring to do as they move forward.
Students also began to understand the importance of their relationship with their academic advisor. As the students expressed a comfort level with their academic advisor as well as feeling like they found a caring, supportive adult on campus, they expressed wanting this relationship to continue. Freshmen seminar does not continue into the spring semester (which is the case for many universities). Once the students understood this, there was an overwhelming response on continuing their relationship and how often they would want to ‘check-in’ with their academic advisor. They wanted to meet with their academic advisors and continue on-going support throughout their spring semester. However, they would like check-ins to see how they are doing. These check-ins come in many different formats, depending on the student, for instance, most students wanted one-on-ones throughout the semester as well as informational emails.

Along with expressing what type of contact they wanted with their advisors next semester, all participants expressed thoughts on how they would change freshmen seminar for the next fall freshmen students. Although they expressed they wanted some changes to freshmen seminar, they did express how beneficial and helpful it was for their transition. It is helpful to them because they stated they wanted structure in the beginning. The freshmen students transition so quickly. They acclimate to college life and their new friends and new environment with excitement and angst. The changes brought up to freshmen seminar were brought up during the last focus group which was held at the end of the fall semester. It was as if the students did not remember being ‘so lost’ in the beginning of their semester. However, they did reiterate a structure in the beginning of the semester helped tremendously with adjusting to the university and meeting friends...
and other connections. As they reflected, they now felt there was no need to meet every single week and felt freshmen seminar was taking time away from their other classes and study time. Amit described how most of the students were feeling (which was reiterated throughout the focus groups and quick-writes) about freshmen seminar and its need in the beginning, however, not in the same capacity toward the end of the semester:

It’s necessary in the beginning. Technically, we are beginners and we don't know everything, like who to go to, and the little things that need to be done. First, it was the common and then registration and getting holds. All these things are things you learn in the beginning once you learn like sophomore year, you know the gist of it and how to do it. So it was helpful at first, but the reason why they say they want it every other week or so is because you do have other things to do. I personally don't feel that freshmen seminar is my legitimate class. I don't have to study and when I don't need things answered it’s a waste of my time because I have other things to do. I have work to do so it's tough adjusting at first but then when we do these little things: like we say, ‘how was your week how was this,’ we can do that on my own time, I have an exam to study for and stuff.

Students became bored of the structure after the first few weeks. They seemed to acclimate quickly and then want change. As academic advisors, the change has to occur both in freshmen seminar as well as the relationship with students from a group setting to an individual, one-on-one setting. They felt meeting for 12 weeks became a waste of time or busy work. The students felt there was a need for freshmen seminar in the beginning (first three weeks) to become acclimated, however, they then felt a shift in
their need and did not feel they needed weekly meetings. All of the students wanted continuous contact throughout the semester, just in a different format. Most of the students expressed the weeks with no freshmen seminar class could be one-on-one times. One student-athlete, Samantha, described her relationship with her athletic academic advisor and how she has to do weekly check-ins due to NCAA rules. She enjoyed the weekly check-ins and did not feel they were a waste of time but were as long or as short as she needed them to be that week.

I go to see S and I like S a lot she is probably like the most helpful person in my freshmen transition. She like really got to know me personally and always asks me when she sees me in passing oh how did you do in this and how did you do in that and like she said I can go and meet with her the whole half hour the half hour if I wanted to or for 3 minutes and its not a set thing if I can get what I need to say out in like three minutes she is fine with that or if I have more to say she is fine with that she will let me stay.

Every student expressed how and why he or she would make changes to the structure of freshmen seminar. The students expressed wanting structure in the beginning of their semester but then transitioning this structure and relationship with their academic advisor after a few weeks of becoming acclimated. Susan stated, “I would have 40 minutes every other week. If it was every week for 40 minutes that wouldn’t be bad, but I would have it every other and probably like at least a couple of one-on-ones. Three mandatory and a couple if you want to go and see your advisor.” Each student reiterated something similar to this need for both class time and one-on-one sessions. Students
appreciated the freshmen seminar course because it was such a useful resource. They never suggested to get rid of freshmen seminar or the academic advisors teaching, only to reorganize the way it was currently being run. They suggested a new type of relationship with their academic advisor in conjunction with changes to freshmen seminar. The students expressed learning about the college campus and all the necessary resources on campus was needed and helpful during the first few weeks of freshmen seminar.

Each student had a different idea of how freshmen seminar could be set up with both class time as well as one-on-one time. Zion expressed, “It went from freshmen seminar to help you to it becoming busy work. Have to show up for an hour and a half and its not helping, but a waste of time.” All of the students felt the journals they had to complete prior to class were *useless and busy work*. The students did not feel that the journals were discussed in the classroom. They did not feel their academic advisors were reading their journals and then processing these with the classroom or in a one-on-one session. They then came to the conclusion these journals were useless if they were spending time on them and they were never being discussed.

Freshmen seminar can be taught as a normal class style, with an instructor in the front lecturing to his/her classroom. However, these freshmen seminar taught by their academic advisors were taught in a circle format. The students would form a circle when they entered the classroom. All students were able to share “highs and lows” in the beginning of each freshmen seminar class. These conversations created a bond between the advisor instructors and their advisees. Within the quick-writes, the majority of students stated “they didn’t feel alone” because of this process of talking and sharing with
their peers. They also created a comfort level with their peers and instructor. They enjoyed the group style of the classroom and getting to know their peers. The students wanted these connections early on and throughout the semester. They felt at ease and less angst by knowing their peers had gone through similar situations with their grades and overall struggles. This again, reiterated to the students that they were ‘not alone.’ The peer mentors also helped the freshmen transition with being both relatable and informational. As Purvi stated regarding the peer mentors, “Susan would help and give us advice. She was informative about our major and our other mentor gave us more of the social part of college.” For overall information and learning about the campus and resources, they liked the structure in the beginning of freshmen seminar with this structure transitioning into one-on-one sessions to have their individual needs met.

Overall, the students enjoyed their freshmen seminar experience, having their academic advisors teach as well as connecting with a peer mentor.

**Conclusion**

The students openly shared through both their quick-writes and during the focus groups how they felt about their academic advisor and the relationship that was transpiring as well as navigating their college experience. The students felt comfortable and less awkward with their academic advisors as the semester progressed. Christina stated, “I feel like the fact that our teacher is our actual advisor themselves since we are in class we kind of have to know each other so it really helps when we have a one-on-one meeting later on, we’re not as nervous, we like already met with our advisors multiple times.” Samantha reported the following:
Its good to build a relationship with your advisor so you don’t feel awkward talking to them and know you can come to them with a question. It is easier because I don’t think I would exactly know where to go. I think I would be a little nervous and scared to actually go and talk to her but since she is right here in class it’s easier.

The engagement through the freshmen seminar created a place of safety and comfort for participants to ask questions giving advisors time to provide feedback and/or answers. The students wanted and appreciated the guidance they received in helping them navigate this new college experience. When discussing what has helped them navigate their college experience, in regards to academic advising and the help they have received, participant Amit stated, “It’s a new atmosphere; it’s not like it’s the next grade in high school. This is a new place that you have to learn where the places are, what happens here. This stuff without them we wouldn’t know any of this, most people would be stuck I guess, because they wouldn’t know.”

In analyzing the data in the response to my question regarding their perception of building a relationship with their academic advisor as well as helping navigate their college experience, it became apparent that their relationship with their academic advisor had an impact on their overall college experience and having the advisor teach their freshmen seminar helped navigate their college experience. The relationship with their academic advisor became more comfortable over time and their connections between advisors, peers and peer advisors also became apparent and helpful as the semester progressed. Overall, freshmen seminar taught by their academic advisors had an impact
on their advisor/advisee relationship and the need for more one-on-one sessions was expressed. Discussions, implications for practice, as well as future research will be discussed in Chapter 5.
CHAPTER FIVE

Discussion and Implications

This study examined the perceived impact of a learning centered approach to advising on first semester freshmen at a STEM university. The learning centered approach to advising was operationalized by student participants taking a freshmen seminar being taught by their academic advisors. Overall, I examined how participants perceived this approach to advising and its potential impact on their advisor/advisee relationship and their ability to navigate their college experience. This inquiry is important because advising is an essential resource on college campuses, but it is sometimes underutilized (Campbell & Nutt, 2008; Cuseo, 2003; Drake, 2011; Jordan, 2000; Habley & McClanahan, 2004; Hunter & White, 2004; Light, 2001; NSSE, 2005; Pascarella & Terenzini, 2005). A total of 56 student participants (herein referred to as students) were involved in the study. After analyzing the quick-writes of all students and the transcriptions of three staggered focus groups with 12 of the students, it is evident that the learning centered approach to advising with academic advisors in the classroom helped students build relationships with their advisors as well as helped them navigate their college experience.

Many issues evolved (e.g., time management, self-doubt, procrastination) and were shared during the freshman seminar with other students and the advisor instructors. As suggested by Chickering (1969) as well as other developmental approaches to the college experience, these students described the formation of their college identity as rapid as well as stressful. In the beginning of their college experience (i.e., first semester,
freshmen year), students were experiencing existential angst as they became adjusted and began to realize their study habits, time management skills, and procrastination behaviors needed to shift, helping them transition from a high school student identity to a newly forming college student identity. Throughout the semester, they began to develop relational networks, developing a sense of competence within their relationships as they connected through freshmen seminar, classrooms, and residence halls. They created a synergistic relationship with their peers which helped further their movement toward social and interpersonal competence. They also utilized the resources and information gathered through their academic advisors and freshmen seminar class, which helped them better understand their emerging college student identity.

Although they recommended some changes to the structure of the freshman seminar, overall, students were satisfied with their class and what it provided them in terms of support as a first semester freshman. For example, Samantha reported that the class allowed her to “develop a closer relationship with her advisor, and not feel awkward when I go to meet with her one-on-one,” and many students in the quick-writes reiterated freshmen seminar “made me feel not alone.” Although a learning centered approach to advising cannot provide everything freshmen students need to start adjusting to college life, it seemed to provide emotional support and help students feel more comfortable using other resources on campus. For example, Anthony gave advice to other students about how to get an appointment with CAPE and another student shared learning that she had to use internet sources to learn the classroom material on her own, for example, khanacademy.com, to be successful. The seminar seemed to give them a forum for
learning to take responsibility for their learning and then sharing that with others whom were feeling as alone as they felt.

In this chapter, I will further discuss the findings and make connections to the literature review, offer implications for practice for academic advisors, college student administrators, and counselor educators, as well as include the limitations in this study and suggest future research to be conducted within higher education relating to academic advisement.

**Discussion**

When students were asked the question about if they had a relationship with their academic advisor as well as how the relationship was going, in both quick-writes and focus groups, most students expressed the comfort level they felt with their academic advisor and how advisors were helpful throughout their entire semester. Students were able to describe this as a fluid relationship that grew and changed over the course of the semester. Overall, students described the freshmen seminar class as a place to gain important information about the college campus, including tutoring resources, and new study habits, to name a few. These factors, as described in the focus groups, contributed to helping students navigate their college experience.

These findings are in line with past research. Prior research supports the importance of a relationship between an academic advisor and a student. With a consistent relationship in place, academic advisors can help as students undergo these developmental changes throughout their freshmen year, building a lasting, caring relationship with their advisees which can nurture them through the developmental

**Beginning College Student Identity**

The students in this study were quickly forming a new identity as college students; however, this development will be a continuous process that will last beyond the first year. The students discussed their transition into this new role as a college student, which was evident throughout each focus group. This identity adjustment, at times, was stressful and concerning. The beginning stages of their college student identity can be seen through Chickering’s Psychosocial Developmental Model. Students began to understand their roles more clearly as college students. In the beginning of the semester, some students felt a lack of competence. For instance, many students stated they lacked time management skills and had poor study habits throughout high school. During their first semester, students learned that the skills they brought from high school alone would not create success. They began to challenge and change their habits and behaviors. According to Chickering and Reisser (1993), “students’ overall sense of competence increases as they learn to trust their abilities and integrate their skills into a stable self assurance” (p. 46). Through freshmen seminar and the resulting connections with peers as well as their advisors, students began to understand the importance of changing their habits to have a better and more successful college experience.

During this first semester, college students expressed development in three of Chickering’s vectors discussed in the literature review: expressing competence, managing their emotions, and moving through autonomy towards interdependence which are
described in the overall themes below. One vector, developing purpose and goals, was not expressed by the majority of the freshmen students. They began to talk about exploration of their majors during the sub-theme continual transition; however, this was just in the talking phase. The students had not yet begun the process of developing a purpose or goals regarding their future vocation. The students are building a foundation. They have a purpose and goal because they are in college, but processing future goals and purpose is not necessarily in the forefront of their minds at this stage of their development. The students expressed areas of interest, but these were not definitive and needed more exploration with their academic advisors. The semester became too demanding for them to process life ahead, but compelled them to live in the present semester. This choice of living in the present can be both the demands of the semester as well as the norm for their developmental process as beginning college students.

**Existential Angst**

When starting college, most students expressed and experienced a shift in their lives that created many emotions. This shift involved recognizing a new chapter and culture as they begin to form new patterns. For example, some students explained how they ventured away from their homes and lived on campus with individuals they met for the first time. As Anna described, “I think this is a lot different from high school because you are always with your friends, well, I’m living here so I am living with my friends. You kind of had to do your work in because there is no one else around other than your family which aren’t as distracting and it’s a lot more work than high school and less structured because you kind of structure your own life.” This can create a sense of
autonomy as well as help students learn to manage their emotions. In the managing emotions vector of Chickering’s (1969) model, he viewed growth as an opportunity for reflection and self-awareness while learning how to manage their emotions. This shift occurs quickly. Moving from high school to college can be both liberating and terrifying at the same time, as can be seen in Wendy’s belief that “In high school, we were babied a lot. Come to college, you have to teach yourself; it’s not enough to just go to class and come back, you have to actually study. Back in high school I never did any of my homework and studied at least ten minutes before the test, but now I’m actually getting my work done.” This student possesses management of emotions as well as expressing competence as she begins to understand she is solely responsible for her success in college. She has begun her own educational planning and the start of her lifelong learning through the learning centered approach.

Irvin Yalom (1981) was one of the most influential contributors to Existentialism. In his second book, *Existential Psychotherapy*, he expressed his belief that all individuals had “givens” or “ultimate concerns” throughout their existence. These four givens are death, freedom, isolation, and meaninglessness. These all relate to students in this existential angst and beyond. Students often feel a loss in multiple areas of life (e.g., their high school identity, friends, family structure) and are trying to make meaning out of their new experiences. Their freedom refers to a student creating and being the author of his/her own life and owning their choices, actions and behavior, which is supported by a learning centered approach to advising. In student-centered learning, the goals of the freshmen seminar are defined around what assignments, experiences and explorations the
students will have and complete. For learning to empower students, the freshmen seminar assignments and activities encouraged students to explore their own interests (Berling, 1999). Therefore, this self-exploration is supported through the learning centered approach.

The students from the present study have to process many of these ultimate concerns at the same time, which can be overwhelming and unmanageable. Throughout the semester, the freshmen seminar instructors had the students’ journal each week and discuss these ultimate concerns. However, the students did not feel that these journal entries were being processed effectively or at all. The advisors had good intentions of getting to know their students; however, the students felt the journals were only “busy work.” Another, more effective classroom discussion was processing the common exams and the anxiety before and after taking these math, biology, and chemistry exams. These were all discussed in a group setting during freshmen seminar and students were able to hear other students and know they were “not alone.” The shift to this new culture and environment was facilitated through freshmen seminar.

**Adjustment.** Students were entering college with the expectations of their class workload being similar to that of high school. There was an adjustment because they were not used to feeling they needed help or tutoring for their classes. However, they also did not feel capable of handling the homework and assignments that were given by their professors. The students were acclimated to a high school system that seemed not to require many study hours compared to their beginning college experience and allowed “getting by” with minimal effort. During this adjustment phase, many students did not
feel competent and struggled to develop their thinking skills, but did not ask for assistance. Many were still in the same mindset that you do not need to ask for help since many students did not seek help in high school. In Chickering’s (1969) developing competence vector, students come to trust their abilities. Some students did not trust their abilities once they were in the classroom and given homework or assignments in class, especially math and chemistry classes. Other students came into the university trusting their abilities, as well as feeling prepared because they had learned similar material in high school, until the first common grade (in math or chemistry) was received with a failing grade.

During this adjustment phase, the personal development of the participants into college students has just begun. They have yet to move through any of the vectors but are adjusting to a new environment. Within the application of the learning centered approach through the advisors teaching freshmen seminar in the first week of the semester, the social and educational relationship between advisor and advisee has begun. The advisor has begun to “facilitate the exploration of meaning and content knowledge through personal and interpersonal discovery” (Arizona University System, 2000, p. 1) with the student about his/her overall college experience. Additionally, students are also becoming comfortable with their peers and peer mentors through freshmen seminar.

In this study, students came to a realization around their lack of study skills and ability to manage their time and make necessary changes. They mentioned their high school counselors and their relationship being “generic” and not feeling as if they were an individual but just part of student body the counselors had to deal with. The school
counselors, as well as students’ overall high school experience, did not prepare them for the rigor of a STEM university with intensive math and chemistry requirements. The students did not expect to study for a prolonged period of time. They felt the academic and learning behaviors and strategies learned in high school were not enough; however, after their first common, all students understood the implications of their behaviors and choices and realized they could not continue the minimal hours of studying if they wished to pass.

The third vector is moving through autonomy toward interdependence. The key aspect of this stage is that students learn how to be self-sufficient and take responsibility for achieving their goals (Cleveland-Innes & Emes, 2005; Kuh et al., 2005; Melander, 2005; NACADA, 2006). There was a theme of unpreparedness as well as the lack of an adult figure explaining or teaching the skills that would be needed to be successful in this new environment. Therefore, students seemed to struggle with acclimating to a rigorous STEM program. The freshmen seminar being taught by an academic advisor with assistance by a peer mentor helped students focus on goal setting and developing an understanding of the many different aspects of college life such as managing their time, understanding their curriculum, acclimating to the university and ultimately, developing into lifelong learners who are capable of advising themselves. From the information shared in the focus groups, it was clear that students did not begin to recognize their responsibilities until after a few weeks of the semester had passed. In many cases, this was too late and they had already received a grade worth 25% of their final grade. This
knowledge is helpful within the learning centered approach and when to begin the process of realization around goal-setting and critical thinking with the student.

**Developing Relational Networks**

**Synergistic Relationships.** Moving through autonomy towards interdependence is evident in this sub-theme, synergistic relationships. Students learned from each other through their expression during freshmen seminar with how they “don’t need to be alone” in their experience. They were able to express their struggles within the classroom to their peers. This movement was also apparent among commuters. The commuters started out on their journey as if they were still in high school. After classes were over, they would head home to study, which was not an ideal way for them to study. They began to realize that staying on campus and committing more time with friends and study groups, then their work could be completed. Within a few weeks of the semester, they began to stay on campus as late as they could, mostly meeting up with a group of friends to study. They trusted their abilities to make this decision to stay longer and create better study habits.

**Implementing Supportive Relationships.** The academic advisors being part of the classroom experience fostered the beginning of a genuine relationship with unconditional positive regard. The students felt a sense of connection and comfort level with their academic advisor, which enabled the students to feel they could express themselves. They understood they were in a “free space” and comfortable to express themselves with their peers, peer mentors and advisors. As stated in the literature, students are more satisfied with the advising process when a warm, caring academic
advisor guides them. If advisors are providing quality services such as these, then the more likely students will see their advisors as important to their college experience (DeSousa, 2009; Propp & Rhodes, 2006; Uhlik & Jones, 2008). This connection helped develop competence and moved students through autonomy to interdependence.

According to Chickering (1969), the *developing competence* vector has three components: intellectual skills, physical and manual skills, and social and interpersonal skills. Students began to develop competence through the connections in freshmen seminar, including peer mentors, peers as well as the academic advisors. Their social and interpersonal skills were apparent. They felt free to express themselves and did not find themselves “feeling alone.” The comfort level as well as the circle format of the classroom created an engaging, welcoming environment for students to share their emotions.

Due to the freshmen seminar, students felt more comfortable during one-on-one advising meetings. Their comfort level allowed emotional expression and a sense of trust and opportunity to discuss their true feelings of their college experience struggles. Developing comfort with their advisors early in their college career will more likely lead to a positive impact on students’ persistence in college, development of academic skills, career decisions and educational aspirations, and satisfaction with their college experience (DeSousa, 2009; Hunter & White, 2004; Propp & Rhodes, 2006; Uhlik, 2004). They also had the ability to make appointments whenever necessary with their academic advisor. This will help with their continual transition and ability to explore
majors. The students will be more likely to express their needs and interests during a one-on-one with their academic advisors due to their comfort level.

The mission of learning centered advising programs is to develop learning goals for the students to master within the academic advisement relationship (Barr & Tagg, 1995; Bosch et al. 2008; McDaniel et al. 2000; O’Banion, 2000). Before developing these learning goals, I believe the advisor/advisee relationship needs to be clarified by the academic advisors. Some students knew their role in the academic advisor/advisee relationship; however, a few were confused about what an academic advisor could provide for both their immediate needs and future expectations. They understood their teacher was an academic advisor, but not what type of help the advisor could provide during the semester, as well as in the future. This seemed to be muddled and clarification in the beginning and the throughout the semester will be needed for future advisors teaching freshmen seminar.

In the learning centered approach that we created at this STEM university for advising, the advisor plays the role of the teacher, assisting students in learning the necessary skills to be their own educational planners (Melander, 2005). In my study, this role was just beginning. Students were just starting to become their own educational planners. They will need more adjustment as well as guidance through their spring semester and beyond. This is true for the undecided majors, as well as those students who did not place into the first semester math course. These students implied interest in a few different majors but had yet to narrow their focus down to one major.
Through the learning centered approach, more exploration of the student’s majors needs to be considered. For learning to empower students, course assignments and activities should encourage students to explore their own interests (Berling, 1999). There were not many assignments during freshmen seminar around the student exploring their own interests as well as establishing their purpose and goals. If these were offered through the journal assignments, the students did not feel they were processed in a meaningful way. The students did have to create a résumé, but their needs to be more meaning making around the students’ overall goals and purpose to their education and expectations of their college experience in relation to the résumé.

The central focus of learning centered advising is to assist students in developing an understanding of their curriculum (Addus et al., 2007; Campbell & Nutt, 2008; Hagen, 1994; Hemwall & Trachte, 2005; Lowenstein, 1999, 2005; Strommer, 1994). The academic advisors in my study helped the students have a full understanding of their curriculum. However, many of these students will change majors or not be successful in the current major they have chosen. In the “future implications” section, I discuss changing the STEM university’s acceptance process for incoming freshmen and how this can impact freshmen changing their major. For students, exploration of their majors will be a continuous learning process as many may switch throughout their first two years of college (and some beyond).

Retention and persistence are important, but another, potentially better measurement of success and progress is whether a student has learned what he/she needs to know to be successful in a growing global economy as well as balancing their personal
lives, according to the College Learning for the New Global Century (AAC&U’s 2007 report). Within the learning centered approach, the advisor needs to continually reiterate goal setting and create a long term, ‘big picture’ for the students.

**Implications for Practice**

Based on my action research on freshmen students’ perceptions in regard to their academic advisors both teaching and advising them through a freshmen seminar class and whether this had an overall impact on the advisor/advisee relationship and college experience, below I suggest implications for practice moving forward. My first suggestions are for academic advisors and how they can build a better relationship with their advisees throughout a first semester. The second set of implications for practice is through freshmen seminar and addressing changes that could be made in regards to peer mentors, summer programs, as well as helping students who struggle with their GPA and math requirements. The third implication is for counselor educators as well as bridging the gap between high school and a students’ college experience.

**Academic Advisors**

Based on my findings, I suggest having an academic advisor teaching and advising their advisees is beneficial in helping freshmen students begin to navigate their college experience and form a comfortable, beneficial relationship with their advisors. The students mentioned numerous times that their advisors were helpful, available and able to answer any questions, as well as give advice both in and out of class. By meeting with the students in the freshmen seminar, the academic advisors helped build connections, fostering the feeling that students are not alone, gathering useful
information, and building stronger advisor/advisee relationships. The advisor/advisee relationship is important for students so they feel comfortable coming to the advisor as well as expressing concerns or information they may otherwise not tell anyone (e.g., a learning disability, a possible diagnosis in high school). This role needs to continue throughout a student’s college experience as there will be other stages throughout his/her time where she/he can be confused or feeling angst. As advisors, a constant presence in the form of one-on-ones as well as emails as reach out methods to their advisees can continue their relationship.

Many academic advisors have a large caseload at their university (Teitlebaum, 2000). The engagement of a caring administrator is shown throughout the literature (Campbell & Nutt, 2008; DeSousa, 2009, Hunter & White, 2004; Propp & Rhodes, 2006; Uhlik, 2004), as well as in this study, to be an important factor. Some academic advisors may feel that teaching an entire course may be time consuming. However, this model can be tailored to the university and the university’s needs. In this study, the seminar met once-a-week for one hour and twenty minutes. After “hearing” the voices of the participants, there may not necessarily be a need for the class to last the entire allotted time or to have continuous group meetings throughout the semester. Therefore, an academic advisor can tailor this to his/her schedule. However, the advisor must know the needs of their students in order to have a better understanding of why or why they are not persisting towards graduation and satisfied with their overall university experience. Therefore, spending some, if not all the time within freshmen seminar or another course
is important for advisors to consider. This will be a long-term investment in starting and building a foundation for a lasting relationship with their advisees.

Within the focus groups and quick-writes, students emphasized their need to develop better time management skills and study habits, as this became an important part of their acclimation to college. One way universities can address time management and study skills is by creating mandatory tutoring for all students until the grades of the first mid-term or, like our university, first common are awarded. This tutoring can be in lieu of the one-hour and half meeting time per week of the freshmen seminar. The class can meet as a whole for 45 minutes and then have tutoring allotted for the remaining 45 minutes. This might create study habits and the structure students seemed to be lacking. For example, student athletes who were part of the freshmen seminar class also had both mandatory tutoring 10 hours per week as well as a weekly check-in with their athletic academic advisor. The student athletes liked having the mandatory tutoring scheduled every week. I believe it might benefit all students in the beginning of their college career to have mandatory tutoring and study hours.

Participants also expressed the need for more one-on-one meetings with their advisors with the potential for fewer group meetings. They felt their needs may be different than their peers and wanted to be able to meet with their advisors one-on-one. These one-on-one sessions can help with individual goal setting as well as understanding the advisee’s purpose in attaining a college degree. During these one-on-ones, it is important to learn the student’s background and family support at home. How do they really feel about their major and their math course (since math has such an effect on
everything else)? What is their financial situation? Are they the first in their families to go to college? Do they have brothers or sisters who have graduated from college? There are so many factors with regards to retention, student satisfaction, and persistence (e.g., family, financial needs, first generation, institutional fit) that may get overlooked in a group format. The one way of learning more about students and their overall needs is by building a connection and relationship with the student within a one-on-one setting.

One activity that may help the advisor instructors better focus on struggling or at-risk (students who have failed a mid-term or fell below a 2.0 after the first semester) students is to have weekly case conference meetings where 1) staff training would occur; and 2) struggling students are identified and processed as a group with some recommendations moving forward. We began this process as a staff this semester and noticed academic advisors working as a team often generated more solutions to a student issue than they do working alone. These weekly case conferences can address some of the following: Do we need to call the student back in for a follow up appointment? Did we give the student the appropriate resources to help with his/her needs? By incorporating partnerships, which are listed below, universities can continue to incorporate a learning centered approach that is accessible, well developed and creates a sense of belonging for all students.

**Freshmen Seminar**

I am recommending changes to the structure of the freshmen seminar to enhance its effectiveness for students. The students are changing so rapidly during the semester that the advisors need to learn how to accommodate these needs. Students identified and
recommended changes to the structure of freshmen seminar. Along with these recommended changes, students struggled with their adjustment to college with their time management, how to study and for how long, as well as with the realization that changing was necessary to be successful. One suggestion to augment the work in freshmen seminar is to incorporate workshops in the summer for those students who have been flagged as underprepared and therefore placed in the lower level math courses. During the fall semester, we only had 15% of our students pass the lowest level math course; therefore, statistically, an intervention is warranted and needs to be implemented. Freshmen seminar may not be enough to begin the process of adjustment; while it is helpful, in of itself, it may not be enough. A suggested summer program will be discussed in more detail in the next section.

Students suggested changes to the current structure of freshmen seminar. They felt like the freshmen seminar added a lot of “busy work” to an already busy schedule. Moving forward, freshmen seminar will be revamped and continuously evolving as the students are evolving. Their needs as students were constantly changing. Suggestions may change each time the seminar is taught because of this; therefore, we always want to ask the students and assess if what we have implemented is helping them become successful college students. Moving forward at this point, the freshmen seminar will consist of four weeks of class meetings for the 1 hour and 20 minutes; during these classes, advisors will introduce the information students will need to be successful both academically and socially in and outside the classroom (sharing resources available, establishing a peer group, and building a relationship with their academic advisor).
During the first four weeks and beyond, students will be required to log both tutoring and study hours. The advisees will then set up one-on-one meetings throughout the semester with their academic advisors. For those students who do well on their first common or mid-term exam, they can have the choice of continuing to log their study hours and tutoring or cut back. The freshmen seminar class will meet as a group one or two more times before the end of the semester in order to recap with their peers and continue dialogue on how their semester is unraveling overall.

**Peer Mentors.** Many students expressed how helpful the peer mentors and upperclassmen were to their development and expectations of professors, major, and overall college experience. This creates a special connection, not only for the freshmen, but also for the peers to be able to participate and help other students become successful. The freshmen were anxious, nervous, and afraid of failure, and lacked time management and study skills, but to hear from a peer mentor that they were feeling the same way when they entered the university, relieved many of the freshmen seminar students.

Incorporating both study hours and tutoring as components in freshmen seminar will be an asset for the peer mentors as well as the incoming students. Peers mentors can participate in both of these activities. The peer mentors have taken the courses that the freshmen are struggling in, therefore, they can help through tutoring and teaching those students who need help on how to study proficiently. Those peers who have expressed interest in, as well as shown success in a particular subject, can offer their expertise as part of their peer mentorship position.
**Beyond Freshmen Seminar.** Students who fall below a 2.0 GPA after the fall semester require additional services at both this university as well as others. Most universities are focusing on retention, therefore, it is important to help and guide these students who are struggling academically and moving into their second semester of college by implementing programs to help them. This is unfortunately a reality for many of our college freshmen within the study. The students also seemed to struggle with their math coursework particularly, which is a requirement at STEM universities. The students within this study were taking pre-calculus, which could be a course one level below calculus or a course two levels below calculus. These students placed into these courses according to a placement exam. They must pass this before moving to Calculus. They must also take many other math courses beyond Calculus to graduate at a STEM university. This is true for most if not all STEM degrees. Another possible program, math emporium, would target students who were placed in a lower level math requirement prior to attending the university.

**Below 2.0 Students.** The students below a 2.0 could attend one-on-one sessions with their academic advisor throughout the spring term. Advisors will be given smaller caseloads of freshmen in order to meet each student weekly to “check in.” Again, this is to help these students with their study skills, time management and giving them guidance and goals throughout the semester. By meeting with them each week, advisors can learn about each student individually and what type of needs they may have socially, academically and developmentally. These could include test anxiety, planning their time more effectively and their continuation in acclimating to the university. These
students will not only have the one-on-one sessions with their academic advisor, but will need to attend tutoring each week (approximately) 10 hours. The majority of students who did poorly academically and fell below a 2.0 failed to pass their math course. Therefore, it may be helpful to explore majors at the universities that do not require an intense math curriculum.

**Summer Program for students who placed below Calculus.** Currently, at this STEM university as well as many others, students get accepted into a major of their choice, such as computer engineering, but can be an entire year behind the required curriculum due to the math they placed into. If these students do not succeed in their first math course, advisors will need to discuss a change of major and other opportunities at the university. Therefore, a summer program, similar to other summer bridge programs, can be designed for these students. These students need to learn how important study habits and time management are early in their college careers. We can incorporate peer mentors and tutors in a summer program which can focus on the following: study skills, time management, and how math is taught at the university. By moving these helpful elements to the summer preceding their first semester, hopefully we can help better prepare the students for their first semester of college.

**Math Emporium.** According to Carol Twigg (2011), the primary reason students do not succeed in a college math course is they do not spend enough time with the material or completing the math problem to completion. “Students learn math by doing math, not by listening to someone talk about doing math” (Twigg, 2011, p. 34). The emporium is a structural change on how to teach introductory math courses. What is
critical for success is the pedagogy: eliminating lecture and using interactive computer software combined with personalized assistance at all times through faculty and peer mentors. The goal of the emporium model is to develop and implement an increased completion rate for students by having a more effective and efficient assessment and delivery system as well as reducing the amount of time students spends in remedial math and other developmental courses. This will also decrease the amount of money students spend by taking these developmental courses, which usually prolongs a student to stay an extra year in college. The emporium model has been implemented in many different ways. Some institutions have large computer labs while others have small ones. At some institutions, students have to dedicate so many hours in the labs while at other institutes, instructors have to meet with the students in the lab or classroom to assist. Each institution works with what their needs are and the given constraints. The critical piece of the emporium is the pedagogy, including assistance with assignments, eliminating lecture, and utilizing computer software.

In a June 9, 2008 Inside Higher Ed article, Vincent Tinto stated, “We must stop tinkering at the margins of institutional life, stop our tendency to take an ‘add-on’ approach to institutional innovation,…stop marginalizing our efforts and in turn our academically under-prepared students, and take seriously the task of restructuring what we do.” This structuring can be through this emporium model, which has been successful for many reason reasons. Students spend most of their time working through math problems rather than sitting and listening to a lecture. Another reason for success is students will spend a majority of their time on learning about the math problems they do
not understand rather than on those problems, which have been mastered. Lastly, students have assistance whenever they need it and students are required ‘to do’ math (Twigg, 2011).

Beginning a math emporium would be an effort of both faculty and student affairs professionals and would require support from the president and provost of the university. Faculty would have to be both supported and supportive. This would be an ongoing collaboration of many individuals across the college campus. There would need to be a long-term vision supported and addressed by the university shown by, for instance, adding this to the university vision and overall strategic plan for academic success. This would then become an institutional goal instead of an individual goal.

**Student Affairs Professionals – Collaboration & Communication**

As stated earlier, students are attending college with more personal and psychological issues than ever before (Habley, 2007). Clearly, the participants in my study had a variety of emotional responses, such as fear of failure, angst, stress, and being overwhelmed with their workload. Therefore, it is important that the advisors teaching freshmen seminars feel knowledgeable and comfortable in referring students to other services available on campus. These relationships and partnerships across college campuses need to be in place to ensure students are receiving the assistance they need and are able to progress through their academic program. For example, it would be helpful for academic advisors to be trained in referrals, procedures, and other protocols through the counseling center. At least once a semester, there should be a training session developed by the counseling center for all academic advisors. This could occur once
during the fall term. This is not currently set up at our university, however, we have implemented this during our spring semester and feel a need for continual, ongoing relationship with counseling. It is beneficial for academic advisors to know who the counseling staff are, their backgrounds, and what type of theoretical orientation they have. This will be important for referrals. The training would also reiterate that we are academic advisors and not certified, licensed counselors. We are in a helping relationship; however, there is a time to refer a student and to know the protocols and procedures on when to refer and when to walk a student over for immediate attention.

A second relationship that can be fostered is with the tutoring center. Most universities have some type of learning center or tutoring center. Research has shown that support from a learning center is a key component toward persistence toward their degree (Drake, 2010). Many students are struggling with anxiety, learning disabilities, and poor time-management and study skills. Often times, students will feel like failures or overwhelmed with the transition from high school to college. Partnering with the tutoring center to identify students’ specific tutoring needs and offering services early in their semester may prevent some stronger emotional reactions that occurred throughout the semester. By creating awareness of what is available to each student, we can foster an environment of unity across campus.

**Faculty Members**

Students mentioned during their focus groups that they had to utilize on-line resources for their classes because information they were receiving was not clear or understood in class. Therefore, the collaboration of faculty members coming into
freshmen seminar to meet with the students more personally and listen to their needs in terms of their learning styles or ways of being engaged in class would be beneficial. Students may not be as open to talk to the faculty about their needs due to them just beginning to develop their relational networks and could be nervous or feel they can learn the material on their own. Therefore, as the Director of the Advising Success Center (ASC), I can also serve as a resource for the students. I would meet with the department chairs and share information received from the students that they themselves may feel reluctant to share, even in their evaluations of their professors and their experience. I would also schedule a meeting in the beginning of each semester with each department individually. Within these meetings, I would explain our services and resources we offer to the students. The faculty and departments will know they can refer students who are struggling or in need of tutoring to the advisors at the Advising Success Center to help the student receive the services they need.

**Admissions & Student Affairs**

During the focus groups, I learned that many students were confused about their current major choices, and were changing within the first semester. Other students were placed into the lowest level math and were struggling to pass this class due to study skills, time management, and comprehension of the subject matter. Currently, my university accepts all students into a major of their choice. The university is moving away from this toward possibly accepting all incoming freshmen with an “area of interest” within a college. The “area of interest” would be a student who wants to be an electrical engineer but would be accepted into the “College of Engineering” with an area
of interest in electrical engineering. Students can be accepted as computer engineers but then placed in Math 108 depending on their placement exam scores, which does not meet the requirements of the first semester curriculum of an engineer (or the second semester). Many of these students who are placed into Math 108 do not move on during the following semester to the next math requirement, Math 139. These students will have to repeat Math 108 and are then two years behind starting their computer engineering degree. This affects both the student with their persistence towards graduation and the university retention. As a university, we are funneling the students incorrectly.

This also could be happening at other STEM universities. Universities may want to rethink acceptance into a major when students are only at the beginning of their college identity and working on the adjustment to college. I feel this creates more pressure to fit into the major instead of making sure this is the right major for them and their career. We are starting with a narrow scope. This narrow scope then has many advisors explaining to students that they need to change their major because they have not fulfilled the core requirements. If we start with a broad scope with all students coming in undeclared or with an area of interest, they then can explore the many majors that are offered at the university and earn their way into the major that is right for them. If they do not fulfill the required engineering math courses, we have other majors that would better suit the student. This will help with student satisfaction, retention and persistence.
Counselor Educators

I would recommend that counseling programs place master’s level student affairs/higher education counselors-in-training that are interested in advisement into academic advising divisions on college campuses. These students can be involved with special programs, such as a freshmen seminar course. They can shadow their on-site supervisor and eventually help teach freshmen seminar. The practicum student or intern can observe and process the freshmen experience, but then eventually become an active part of the class. During the student’s internship, they could teach one of the sections with the supervisor being present perhaps during group process. The intern can also take on some students who have fallen below the 2.0 GPA and guide the student with goal setting, time management, study skills and resources available to the student to be successful. The intern can then process the experience within the internship class. They can begin the process of how this learning centered approach to advising is impacting their thinking about the advisor/advisee relationship as well as ways to enhance students’ college experience. As professionals in higher education who understand how important relationship building is with students, we as counselor educators have to begin to express how important and what a great resource an advisor is on all college campuses. The intern will be able to notice and be a part of the impact an advisor can have on a student’s overall experience.

Counselor educators specializing in student affairs need to attend conferences to learn more about the learning centered approach to advising as well as what other academic advising centers are implementing to help with student success. Learning
about best practices and attending conferences should always be emphasized. This creates open dialogue and new ideas that we may not have thought of for our own university. They also need to learn from other academic advisors on best practices and what other advising centers have implemented to help students with adjustment to college in such areas like; time management and study skills, self-doubt, procrastination, and handling distractions. These ideas can be brought together and discussed as a staff on whether they could help within their institution. These ideas from other institutions can provide in-service training for advisors serving as instructors in freshmen seminar.

In some student affairs classes, it would be helpful if students learned about STEM universities and the rigors of completing such a degree. The special needs of these students acclimating to the university will be helpful with respect to the advisors, faculty and administrators. This may not only be true for STEM students, all students are acclimating to their new settings, however, there is a lot of pressure on a STEM degree due to the math, physics and GPA requirements. Many of these students were smart in high school and many did not have to study a lot (and did not study many hours). Within a core student affairs course required for the students master’s degree, discussion of implementation of teaching new students preparedness and study skills techniques will occur.

**Bridging High School & College**

Many counselor educators teach master’s degree students who will work as school counselors in high school settings. This provides an opportunity to begin the discussion of how to best prepare students to make the transition from high school to
college. An important component of this transition is the difference between a high school skill set and a yet to be experienced beginning college student identity along with creating a new skill set. For example, a student’s study habits and time management skills begin developing in elementary school. Many high school students do not spend a lot of hours studying. The amount of time studying and learning good time management skills will need to change once entering a STEM university. Many students are not prepared and do not realize they need to spend many more hours studying than they are accustomed to. If the importance of establishing efficient ways of learning and studying can be infused throughout a student’s education, he/she may not have such a large learning curve when entering college.

Counselor educators can begin this conversation in the classroom of master’s level students who are infused in the same class but branching out towards either school counselor or student affairs. This can help train future high school counselors to spend more time visiting classrooms and meeting with students individually or in small groups discussing study habits, time management skills, and procrastination. This may start with the families: creating quiet time, dedicating hours after school to solving problems and writing down any questions they may have about their homework, setting aside time that is only focused on schoolwork, even if there are no homework assignments. This may create behaviors that will continue throughout a student’s educational experience that counselor educators can address with their students with respect to how they will help families become involved in creating stronger skills for their children to persist in college.
Limitations

Every methodology will have limitations. My overall findings cannot be generalized to other sites because action research is not generalizable. In qualitative research, a single case or “small, nonrandom, purposeful sample is selected precisely because the researcher wishes to understand the particular in depth, not to find out what is generally true of many” (Merriam, 2009). However, the findings may be transferable and have implications for other academic advisors and student affairs professionals. Lincoln and Guba (1985) discussed the notion of transferability in which, “the original inquirer cannot know the sites to which transferability might be sought, but the appliers can and do” (p. 109). With this detailed description provided, other researchers and readers can compare to compare if there is a “fit” with their institutions (Merriam, 2009). The small sample size is also a limitation; however, it gave an in-depth understanding of how first time freshmen perceive the impact of a learning centered approach to advising on their academic advisor relationship and their early college experience.

Another limitation is using only one geographic area. Most, if not all of these students were all from the same state and the same institution. Since this was an action research study, I only studied my current STEM university. I wanted my study to be action research because the goal of an action researcher is addressing a specific problem within a specific setting, such as a workplace and is conducted by those who are interested in practical solutions to problems and want social change (Merriam, 2009). I only collected data for one semester. If I were to follow these students through their entire freshmen year and beyond, this might have yielded far different data. I also could
not control for differences in teaching styles of the academic advisors. I was also the primary investigator in this study, which may have created some bias and assumptions. However, I kept a journal and had a critical friend throughout the entire process to challenge my thoughts and beliefs.

**Future Research**

Additional research on the learning centered approach to advising is needed to promote greater understanding of how such an approach can most effectively be implemented and with what outcomes. For example, having more diversity in the sample would allow a researcher to focus on cultural similarities and differences in the outcomes of this approach to advising. Comparing the experiences at my university, of students in a similar freshmen seminar being taught by administrators or other types of student affairs professionals and those being taught by their academic advisors would specifically highlight advisor effect. Future research would be to observe different types of universities that have academic advisors teaching freshmen seminar and observing their relationships with their advisees as well as the students’ overall acclimation to college life.

We have received feedback from our current students regarding the current format of freshmen seminar. The changes in freshmen seminar moving forward can be implemented and the format to meeting as a group four times in the beginning of the semester as a class and then begin one-on-one sessions as well as tutoring can take place. However, I would want to hear from the new incoming students on their overall college
experience and their advisor/advisee relationship. This can be an ongoing, evolving freshmen seminar with changes occurring depending on what the students’ needs are.

I also recommend conducting a longitudinal study with a larger number of students who were undeclared and follow them each semester until graduation. There could be a longitudinal study on the incoming freshmen class that has entered the university. This could be a mixed method approach, which can incorporate a larger sample size and generate more generalizable results. This would include surveys of students who persist with their studies, as well as those who leave the university. This mixed methods approach can inform and influence how we admit students and our practices once accepted.

Universities are only graduating approximately 53% of their students after six years (Berkner, & Cataldi, 2003; Crosling, Thomas, & Heagney, 2008; Mortenson, 2005). The need for exploring if developing a more meaningful relationship helps with early intervention and students persisting towards graduation by implementing a learning centered approach. Persistence also depends on the university as well as many other factors if the student decides to complete her/his degree or not. Part of the advising process is to help young students make appropriate career choices and find out why they persist or why they may feel their current university is not the best choice. Their current university may ultimately not be the best choice.

There are universities that follow a split model of advisement, which includes advisors teaching their freshmen and having them as their advisees for the first two years. Another area for future research would be to examine this type of split model of
advise students. The students would then be assigned a departmental advisor. More research needs to be done around how students feel about having two separate advisors and if the learning centered approach and establishing the connection with students early on has an impact and if it truly benefits the overall student’s experience. There are not many advisors teaching their students in the first semester, so these models may be hard to find (Tobolowsky, 2005). Examining these institutions that have this in place and their overall retention and persistence could help provide some insight as well.

Peer mentors relationship can also be explored and how they contribute to the overall impact on the freshmen’s college experience. The peer mentors seem to have an impact but to focus a study solely on peer mentors would be helpful. Lastly, would be conducting research regarding who is admitted to STEM degree programs and how if they persist toward graduation. One could conduct a study on the criteria of who is best suited to enter these types of degrees.

**Conclusion**

The focus of my study was on an approach to academic advising for freshmen students at a STEM university. The main goal of this study was to understand the experiences of incoming freshmen students enrolled in a freshmen seminar taught by their academic advisors, and how students perceived this impacting the advisor/advisee relationship and helping them navigate their college experience. I developed a greater understanding of freshmen students’ needs and struggles during their first semester at a STEM institute and how freshmen seminar helped students with these struggles and needs. I also learned what changes in the structure of the freshmen seminar could be
implemented moving forward. There are also practical implications for the Advising Success Center (ASC) and academic advisors to think about bridging the gap between high school and college earlier in a college student’s experience, possibly during their summer prior to starting college. However, the discussion and implications for practice are relevant not only for academic advisors, but also other student affairs professionals and counselor educators.
References


of traditional freshman and nontraditional freshman students: Are they really

for the new global century*. Washington, DC.


San Francisco.

Astin, A.W., & Antonio, A. (2012). *Assessment for excellence: The philosophy and
practice of assessment and evaluation in higher education*: Rowman & Littlefield.

Thirty Year Trends. *Los Angeles, Calif.: Higher Education Research Institute,
University of California at Los Angeles*.

Understanding the Role of Faculty "Developers" in Student Success. *About
Campus, 14*(6), 2-8.

training on peer educators: Leadership, self-esteem, health knowledge, and health

Exploring the evidence, Volume II: Reporting outcomes of first-year seminars
(Monograph No. 29). *Columbia, SC: National Resource Center for the First-Year
Experience and Students in Transition, University of South Carolina.


comprehensive handbook, 18-34.


Habley, W.R. (2004). The status of academic advising: Findings from the ACT Sixth National Survey (Monograph No. 10). *National Academic Advising Association, Manhattan, KS.*


Keup, J.R., & Stolzenberg, E.B. (2004). The 2003 First College Year Survey: Exploring the academic and personal experiences of first-year students (Monograph No. 40). Columbia: University of South Carolina, National Resource Center for The First-
Year Experience and Students in Transition.


Merriam, S.B. (1998). *Qualitative Research and Case Study Applications in Education. Revised and Expanded from" Case Study Research in Education."*: ERIC.


New Directions for Institutional Research, 2007(136), 29-40.


http://www.nacada.ksu.edu/Clearinghouse/AdvisingIssues/org_models.htm


Patton, M.Q. (2005). *Qualitative research:* Wiley Online Library.


Petress, K.C. (1996). The Dilemma of University Undergraduate Student Attendance Policies: To Require Class Attendance or Not. *College Student Journal, 30*, 387-
389.


and Educators. *Journal of Creativity in Mental Health, 2*(3), 29-49.


Tinto, V. (1993). *Leaving College: Rethinking the Causes and Cures of Student Attrition.* (Second ed.).


Appendix A

NJIT First Year Seminar

Course Syllabus - Fall 2013

Instructor: XX
Office: Fenster 420, 4th Fl.
Office Hours: Tuesdays 1:00pm - 2:30pm (walk-ins)
Office Phone: 973-596-XXXX
E-mail:
Class Hours & Location: Mondays - 8:30am - 9:55pm

Course Overview:
This course will assist with orienting students to NJIT by working in groups, and discussing strategies to promote academic and professional development. Through meetings with faculty, upper-class students, and current industry professionals, students will explore different majors and learn about the many exciting career opportunities within each field.

Course Learning Outcomes:
As you navigate your first semester at NJIT, this weekly seminar is a forum for discussion, feedback, and mentoring. Topics are relevant to your experience as a first year student. Engagement in the course will empower you to make the most of your first semester. The goals and learning outcomes reflected in this document were carefully formulated to ensure a relevant, sustainable and dynamic freshman seminar experience.
As a result of this course, students will:

1. Foster Academic Success by:
   a. Adapting and applying appropriate academic strategies to their courses and learning experiences.
   b. Identifying relevant academic policies, processes, and procedures related to advising, course planning, and major exploration.
   c. Identifying and applying strategies to effectively manage time and priorities.
d. Demonstrating how to effectively evaluate information sources and utilize University libraries and information systems for academic inquiry.

2. **Help Students Discover and Connect with The New Jersey Institute of Technology** by:
   a. Identifying appropriate campus resources and opportunities that contribute to their educational experience, goals, and campus engagement.
   b. Developing and applying skills that contribute to building positive relationships with peers, staff and faculty.

3. **Prepare Students for Responsible Lives in a Diverse, Interconnected, and Changing World** by:
   a. Examining how their background and experiences impact their values and assumptions and explaining the influence these have on their relationships with others.
   b. Describing and demonstrating principles of responsible citizenship within and beyond the campus community.
   c. Describing processes, strategies, and resources, and explaining the implications of their decisions, related to their overall wellness.

**Attendance:**

**Attendance at all classes is mandatory.** If you must miss a class, please make arrangements with the instructor in advance. Missing one or more classes or not submitting complete assignments for any reason puts you at risk of not passing the course. The First Year Seminar Class is comprised of ten (10) in-class sessions during the fall semester. The first part of your program includes a two-day introduction at **First Year Connections on August 30-31, including the Service Day on August 31.** You will also have to attend **Freshmen Convocation on Wednesday, September 18, 2013 at 3pm**, Naimoli Family Athletic and Recreational Center.

**Grading:**

The FYS course is a pass/fail course. Passing the course will result in an “S” for Satisfactory. Failing the course will result in a “U” for Unsatisfactory. All assignments
must complete, completed on-time, and executed in accordance to University academic policies. *More than one class missed will result in a "U."* Absences may be made up at the discretion of the instructor.

- **Attendance and Participation in class as well as *3 seminars in engineering fields***
  *You will be required to visit a minimum of 3 diverse engineering departments to gain information on the major. Six will be scheduled (you only need to attend 3) on diverse Wednesdays during common hour (2:30pm – 4:00pm). Specific dates TBA.*

- **Participation in community service assignment**

- **Journal Entries** – minimum 10 – 1 page in length, with exclusion of free journal entries.

- **Group Presentations:**
  1. How did you imagine the college to be like in comparison to what you’ve experienced this past semester?
  2. What would you tell future freshman who are interested in enrolling at NJIT?

  - Group Presentation Requirements:
    - 15 minute video in response to the questions above
    - DUE week of November 11th

**Schedule:** Please note: the outlined schedule below is tentative and can change at any time to accommodate the overall needs of the class.

<table>
<thead>
<tr>
<th>Week 1 – Sept. 3rd</th>
<th>Discussion Topic</th>
<th>Class Activity</th>
<th>Homework Assignments</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Purpose and Philosophy of freshmen seminar course • *So what is an LC?</td>
<td>Name Game Syllabus Review</td>
<td>Acquire Journal for next class Journal entry #1 Read Eddie and Me (pages 1-3) for journal entry Bring in copy of all course syllabi and calendar (or electronic access)</td>
</tr>
<tr>
<td>Week 2 –</td>
<td>• Academic Integrity • Walking Tours of</td>
<td>Name Game</td>
<td>Journal entry #2 How has the first</td>
</tr>
<tr>
<td>Week</td>
<td>Sept 9th</td>
<td>support services</td>
<td>Highs/Lows</td>
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<td></td>
<td></td>
<td>Walking Tours: CAPE, Writing Center, Math Tutoring Center</td>
<td></td>
</tr>
</tbody>
</table>

| Week 3 – Sept 16<sup>th</sup> | VARK Assessment, Learning styles/Affective learning and Preparing for and taking tests (study skills for common exams) | Name Game Highs/Lows Take and discuss VARK Common Exam Inquiries (PAL’s) | Journal entry #3 – Keep a calendar for the week and right down EVERYTHING |

| Week 4 – Sept 23<sup>rd</sup> | Learning about yourself through an assessment run by career development services | Highs/Lows MAP-Works Assessment MBTI – Lab class | Journal entry #4 – Reflect on your experience taking the MBTI assessment and what your results tell you |

| Week 5 – Sept 30<sup>th</sup> | Group dynamics Communicating with professors | Highs/Lows Role plays (peer to peer and professor to student) Calendar review (from week 3) | Journal entry #5 How comfortable are you speaking to professors and what would you want help with? |

| Week 6 – Oct. | Student Success at NJIT Calculating GPA Student support services | Highs/Lows Degree Works (GPA) | Journal entry #6 – What are your plans for staying motivated and keeping track of |
| Week 7 – Oct. 14th | 7th | Email checking/networking  
Goal setting (short term, long term)  
Motivation (How does one stay motivated?) | your goals? |
|---|---|---|
| **Week 7 – Oct. 14th** | Financial Literacy  
Financial Aid office  
Healthy Living  
C-CAPS  
Health Services | Highs/Lows  
Finance Modules to be discussed in class  
Developing healthy eating habits | **Journal entry #7 –** Please describe you daily eating habits, including “likes” and “dislikes”, as well as your daily exercise routine. |
| **Week 8 – Oct. 21st** | Advisement  
- Responsibilities in advisement for both Advisor and the student  
- Academic plans: Curriculum grids  
- Credits needed to graduate | Highs/Lows  
Build your Spring 2014 schedule  
Share in groups/Review Academic plans  
Discuss celebration planning for the week of 11/18/13. | **Journal entry #8 –** Free entry – drawing/poem/how's week going?  
***Make appointment with advisor as needed, get holds removed prior to registering*** |
| **Week 9 – Oct. 28th** | Advisement Continued  
- Courses to be taken  
- One on one time with advisor | Highs/Lows  
Academic Policies and procedures at NJIT  
Group hunt -Who's | **Journal entry #9 –** Think about what policies you still have questions on or questions that have not yet been
HONOR CODE AND BEHAVIOR
Please read the University’s Academic Honor Code. Violations of NJIT’s Academic Honor Code will lead to disciplinary consequences.
NJIT has a zero-tolerance policy regarding cheating of any kind and student behavior that is disruptive to a learning environment. Any incidents will be immediately reported to the Dean of Students. In the cases the Honor Code violations are detected, the punishments
range from a minimum of failure in the course plus disciplinary probation up to expulsion from NJIT with notations on students' permanent record. Avoid situations where honorable behavior could be misinterpreted. For more information on the honor code, go to http://www.njit.edu/academics/honorcode.php

Cellular phones must be turned off during the class hours, or if you are expecting an emergency call, put it on vibrate. No headphones can be worn in class. Also, class will begin on time. Calendar integrity is critical for attendance and for all assignments.

Don’t be shy regarding asking questions during class, and don’t be shy about answering questions, even if you are not sure about the answer. The only way you learn is by making mistakes, and realizing how to avoid them.

Looking forward to a great semester!
Appendix B

Recruitment Item #1
Letter to Instructors

Date

Dear (Instructor):

My name is Sarah Vandermark, and I am a Doctoral Student in the Counselor Educator Program at Montclair State University. I am asking permission to visit your class with the aim of recruiting potential participants for my dissertation study titled “Impact of Academic Advising Using a Learning Centered-Model on the College Experience and Advisor/Advisee Relationship of Traditional-Aged College Freshmen.” Dr. Fey, NJIT and Montclair State Universities IRB has granted overall site permission to conduct this research.

The goal of my study is to ask freshmen students about their experience in freshmen seminar, an example of a learning centered model for advising. During my visit, I plan on distributing an Informed Consent Form; presenting a scripted explanation of the Informed Consent Agreement and confidentiality; explaining my study and its purpose; and asking for volunteers to participate in a focus group.

If you approve and to reassure students that participation in my study has nothing to do with their current course, I would ask that you not be present for the 5 to 10 minutes my visit will take. My intention is to visit your class sometime in September 2013.

I realize your class time is very busy, so I thank you in advance should you give me permission to visit your class. I will contact you in the near future to see if and when I might visit your class. If you have any questions, please feel free to call me at 973-493-4830 or e-mail me at sarah.vandermark@njit.edu.

Very truly yours,                      Dissertation Chair:

Sarah Vandermark                      Dr. Larry Burlew
Recruitment Item #2
Scripted Explanation for Students

Hello, everyone. First, I want to thank [Instructor] for giving me the opportunity to speak to you about my research study. My name is Sarah Vandermark, and I am a doctoral student in the Counselor Education program at Montclair State University, as well as a Director at NJIT. For my dissertation research, I am examining students’ experience with freshmen seminar, and I am here today to ask for your participation in the study.

Your participation will enable me to look at your freshmen seminar course in which you are currently attending. If you agree to participate, you may be asked to participate in focus groups lasting 60–75 minutes 3 times throughout the fall semester. The focus group will be responding to questions related to the course and your college experience. The focus group discussion will be audio-taped, but no individual responses will be identifiable because all discussion information will be transcribed, coded, and no names will be used. I am also asking to collect and review your quick writes required for the class. Your individual participation in both the focus groups and quick writes will be coded so you are not identifiable with your responses; thus, all information will be kept confidential and anonymous.

Your participation is entirely voluntary – you do not have to participate in this research if you do not wish to, although I hope you will. Your professor will not know who agreed to participate, and this is not linked in any way to your grade for this class. I will distribute informed consent forms for you to complete if you are willing to participate in this study. If you are not interested in participating, simply turn in a copy with no signature when the other students turn in their forms. You will keep a copy of the consent form, and I will collect the other copy. If you agree to participate and are selected for a focus group, I will then follow up with potential dates for the focus groups within the next month.

I appreciate your time and am happy to answer any questions.
Thank you in advance for considering participating in my study.
Sarah Vandermark
Appendix C

Demographic Survey

1. Age:
2. Gender: Male / Female / Transgendered
3. Race/Ethnicity (Mark all that apply)
   a. African American, Black, African Descent _______
   b. Asian, Asian American, or Pacific Islander _______
   c. Hispanic or Latino(a) _______
   d. Native American or American Indian _______
   e. White/Caucasian or European _______
   f. Mixed Heritage _______
   g. Other (specify): _______
4. Nationality/ethnicity:
5. Are you registered as an international student: Yes ____ No ____
6. What is your current major today at NJIT:
   a. If undecided, which majors are your top choices:
7. Highest level of parent education:
   a. Some high school: _______
   b. High school diploma: _______
   c. Bachelor’s degree: _______
   d. Post Bachelor’s degree: _______
8. Student status:
   a. Residential: _______
   b. Commuter: _______
   c. Part-time: _______
   d. Full-time: _______
9. Working status while going to school:
   a. Working part-time: _______
   b. Working full-time: _______
   c. Not working at this time: _______
10: In terms of education, in high school who influenced you most:
   a. Parents
   b. Teacher(s)
   c. School counselor:
   d. Other (please indicate who):
Demographic Survey Questionnaire Results

1. Age
   a. 18 = 44
   b. 19 = 12
   c. 17 = 4 (taken out)

2. Gender
   a. Female = 28
   b. Male = 33

3. Racial Identity
   a. White = 25
   b. Asian = 19
   c. Hispanic = 7
   d. Black = 4
   e. 2 Races = 2
   f. Race NA = 1

4. Major
   a. Biology = 24
   b. Undecided Engineer = 17
   c. Undecided Science & Liberal Arts = 8
   d. Biochemistry = 3
   e. Math = 3
   f. Chemistry = 2
   g. CS = 1
   h. LTC = 1
   i. MET = 1

5. Degree
   a. Mom Education
      i. High School = 9
      ii. Associate = 5
      iii. Some College = 8
      iv. BS Degree = 18
      v. Post Bac = 16
      vi. NA = 4
   b. Dad Education
      i. High School = 13
      ii. Associate = 8
      iii. Some College = 7
      iv. BS Degree = 13
      v. Post Bac = 14
vi. NA = 5
6. Residential
   a. Residence = 25
   b. Commuter = 34
   c. NA = 1
Appendix D

Quick-Writes 1, 2 & 3

October 8, 2013 – First Quick-Write Questions

1. Describe for me what has been your easiest/smoothest transition to college?

2. Describe the biggest struggle transitioning to college/NJIT?

3. Has the freshmen seminar helped with this struggle at all? Why or why not

November 5, 2013 – Second Quick-Write Questions

1. How do you feel you are transitioning from high school to college?
   a. Has freshmen seminar been helpful in your transition? How?
   b. How could we (advisors) be more helpful?

2. Transition to college is often stressful. You are now two months into it – how’s it going so far?
   a. Has freshmen seminar been helpful with this transition at all?
   b. If so, how?

November 18, 2013 – Third Quick Write Questions

1. Who have you connected with on campus? (ie. Friends, friends in your major, fraternity/sororities, professors, mentors/peer advisors, etc) Can you describe your relationship.
   a. Has freshmen seminar facilitated any of these connections, if so, how?
2. Have you used any services on campus? (CAPE, C-CAPS, Tutoring, etc.) If so, how & why?
   a. Did you find out about these services through Freshmen Seminar, if no, how?

3. Have these connections impacted (influenced) or changed your experience at NJIT?

3. Next semester, how many times (if at all) do you expect/want to meet with your Academic Advisor.
   a. What are some topics you would like to discuss moving forward?

4. Would you want us to check-in on how you are doing? If so, how often?
Appendix E

Focus Group Questions

Focus Group #1 Questions

1. How would you describe your experience in freshmen seminar?

2. How do you think freshmen seminar is affecting your relationship with your academic advisor?

3. How effective did you think this model is?
   a. Having your advisor both teach and advise you during your first semester?

4. Are there any disadvantages to taking freshmen seminar?

5. Any suggestions you would provide for this model?

Focus Group #2 Questions

1. Have your goals for college and your career/major changed at all?

2. Many students stated that they felt comfortable speaking to their academic advisor. How would you describe your relationship with your academic advisor? Then probe some of these:
   Is it evolving at all? How?
   What kinds of things might have you seek out time to talk with your academic advisor?

3. Do you think this relationship is important? Why, why not?

4. What type of things would you come back and talk to your academic advisor about?

5. With the stress of your schoolwork, has Freshmen Seminar helped? How?

6. Can you give me some recommendations to add to Freshmen Seminar (or continue) for managing stress?

7. If you were to set up Freshmen Seminar – what would it look like.
   Most important pieces?
8. Do you feel it has made a difference having an academic advisor teach freshmen seminar? Does it matter?

**Focus Group #3 Questions**

1. As you think back over your experience in freshmen seminar this semester, I have several areas I’d like you to talk with me about.
   a. How important was it for you to have peers within your major in freshmen seminar? Why do you say that?
   
   b. Your academic advisor taught your freshmen seminar. What do you see as the pros of this arrangement? The cons?
   
   c. A lot of you were stressed at the beginning of the semester. Are there things that we can do in the seminar to ease that more?

2. More than half of you used tutoring, either CAPE or some other tutoring. If you did, when did you decide to go? Why? Was it helpful?

3. A lot of you thought it would be good if we checked in with you 2-3 times next semester. As you think about that, what’s the best way to do? What format? How important is contact with your advisor to you? In what way?

4. How can freshmen seminar help manage stress early on in your first semester? Suggestions for a lesson plan (incorporate this into the lesson plan). What type of lesson would you envision early on to manage stress.