CURRICULUM VITA

Sarah Ann Forbes

EDUCATION

2015	Indiana State University, Terre Haute, Indiana
	Ph.D. in Curriculum and Instruction
	Concentration in Post-Secondary Teaching and Learning
2003	Indiana State University, Terre Haute, Indiana
	M.A. in Experimental Psychology
2001	McKendree (College) University, Lebanon, Illinois
	B.A. in Psychology

PROFESSIONAL EXPERIENCE

2007 – Present	Rose-Hulman Institute of Technology, Terre Haute, Indiana
	Director of Data Management and Reporting
2004 – 2005	Indiana State University, Terre Haute, Indiana
	Project Manager
2003 – 2004	Indiana State University, Terre Haute, Indiana
	Research Assistant

THE INFLUENCE OF PEER EDUCATORS IN A FIRST-YEAR SEMINAR ON FRESHMAN

PREPARATION FOR COLLEGIATE CHALLENGES: A QUALITATIVE

INVESTIGATION OF OBSERVATIONAL LEARNING

———————————————

A Dissertation Proposal

Presented to

The College of Graduate and Professional Studies

Department of Curriculum, Instruction, and Media Technology

Indiana State University

Terre Haute, Indiana

———————————————

In Partial Fulfillment

of the Requirements for the Degree

Doctor of Philosophy

———————————————

by

Sarah A. Forbes

May 2015

© Sarah Forbes 2015

Keywords: college transition, first-year seminar, peer educators, observational learning,

phenomenology

COMMITTEE MEMBERS

Committee Chair: Larry Tinnerman, Ph.D.

> Associate Professor of Curriculum, Instruction, and Media Technology

> Indiana State University

Committee Member: Timothy Boileau, Ph.D.

> Instructor of Curriculum, Instruction, and Media Technology

> Indiana State University

Committee Member: Eric Hampton, Ph.D.

> Associate Professor of Educational and School Psychology

> Indiana State University

ABSTRACT

Most high school students have not spent deliberate time preparing for their transition to college. Knowing this, institutions have developed a first-year seminar geared toward transitional issues inherent to a specific institution. While the research on these programs illustrates their utility, there appears to be an opportunity to further their success by incorporating peers as educators in the classroom. Bandura (1986) saw the potential of observational learning through peer modeling, though few researchers have studied first-year seminars from this theoretical perspective. Through a postpositivistic philosophical paradigm, this exploratory qualitative study utilized a phenomenological design to investigate two research questions: what are the academic and social challenges freshmen face in the transition to a small, private, highly selective, STEM-focused institution and how does the presence of sophomore peer educators in a first-year seminar influence freshman preparation for those fall quarter challenges. A total of 41 freshmen participated in the study. Data were collected through student journals and focus group interviews. The results of this study confirm that the transition to this specific type of institution is just as complex as the transition to other types of institutions, with students reporting similar academic and social challenges as found in the literature. However, their emphasis was on the core (i.e., academic) rather than the periphery (i.e., social) of the collegiate experience. The application of modeling, however, was not strong enough to determine whether observational learning influenced these transitional challenges.

TABLE OF CONTENTS

CHAPTER 1

INTRODUCTION

The transition to college is an experience that 41% of high school graduates will face

each year as they matriculate to various two-year and four-year degree-granting, public and

private colleges and universities across the nation (National Center for Education Statistics,

2013). For many of those students, college will be a vastly different experience from high school

(M. R. Clark, 2005; Kidwell, 2005). Students are exposed to several social, academic, and

psychological situations not previously encountered. Though the transitional issues can be

grouped into categories, it is important to recognize that the "transition from high school or work

to college is an exceedingly complex phenomenon" (Terenzini et al., 1994, p. 61).

At Rose-Hulman Institute of Technology (Rose-Hulman), freshmen have described the

transition to college as a whole new beginning. This was a major theme that surfaced in a

qualitative study I conducted with freshmen to determine how locus of control orientation

influenced plans for achieving academic success. Another pertinent finding from the study was

the fact that the freshmen have not been prepared for the college experience. While it is hard to

be completely prepared for this new phase of life, the students illustrated the fact that many of

their false perceptions of college were based on information they received from high school

teachers and guidance counselors. These findings align with other studies that have documented

the perception of college as a new chapter (Keup, 2007) as well as collegiate expectations

received from others (Roderick & Carusetta, 2006). These findings also provided a foundation for my interest in student transition and success.

After this study concluded, I began investigating the data available on the freshmen and what resulted was an interesting disparity. Rose-Hulman is a highly selective, science, technology, engineering, and mathematics (STEM)-focused institution attracting some of the brightest students in the nation. Standardized test scores for the enrolled freshmen are high, and these students graduated at the top of their high school class. On the Trice Academic Locus of Control Scale (Trice, 1985), a vast majority of the students fall into an internal academic locus of control orientation. According to Nordstrom and Segrist (2009),

> Academic locus of control deals with whether students perceive themselves as exerting control over their education fates. Those with an internal locus of control perceive they have a direct impact on their learning, grades, and educational opportunities through the time and effort they put in. Those with an external locus of control believe external factors (e.g., luck, social activities, professors, course requirements, etc.) dictate what they learn and the educational outcomes they derive. (p. 201)

Further, when asked about their expectations for freshman year, students are able to anticipate the difficulty of courses and acknowledge the need to work hard in order to get good grades.

One would expect a student population with these characteristics to be successful from day one of their collegiate career. Yet, as a member of the Retention Task Force, I continually see evidence of students struggling as they make the transition to college. The Retention Task Force was established for the purpose of investigating causes of freshman attrition and to recommend changes designed to increase retention. One of our standard practices is to administer the RHIT Link Survey, a survey developed in-house and administered online each

quarter to faculty and staff teaching freshman courses, resident assistants, coaches, and faculty advisors. The RHIT Link survey asks these participants to indicate whether the freshmen in their classes (or living on their floor, participating in their sport) have demonstrated certain at-risk behaviors. These behaviors include a lack of work ethic, poor attitude, and tardiness. Lack of work ethic is related to diligence and work quality, operationalized as the student does not take self-initiative or responsibility for his/her own performance or is considered lazy. Poor attitude is related to behaviors and gestures, described as behaving negatively towards others, being inconsiderate of others, lacking desire, or behaving uncooperatively. Tardiness is related to poor attendance and operationalized as frequently late for class or group activities.

Survey respondents check the box for any and all behaviors that have been observed in each student. Results from the surveys are aggregated (one point per check box) so as to identify students who are at-risk for non-academic behaviors. We define at-risk as having three or more points from two or more sources. While the ratings are subjective to an extent, these respondents have firsthand knowledge of and interaction with the freshmen. The small campus and low student-to-faculty ratio give respondents an in-depth knowledge about the students.

Preliminary analyses have indicated a relationship between the number of points accumulated on the RHIT Link Survey and likelihood of leaving Rose-Hulman. Of the freshmen who began in the fall of 2012, those with four or more points had a 57.1% retention rate; those with less than four points had a retention rate of 93.3%. In addition, over 20% of last year's freshmen received at least one point. While not all of these freshmen would be labeled as at-risk (based on the above definition), it is plausible that if we had 100% participation in the survey these students would have accumulated more points. This makes sense in light of another finding from my interviews with the freshmen. Throughout the interviews, the students

mentioned behaviors consistent with an internal locus of control. However, these behaviors were not always executed. Thus, the bigger issue may not be one of knowledge, but rather one of motivation to enact upon the behaviors that can facilitate success.

It is not surprising that students struggle during their transition to college. The literature documents myriad challenges that freshmen will face. As an institute, we have required all freshmen to enroll in a first-year seminar to help with that transition. Unfortunately, course evaluation results suggest that one-third of the students do not feel that the course has helped to prepare them for the challenges they faced.

To further investigate this issue, I conducted an action research project to explore one way of improving these statistics. My hypothesis was that if we could bring a sense of relevancy and importance to the topics in the first-year seminar, it would help their preparation. As such, I utilized upperclassmen as guest speakers in my section of the course. For three of the 10 weeks, two seniors spent 15-20 minutes discussing their experiences with the topics of campus involvement, time management, or study skills. A total of nine freshmen in my section of the first-year seminar provided data through three different surveys. The first two assessed the upperclassmen on characteristics such as credibility and relatability, in addition to the interest, importance, and relevancy of the information presented. The third survey was the course evaluation.

Overall, the freshmen found the upperclassmen to be credible, and the information presented was deemed to be interesting, important, and relevant. Their favorite part of the lesson was having the upperclassmen share their experiences. However, the freshmen felt that senior students were not able to relate to their situation as well and recommended having sophomores and juniors present the information in the future. This aligns with Shook and Keup's (2012)

discussion on the utility of peer leaders in which they noted that "proximity to the student experience" (p. 9) was just as important as knowledge, training, and accessibility. While the sample size in this action research project was too small for statistical analysis, the average rating for the course evaluation question "how well did the course prepare you for the challenges you encountered during fall quarter" did increase from the prior year (4.00 versus 3.36 the prior year, on a five-point scale). The results of this action research project spurred me to formally apply social cognitive learning theory on a larger scale.

Further support for the use of peers in a first-year seminar can be found in the peer tutoring program administered through the Learning Center. The Director of the Learning Center, in a presentation to the freshmen, highlighted the fact that during the 2012-2013 academic year, a total of 16,194 visits were made to either the Learning Center or Percopo Hall for tutoring services (S. Smith Roads, personal communication, October 14, 2013). This is remarkable given that there were only approximately 2,000 students enrolled. In addition, 86% of the freshmen visited the Learning Center during that time period (S. Smith Roads, personal communication, October 14, 2013). The Director further explained that there are many advantages to using peers for tutoring, namely that the peer tutor can relate to the freshmen in terms of majors, classes, professors, issues, concerns, and curricular challenges (S. Smith Roads, personal communication, October 14, 2013).

Statement of the Problem

The freshmen at Rose-Hulman are highly intelligent and have an internal locus of control orientation. Yet, based on past data from the RHIT Link survey, a substantial percentage of the freshman class will be flagged for specific non-academic at-risk behaviors before the end of the year. In addition, current evaluation data on the required first-year seminar indicate one-third of

the students did not feel the course helped to prepare them for the fall quarter challenges. As an institute, we have the responsibility to bridge this gap by understanding whether the freshmen are facing the same issues as other students across the nation and implementing institution-specific programs to facilitate preparation.

Purpose of the Study

The purpose of this qualitative research study is to explore the challenges faced by the unique freshman population at Rose-Hulman in the transition to college and to understand the influence of observational learning towards preparation for those challenges. By incorporating sophomores as peer educators in a first-year seminar, the freshmen will be exposed to models who have successfully navigated the first year of college.

Research Questions

There were two primary research questions guiding this study:

1. What are the academic and social challenges freshmen face in the transition to Rose-Hulman, a small, private, highly selective, STEM-focused institution?
2. How does the presence of sophomore peer educators in a first-year seminar influence freshman preparation for fall quarter challenges?

Significance of the Study

The significance of this study is threefold. First, by identifying the challenges the freshmen face at this institution, the first-year seminar curriculum can be revised to address the immediate needs of the students. As noted by Locks, Hurtado, Bowman, and Oseguera (2008), "higher education scholars and administrators need to continue to work on building better insights into the transition process for students, particularly on the challenges students face and appropriate responses of support" (p. 259). Similarly, Nadelson et al. (2013) suggested that

"statements of first-year students' needs and experiences should be crafted based on the personal characteristics of the students being considered" (p. 60). Thus, rather than assuming we know all of the transitional issues our freshmen face, or solely relying on the challenges documented in the literature, it is important to study the transitional experiences from their perspective.

Second, if peer educators can bring an increased sense of relevancy to the topics through observational learning, this can lead to better preparation. This is supported by M. R. Clark (2005) who found that "students may be unreceptive to the knowledge [for success] until it becomes personally relevant to them" (p. 311). Better preparation, then, can lead to better success outcomes, such as a reduction in struggles, as well as higher grade point averages, retention rates, and graduation rates. In addition, Kelly, Kendrick, Newgent, and Lucas (2007) noted that "a current trend is to provide interventions for the students who are the most at-risk of not completing their education for academic reasons. Further, many of these interventions are designed to be reactive rather than proactive" (p. 1025). Employing peer educators provides a way for the first-year seminar to be proactive and create a better experience for all students.

Third, this study determined the feasibility of offering a new leadership opportunity for our sophomore students in the future. This study utilized 13 sophomores as peer educators. If successful, the long-term goal would be to incorporate a sophomore peer educator into each of the 54 sections of the first-year seminar. At the institutional level, this opportunity would support our student learning outcome of leadership.

Limitations of the Study

There are two limitations of this study. First, given the qualitative nature of this study, no causal relationship between preparation for fall quarter challenges and the presence of peer educators was examined. My goal for this study was to understand, rather than control.

Triangulation of evidence should support the utility of peer educators in an observational learning context from which further research can be conducted. The second limitation is one that is inherent in all qualitative research. The findings of this study may not generalize outside the context of this specific institution.

Definition of Terms

The following terms will be utilized throughout this document: freshman, sophomore, first-year seminar, sophomore peer educator, and STEM. Their definitions, as applied to the current research study, are as follows:

1. Freshman: A first-time, full-time student enrolled at an institution of higher education.

2. Sophomore: A freshman who returned for his/her second year at the same institution.

3. First-Year Seminar: A course taken by freshmen for credit during the fall designed to facilitate the transition from high school to college. At Rose-Hulman the course is entitled College and Life Skills (CLSK100).

4. Sophomore Peer Educator: A sophomore student who has been given the responsibility for teaching a portion of the first-year seminar curriculum alongside the staff instructor.

5. STEM: An acronym representing science, technology, engineering, and mathematics.

CHAPTER 2

LITERATURE REVIEW

The purpose of this research study is to explore the challenges faced by the freshman population at Rose-Hulman in the transition to college and to understand the influence of observational learning towards preparation for those challenges. By incorporating sophomores as peer educators in a first-year seminar, the freshmen will be exposed to role models who have successfully navigated the first year of college. The supporting literature for this study will focus on three main areas: (a) the transition to college, (b) first-year programs, and (c) peer-led programs. The transition to college includes a discussion of the social, academic, and psychological situations not previously encountered, as well as the expectations and resulting experiences freshmen often face. Many first-year programs have been developed to facilitate this transition, including first-year seminars, which focus on increasing engagement and involvement. Finally, institutions are employing students in a variety of peer-led programs, namely peer mentoring, supplementary instruction, and peer instruction. This literature review will conclude with a discussion of the basic tenants of social cognitive learning theory as well as their utility in providing a theoretical framework for the current study.

Transition to College

The transition to college is an experience that 41% of high school graduates will face each year as they matriculate to various two-year and four-year degree-granting, public and

private, colleges and universities across the nation (NCES, 2013). The transitions that first-year

students will face as they navigate this new chapter in their lives stem from the autonomy that

permeates the college experience (Credé, Roch, & Kieszczynka, 2010; Holmstrom, Karp, &

Gray, 2002; Keup, 2007). Within this transition, students are exposed to several social,

academic, and psychological situations not previously encountered. Though the transitional

issues can be grouped into categories, it is important to recognize that the "transition from high

school or work to college is an exceedingly complex phenomenon" (Terenzini et al., 1994, p.

61). Thus, a student may be affected by one or more of these transitional categories as they are

interrelated.

The first transitional situation that students may face, and often the hallmark of beginning

one's college career, is moving away from home. Not only is there a geographical separation

(Holmstrom et al., 2002; Johnson, Gans, Kerr, & LaVelle, 2010) but a psychological separation

from family and high school friends (Keup, 2007). The challenge, then, is to find ways of

receiving social support in this new environment. For most students, this involves meeting

people and making friends. When students attend an institution where they do not know anyone,

the residence hall becomes salient as this is where many students will begin meeting new people

and receiving that social support (Yazedjian, Purswell, Sevin, & Toews, 2007). As such, one of

the early challenges is living with a roommate (Donahue, 2004; Holmstrom et al., 2002; Keup,

2007; Kidwell, 2005; Wilcox, Winn, & Fyvie-Gauld, 2005).

When "grieving the loss of precollege friends" (Paul & Brier, 2001, p. 77), one is said to

have friendsickness. Paul and Brier (2001) studied the concept of friendsickness and found that

friendsickness was reported by over half of the first-year students in the study. Making new

friends, then, becomes a salient goal for social transition. Unfortunately, not every student is

successful in this endeavor. Paul and Brier (2001) also found that "40% of the participants did not include any new college friends in their network 10 weeks into college" (p. 82). Other researchers have found that social anxiety can interfere with developing friendships, but strong attachments to parents can facilitate the process as it predisposes students to have "expectations for and experiences in other close relationships" (Parade, Leerkes, & Blankson, 2010, p. 134). Loneliness and homesickness can result if students are not able to forge new friendships (Wilcox et al., 2005). Overall, social support is very important as it leads to increased adjustment to college (Friedlander, Reid, Shupak, & Cribbie, 2007).

An increase in academic rigor is another transitional situation first-year students will have to confront. Whereas school attendance has been mandated for the past 12 years of their lives, attendance in college classes often declines (Credé et al., 2010; J. S. Smith & Wertlieb, 2005), namely because it is voluntary and not factored into the final grade. In addition, at some point during the first year students will notice an increased workload (Gibney, Moore, Murphy, & O'Sullivan, 2011), which may necessitate the utilization of study skills (Kelly et al., 2007; McGuire, 2006) and time management skills (Donahue, 2004; Gibney et al., 2011; Holmstrom et al., 2002; Kelly et al., 2007). Other academic transitions noted by Kidwell (2005) include locating classrooms, buying books, understanding multiple syllabi, and finishing assignments by the due dates. Overall, there is increased autonomy with respect to learning. In an analysis of essays written by students in a first-year seminar, Donahue (2004) reported that "students indicated that learning in college needs to be a self-directed endeavor in order to succeed" (p. 87). Further, the students recognized that they "need to take responsibility for their learning" (Donahue, 2004, p. 87).

In addition to social and academic transitions, there are a number of physical and

psychological adjustments that first-years students will have to navigate. Sleep can often be a physical challenge for students as they learn to find balance in their new lives. Ari and Shulman (2012) found that well-adjusted students were getting nearly 1.5 more hours of sleep at night; in contrast, maladjusted students were getting less sleep and reported higher levels of negative affect and stress.

Researchers have found that the prevalence of health problems tend to increase across the first year (Pritchard, Wilson, & Yamnitz, 2007). However, Gall, Evans, and Bellerose (2000) studied first-year students and found that their physical and mental health improved across the first year. They concluded that "students' lower sense of well-being on entry may relate to the fact that they were faced with a multiplicity of changes and demands . . . simultaneously at a time when regular sources of support (e.g., family) were less available" (p. 561). Being able to manage stress is another factor that aided in a successful transition (Parker, Duffy, Wood, Bond, & Hogan, 2005).

The major psychological concepts studied in the literature on college transition are sense of belonging and self-esteem. Sense of belonging has been defined as the "subjective sense of affiliation and identification with the university community" (Hoffman, Richmond, Morrow, & Salomone, 2002-2003, p. 228). In theory, the more a student feels a part of the institution, the more likely he/she will remain at the institution. Researchers have found various factors that influence this sense of belonging, including quality of friendships and social acceptance (Pittman & Richmond, 2008), as well as time spent socializing and interactions with diverse peers (Locks et al., 2008). Self-esteem is another psychological variable studied in first-year students. Friedlander et al. (2007) defined self-esteem as "a positive or negative attitude toward oneself (Rosenberg, 1965) and the personal judgement [*sic*] of worthiness (Coppersmith, 1967)" (p.

261). Adjustment to college has been traced back to high self-esteem (Friedlander et al., 2007) and autonomously setting and reflecting on goals (Conti, 2000).

While ultimately the student must decide whether to put forth the effort to overcome the challenges faced in the transition to college, parental, peer, and institutional support are factors that have played a role in enabling students to have a successful adjustment to college (Johnson et al., 2010; Kolkhorst, Yazedijian, & Toews, 2010; Terenzini et al., 1994; Yazedjian et al., 2007). In a qualitative study of sophomores (i.e., students who have successfully adjusted to college), Yazedjian et al. (2007) found that parents provided both financial and emotional support; peers provided socialization, attachment, academic support, and connections to campus organizations. Institutional support facilitated adjustment through relationships developed with institute employees, a general atmosphere of support, and various orientation programs (Yazedjian et al., 2007).

Expectations versus Experiences

While the literature outlines various academic and social transitions students must face, research also supports the idea that first-year students do not have accurate expectations of these transitions. Expectations can be defined as "all those things that our past experiences have taught us to realistically anticipate" (T. E. Miller, Bender, & Schuh, 2005, p. 12). Miller et al. (2005) further explained that "our expectations are so fundamentally what we predict will actually turn out to be the case that we are surprised if they don't turn out as we anticipated" (p. 12).

There are a number of academic expectations that freshmen possess as they transition to college. For many first-time freshmen, their experiences in high school serve as the expectations for college (Besterfield-Sacre, Atman, & Shuman, 1998; Foor, Walden, & Trytten, 2007;

Roderick & Carusetta, 2006). Through focus groups with freshmen enrolled in a first-year

seminar, Hoffman et al. (2002-2003) discovered that "entering freshmen, by their own accounts,

felt most overwhelmed by the academic expectations in college" (p. 237). College-bound

seniors who participated in Keup's (2007) longitudinal study reported that college academics

"required much more self-discipline, initiative, and personal responsibility than their classes in

high school" (p. 21).

However, Upcraft, Gardner, and Barefoot (2005) commented that "college appears to be

less academically challenging than first-year students expected, and they spend much less time

engaged in academic pursuits than the typical faculty expectation" (p. 5). Meyer, Spencer, and

French (2009) conducted interviews with 52 freshmen at a small, liberal arts university. Every

student reported that they had perceived college to be very demanding. Their current

perceptions, however, varied. A majority of the students (60%) found college to be less difficult

than they were expecting; only 17% of the students thought college was more difficult than they

were expecting. In a longitudinal study, J. S. Smith and Wertlieb (2005) administered the

Academic and Social Expectations-Experiences Survey to 31 students enrolled at a public

university at three different time points. Students participating in this studied expected a faster

pace of material, expected to study more than they did in high school, and expected class

attendance to be important. Average scores at the first administration (representing expectations)

were significantly higher than the third administration (representing their first-year experiences)

on the academic subscale.

In addition to academic expectations, freshmen also hold a number of social expectations,

often taking higher priority than the academic expectations. As Holmstrom et al. (2002)

explained,

While they certainly think about the academic challenges they will face, this concern

remains low in their hierarchy of worries. They have been students since age five and

know the general routines associated with classrooms and coursework. The academic

side of college represents a continuation of their lives and a relatively minor threat to its

continuing coherence. (p. 438-439)

Themes that emerged from Keup's (2007) initial interviews with college-bound high school

seniors align with this observation. The themes included changes in relationships with family

and friends, creating new relationships and friends, moving away, future roommates, personal

and professional goals, independence and responsibility, and self-discovery. These expectations

are more focused on relationships and the social dimension of college rather than academics.

Unlike many of the academic expectations, follow-up interviews revealed that many of their

social expectations were aligned to their experiences. Specifically, Keup (2007) reported that

"precollege expectations to forge friendships were fulfilled" (p. 18) and "family interaction was

reduced as the students expected" (p. 20).

Contrary to Keup's (2007) findings, the Academic and Social Expectations-Experiences

Survey utilized by J. S. Smith and Wertlieb (2005) revealed that average scores at the first

administration (representing expectations) were significantly higher than both the second

administration (representing early experiences) and the third administration (representing their

first-year experiences) on the social subscale. Specifically, freshmen had higher expectations

about not being talked out of studying, making lifelong friends, not being lonely, and getting

along with suitemates than they experienced during the first year. This finding is supported by

Paul and Brier's (2001) study which revealed that "on average, most participants' precollege

social expectations were more positive than their college social experiences" (p. 82).

As stated by J. S. Smith and Wertlieb (2005) and supported by other research studies (Gibney et al., 2011), a "majority of students entered the university with higher academic and social expectations than were revealed in their early and end of first-year experiences" (p. 164). Stern (1966) coined this disconnect "the freshman myth" (p. 413). Since then, researchers have tried to understand the genesis of these inaccurate expectations. Meyer et al. (2009) noted that "student perception of the academic rigor of college courses is often influenced by the information received from close interpersonal sources" (p. 1072) in addition to media portrayals of college. In their qualitative study, Roderick and Carusetta (2006) found that "perceptions . . . [were] informed by learning experiences in high school, college advertising material, word-of-mouth, and interactions with university faculty and staff" (p. 15-16). Yet, in a study of students at all class levels, Kelly et al. (2007) found that "fifty percent (50%) of those responding stated getting no help from their high school counselor on issues concerning college" (p. 1029). It appears, then, that both situations put incoming freshmen at a disadvantage.

Engagement and Involvement

Research suggests the transitional process to be dependent upon student engagement and involvement. Engagement can be traced back to Astin's (1977) theory of involvement and Pace's (1979) theory regarding quality of effort. Involvement is "the amount of physical and psychological energy that the student devotes to the academic experience" (Astin, 1999, p. 518). Quality of effort encompasses both the time and effort a student invests into his/her institution (Webber, Krylow, & Zhang, 2013). Webber et al. (2013) noted that "*time* consists of how often a student engages in an activity(s), while *effort* consists of how fully or thoroughly the student delves into the activity" (p. 592).

A number of studies have investigated the salience of engagement and involvement in

higher education. Engagement and involvement have been demonstrated to have a positive

effect on perceived satisfaction with the institution (Webber et al., 2013), adjustment to the

institution (Tieu & Pancer, 2009), midterm and final exam grades (Handelsman, Briggs,

Sullivan, & Towler, 2005), first year grade point average (Kuh, Cruce, Shoup, Kinzie, &

Gonyea, 2008; Webber et al., 2013), and persistence to the sophomore year (Kuh et al., 2008;

Lichtenstein, McCormick, Sheppard, & Puma, 2010).

Kuh's (2009) definition of engagement extends the idea of student time and effort by

placing some responsibility onto the institution. For Kuh (2009), "student engagement

represents the time and effort students devote to activities that are empirically linked to desired

outcomes of college *and* what institutions do to induce students to participate in these activities"

(p. 683). This idea is supported by Krause and Coates (2008), who indicated that institutions

need to create opportunities; however, students must also take advantage of these opportunities.

As such, specific programs began emerging on college campuses (e.g., learning communities,

writing-intensive courses, service learning, study abroad, student-faculty research), labeled as

high impact practices. Kuh (2009) stated that "high impact practices . . . seem to have very

strong direct effects on engagement" (p. 689). The first-year seminar is not only a common first-

year program (Hunter, 2006) but also a high impact practice.

First-Year Seminars

First-year seminars have been in existence since the late 1800s, with Lee College in

Kentucky purporting to have created the first seminar (Schnell & Doetkott, 2002-2003;

University of South Carolina, n.d.) and Reed College in Oregon offering the first for-credit

seminar (University of South Carolina, n.d.). Popularity of the first-year seminar has increased

over the years, as noted in a recent study conducted by the National Resource Center for the

First-Year Experience and Students in Transition (Young, 2013). Nearly 90% of the 896 colleges participating in the 2012-2013 National Survey of First-Year Seminars indicated that they offer a first-year seminar (Young, 2013). Even though logistical differences exist between the various seminars, the overarching purpose remains the same. The goal of first-year seminars is "to increase academic performance and persistence through academic and social integration" (Goodman & Pascarella, 2006, p. 26). In a high level discussion of the first-year experience, Barefoot (2000) highlighted the main objectives of many first-year experiences. These include "increasing student-to-student interaction; increasing faculty-to-student interaction, especially out of class; increasing student involvement and time on campus; linking the curriculum and the cocurriculum; increasing academic expectations and levels of academic engagement; [and] assisting students who have insufficient academic preparation" (Barefoot, 2000, p. 14).

Facilitating academic success appears to be a twofold process: facilitate the transition from high school to college (short term) and thereby support retention (long term). This short term goal has received less attention in the literature. According to a national study, institutions are examining issues such as course impact, satisfaction with the institution, and satisfaction with the seminar, among other outcomes (Young, 2013), but the results of these efforts are not widely published or disseminated.

Starke, Harth, and Sirianni (2001) analyzed course evaluations for a first-year seminar at a public, liberal-arts institution and found that 70% "believed the College Seminar had helped them make a smoother transition from high school to college" (p. 29). Further, 67% reported learning a lot in the seminar, with 73% indicating that the course should be offered in the future. Nearly all students who completed the evaluations (92%) felt that they were more aware of campus resources as a result of the first-year seminar.

Even though there was no significant difference in overall level of satisfaction, Hendel (2006-2007) reported that first-year seminar participants had significantly higher scores on 15 of the 92 items on the Student Experiences Survey (e.g., experienced a greater sense of community) when compared to a random sample of undergraduates. Schrader and Brown (2008) utilized the Knowledge, Attitudes, and Behaviors instrument in their quasi-experimental design to compare students enrolled in a first-year seminar with those who were not enrolled in a first-year seminar. They found significantly higher scores on knowledge of resources (one component of the knowledge dimension) at post-test for those participating in a first-year seminar; attitudes toward interactions (one component of the attitudes dimension) remained consistent for first-year seminar participants, but decreased significantly at post-test for those in the control group. Engberg and Mayhew (2007) compared pre- and post-test results on the Student Thinking and Interacting Survey between students enrolled in a first-year seminar with students enrolled in an introductory communication course and an introductory engineering course. Only participants in the first-year seminar had significant gains on social justice, multicultural awareness, and attributional complexity.

Keup and Barefoot (2005) found mixed results when comparing first-year seminar participants and non-participants in their longitudinal, multi-institutional study. A total of 3,680 students across 50 institutions completed both the Cooperative Institutional Research Program (CIRP) Freshman Survey at the beginning of their college careers and the Your First College Year survey administered at the end of the first academic year. They reported that first-year seminar participants had significantly higher scores in the categories of interacted with faculty outside of class or office hours, studied with other students, spoke up in class, discussed course content with students outside of class, developed close friendships with other students,

participated in volunteer/community service work, participated in intramural sports, attended campus-sponsored events, and forced to interact with students whom you dislike. First-year seminar students had significantly lower scores in the areas of skipped class and came late to class. No significant differences were found with respect to feeling bored in class, turning in course assignments late, meeting with an academic advisor, meeting with faculty during office hours, worrying about meeting new people, and feeling isolated from campus life.

Further, on self-ratings of success, Keup and Barefoot (2005) reported that first-year seminar students were significantly higher on establishing meaningful connections with faculty or staff, utilizing campus services available to students, and establishing a network of friends on campus. However, no significant differences were found between the two groups on adjusting to the academic demands of college, dealing with campus bureaucracy, managing time effectively, understanding what is expected academically, and developing effective study skills.

Comparing a traditional first-year experience course and a week-long adventure-based course, Bell (2012) found that students enrolled in the adventure-based course had higher means on critical thinking, connections with peers, out-of-classroom engagement, knowledge of academic services, managing time and priorities, knowledge of wellness, inclusion of engaging pedagogy, and overall course effectiveness as measured by the First Year Initiative Survey. No significant differences were found in the categories of study strategies, academic and cognitive skills, connections with faculty, knowledge of campus policies, sense of belonging and acceptance, usefulness of course readings, and satisfaction with the college. However, the two programs were vastly different in terms of length (10 weeks for the traditional course, 1 week for the adventure-based course), instructor (faculty taught the traditional course, peer leaders taught

the adventure-based course), and location (classroom for the traditional course, outdoors for the adventure-based course).

Assessing the effects of a first-year seminar on grade point average (GPA) serves as both a short-term and long-term outcome. Examining end-of-semester GPA, Lang (2007) found significant differences between first-year seminar participants and non-participants. The increased GPA for participants ranged from 0.03 to 0.22 more points. Controlling for prior high school performance and aptitude, Williford, Chapman, and Kahrig (2001) found that "the adjusted mean year-end GPA of the first-year students who took UC 115 [first-year seminar] was higher than the mean year-end GPA of those who did not take UC 115" (p. 334). The authors reported an increased GPA range of 0.03 to 0.12 more points. This aligns with the findings reported by Barton and Donahue (2009), Jamelske (2009), Sidle and McReynolds (2009), and Weissman and Magill (2008). Cavote and Kopera-Frye (2004), M. H. Clark and Cundiff (2011) and Friedman and Marsh (2009), however, did not find significant differences in GPA between participants and non-participants.

Taking a slightly different approach, Lamb, Lee, and Vinton (1997) looked at pre-test/post-test scores on a measure of locus of control for students enrolled in a first-year seminar housed in the College of Business at Montana State University. They discovered that "freshman seminar students felt significantly more in control of their decisions and environment at the end of the course" (Lamb et al., 1997, p. 35). There is a vast amount of literature that points to internal locus of control as a predictor of various definitions of success (Gifford, Briceño-Perriott, & Mianzo, 2006; Hall, Smith, & Chia, 2008; Hand & Payne, 2008; Ogden & Trice, 1986). While these authors did not directly measure success, shifting to a more internal locus of control (i.e., more in control of their academic success) fosters that success.

The long term goal of retention has been fairly well documented in the literature. Schnell and Doetkott (2003) and Sidle and McReynolds (2009) utilized ex post facto studies and through a matched comparison design found that students who elected to enroll in a first-year seminar had significantly higher retention rates when compared to students who did not enroll in a first-year seminar. Similarly, Lang (2007) reported higher retention rates for the first three semesters at the University of Buffalo for participants in a first-year seminar. J. W. Miller, Janz, and Chen (2007) conducted both an initial study and a replication study and found that those who participated in the first-year seminar had higher rates of return. Weissman and Magill (2008) compared two different types of seminars (an extended orientation seminar and a discipline focused seminar) and found that participants in the extended orientation seminar had higher retention rates than non-participants; participants in the discipline-focused seminar did not have significantly higher rates of retention. In a longitudinal study, Williford et al. (2001) found higher retention rates for seven of the ten years under study.

Not all studies have reported similar results. Barton and Donahue (2009), Cavote and Kopera-Frye (2004), M. H. Clark and Cundiff (2011), Friedman and Marsh (2009), Hendel (2002-2003), and Jamelske (2009) reported no significant differences in retention rates between participants and non-participants. Strayhorn (2009) found no difference in first-year seminar participants versus non-participants on academic integration, social integration, or satisfaction with college. Strayhorn (2009) noted that the type of seminar, content of the seminar, who teaches the seminar, and contact hours could influence the results. Similarly, Jamelske (2009) noted that the literature has had mixed results as "each analysis is specific to the particular institution, study body and program under study" (p. 374). Thus, while most of the results are

promising, and likely generalizable, it is important to for an institution to study a specific first-year seminar in context.

Interestingly, as important as the first-year seminar is, there is much variability between seminars across the nation, varying in terms of contact hours, credit hours, grading, content, assignments, and assessment. Two distinct differences in first-year seminars involve the administrative home of the seminar and the person responsible for teaching the course. Keup (2013) highlighted national data indicating that more first-year seminars are housed within academic affairs (37%) than any other area. At the institution where the current study will take place, the first-year seminar is administered through the Office of Student Affairs. Keup (2013) reported that only 14% of first-year seminars are found in student affairs.

Keup (2013) also provided a breakdown of who teaches the course. A majority of first-year seminars are taught by tenure-track faculty (61%). At the institution where the current study will take place, the course is taught by professional staff. Keup (2013) reported that 48% of first-year seminars are taught by student affairs professionals; with 30% taught by other campus professionals. Astin (1993) recognized that "the student's peer group is the single most potent source of influence on growth and development during the undergraduate years" (p. 398). Yet, only 5% of first-year seminars are taught by undergraduates (Keup, 2013). Thus, there is a major opportunity for first-year seminars to leverage peers in an instructional capacity.

Peer-Led Programs

Peer leadership in higher education is not a new concept. Ganser and Kennedy (2012) traced the history of peer leadership from orientation leaders to resident assistants to specialized peer leaders (e.g., peer advisor). These positions all grew out of the institutes' student affairs division, rather than academic affairs. Ganser and Kennedy (2012) noted that the reasons these

positions emerged and have been successful are that the peers have empathy with the new students arriving on campus, they can relate given the age similarities, and "peers have a greater amount of direct, experiential knowledge of student life at the college or university" (p. 22). The literature appears to have transitioned from a focus on orientation and resident assistants and moved toward these specialized peer leadership programs, namely peer mentoring, supplementary instruction, and, in a few cases, peer instruction.

Peer Mentoring

There are a number of benefits documented in the literature for participants in a peer mentoring program across multiple disciplines. T. Smith (2008) reported that 70% of the participants in a peer-assisted learning pilot program felt that the peer mentor enhanced their learning. Participation in a peer mentoring program significantly predicted STEM undergraduates' satisfaction, commitment, and involvement with their major, as reported by Holland, Major, and Orvis (2012). Further, Sanchez, Bauer, and Paronto (2006) found that a mentoring program for freshman business majors "was significantly related to satisfaction with the university halfway into the [first] semester . . . at the end of the [first] semester . . . and at the end of the semester following the intervention" (p. 31). In studying the effect of type of mentoring program (one-on-one versus group mentoring), Walker and Taub (2001) found that satisfaction with the program was not significantly different between the two types. However, "mentees who met more frequently with their mentors or networks reported higher levels of satisfaction with their mentor and the program" (Walker & Taub, 2001, pp. 56-57).

Persistence was another benefit found in the literature on peer mentoring programs, both at the course level (Khazanov, 2011) and the institutional level (Larose et al., 2011), though not all studies supported a significant difference in retention (Rodger & Tremblay, 2003). Exploring

the effect of peer mentoring for a mathematics course, Khazanov (2011) found that the passing rate for the course was higher for those at-risk students participating in a peer mentoring program. Power, Miles, Peruzzi, and Voerman (2011) found that a student initiated and student led mentoring program in the Ancient History department has reduced student attrition as well as facilitated a sense of community among the students, faculty, and staff.

Other benefits reported include higher levels of motivation (Larose et al., 2011; Rodger & Tremblay, 2003) and increased social adjustment and institutional attachment (Larose et al., 2011). Implementing a peer mentoring program outside of the classroom, Rodger and Tremblay (2003) found that the students in a peer mentoring group had significantly higher scores on an academic motivation inventory than a control group. Meyers, Silliman, Gedde, and Ohland (2010) did not find a significant difference between participants and non-participants in a STEM-focused mentoring program on adjustment to engineering. However, they surveyed sophomores and juniors and asked them to reflect back to their first-year experience; in addition, transition was defined as participating in the peer mentoring events, which could be viewed as both limited and inconsistent contact.

In a qualitative study of American Indian students, Shotton, Oosahwe, and Cintrón (2007) highlighted the experience of these students with a peer mentoring retention program. Part of the role of the mentors was to pass on the ideas that had worked for them and to help students avoid their mistakes. Students reported that "having a peer mentor who could relate to their circumstances was extremely beneficial and comforting" (Shotton et al., 2007, p. 93). For engineering students, Budny, Paul, and Newborg (2010) found that "students initially thought the small group mentor class would be a waste of time, but by the end of the semester their view of the class has changed, and they are glad to have had the experience" (p. 20).

Though the literature supports peer mentoring programs, one of the main limitations is that most of the interaction takes place outside the classroom. As a result, contact with peer mentors may be sporadic, and the meetings may serve as a review of information already presented. To counter these issues, many institutions are implementing supplemental instruction as a program that is "proactive and participatory rather than reactive and passive" (Ning & Downing, 2010).

Supplemental Instruction

Supplemental instruction, started in 1973 at the University of Missouri, is more than just a tutoring program (Malm, Bryngfors, & Mörner, 2012). According to Malm et al. (2012), supplemental instruction is "an attitude to learning, where inner motivation and curiosity are the driving forces and where the main emphasis is on self-governing and collective learning" (p. 656). Supplemental instruction is grounded in constructivism, where "tutors take on the role of facilitators to help learners process and understand information and construct their own knowledge, rather than the role of information givers" (Ning & Downing, 2010, p. 921). High levels of responsibility are placed on supplemental instructors. Not only must they attend the course and take notes, but also create plans for the sessions they conduct with the students outside of class, whereby the course content is integrated with learning strategies (Bowles, McCoy, & Bates, 2008). Supplemental instruction shifts attention away from at-risk students and targets difficult courses; with sessions open to anyone enrolled in the course (Terrion & Daoust, 2011).

The effectiveness of Supplemental Instruction has been documented in the literature. In a study of the School of Engineering at Lund University (Sweden), Malm et al. (2012) found much lower rates of attrition as well as a higher number of credit hours at the end of the first year for a

high supplemental instruction attendance group than for non-attendees. Peterfreund, Rath, Xenos, and Bayliss (2008) studied a math and science based supplemental instruction program and found that students participating in supplemental instruction had higher grades than non-participants, with the exception of pre-calculus. In addition, the percent of students passing most courses was higher for supplemental instruction attendees. Fayowski and MacMillan (2008) also found higher grades in an entry-level math course for supplemental instruction attendees, noting that "participation . . . improved grades even after accounting for ability/motivation, and gender" (p. 850).

At the University of Ottawa, however, Terrion and Daoust (2011) did not find any significant differences in mid-term or final grades in first-year courses for participants in the resident study group program. They did report that "participants who were involved in the study groups were more likely to remain in university . . . than those in the control group" (Terrion & Daoust, 2011, p. 319). Taking it a step further, Bowles et al. (2008) found significant differences in time to graduation between supplemental instruction attendees and non-attendees. Specifically, they reported that "SI attendance in freshman-level courses, holding all other factors constant, increases the probability of graduation within approximately four years by . . . 10.75%" (Bowles et al., 2008, p. 858).

As with the peer mentoring program, one of the main limitations is the self-selection bias. That is, students can choose whether to attend and participate in the supplemental instruction sessions held each week. For those who do attend, there are enormous benefits. Leveraging this success has led some institutions to utilize peers in the classroom.

Peer Instruction

In spite of the benefits peers can bring, Shook and Keup (2012) noted that "peer leaders

are least often used in an instructional capacity" (p. 6). The notion of peer instruction surfaces in vastly different ways depending on the discipline of the literature. Peer instruction is a recognized instructional strategy prevalent in the STEM literature. Schmidt (2011) outlined a five-phase approach to peer instruction. First, the faculty member presents a question related to the topic of study. Students in the course then respond to this question anonymously through the use of clickers. The distribution of answers is revealed for the class to see. If a majority of the students answer the question incorrectly, the instructor will ask students to engage in peer instruction, a collaborative approach whereby students work in groups to discuss their answers to the question. Afterwards, the students will use the clickers to respond to the question again.

At a Danish university, Schmidt (2011) found that test scores in an engineering course taught in Danish (i.e., in their native language) were significantly higher with peer instruction than in a traditional class. These results were not supported in an engineering course taught in English. Gok (2012) reported that conceptual understanding was significantly higher, as was the final exam score, for students exposed to peer instruction in an introductory physics course when compared to students in a traditionally–taught course. Lasry, Mazur, and Watkins (2008) also found that students in an introductory physics course that utilized peer instruction had higher final exam scores; however, this was not statistically different than the traditional lecture-based course. While these results do support the impact of peers in a classroom setting, peer instruction focuses on classmates as the peers, rather than as educators alongside the faculty.

There are three studies that I have identified that utilized peers in a predominant leadership role within in a first-year seminar, not simply as an advisor outside of the course. Weissman and Magill (2008) explored the effectiveness of two different types of seminars. The traditional seminar was a 10-week, extended orientation seminar taught by a faculty or staff

member along with an upperclass peer leader. The other seminar was a discipline focused, semester long course taught by faculty. The results of the study indicated that students who participated in either seminar had higher GPAs at the end of the first year compared to non-participants. There was also a statistically significant difference in retention rates for those participating in the extended orientation seminar compared to non-participants; this effect was not found in the discipline-specific seminar. Unfortunately, no additional details regarding the involvement of the peer leader were included.

Bell (2012) compared the effectiveness of a traditional first-year experience course to an adventure-based first-year experience course. The traditional course was taught by a faculty member and an undergraduate teaching assistant once a week for 10 weeks. The adventure-based course used outdoor activities as metaphors for college life. The course was taught by peer leaders and was completed during the week before school started. Course outcomes were measured by the First Year Initiative Survey. Analyses revealed significant differences between course types, with the adventure-based course reporting higher means on critical thinking, connections with peers, out-of-classroom engagement, knowledge of academic services, managing time and priorities, knowledge of wellness, inclusion of engaging pedagogy, and overall course effectiveness. No significant differences were found in the categories of study strategies, academic and cognitive skills, connections with faculty, knowledge of campus policies, sense of belonging and acceptance, usefulness of course readings, and satisfaction with college/university. Bell (2012) noted that each type of seminar may be useful for attaining specific outcomes. It stands to reason, then, that a combination of faculty/staff instructors along with a peer instructor could be the most effective towards achieving the specified outcomes of a first-year seminar.

Budny et al. (2010) examined the impact of a first-year seminar course integrated with another mandatory freshman engineering course. Throughout each week, freshmen would attend a small group session led by a sophomore, junior, or senior student and one large group session taught by a faculty member, advisor, or program director. The rationale for the peer-led small group sessions was to set the stage whereby "students would have an experienced engineering student–their group mentor–to help them navigate and understand the expectations, problems, and possibilities of their first year at the university" (Budney et al., 2010, p. 10). Analysis of academic measures indicates that the implementation of the peer mentoring program has increased the number of first semester honor students, decreased the number of students on probation, and increased cumulative GPA. Survey results of the first-year students indicated that 70% felt their mentor "had been helpful in navigating through this new workload" (Budney et al., 2010, p. 18). Additional results show that "almost all the first-year students report experiencing problems adjusting to either an academic, family or personal change, and the mentors are having a measurable impact on helping students with those transitions" (Budney et al., 2010, p. 19).

Gaps in the Literature

The evidence from the literature highlights three conclusions: freshmen will encounter transitional challenges as they advance from high school to college, first-year seminars provide benefits to those who participate, and peers can be highly influential in formal and informal settings. Nevertheless, there are still gaps in the literature with respect to populations, outcomes, and theories studied.

Most of the research reviewed on the topic of transition to college and first-year programs has been conducted at public, state universities, or doctoral, research-focused

institutions (Johnson et al., 2010; Kelly et al., 2007; Kolkhorst et al., 2010; Locks et al., 2008; Paul & Brier, 2001; Pittman & Richmond, 2008; Shim & Ryan, 2012; J. S. Smith & Wertlieb, 2005; Weissman & Magill, 2008; Yazedijian et al., 2007) relying on a convenience sample of students enrolled in an introductory psychology course (M. H. Clark & Cundiff, 2011; Friedlander et al., 2007; Johnson et al., 2010). A study conducted by Kezar and Kinzie (2006) revealed that "[institutional engagement] policies and practices did indeed differ based on unique institutional mission" (p. 169). This is important as "the mission of particular institutions means that some strategies might work better than others" (Kezar & Kinzie, 2006, p. 169). Studies conducted at small, private colleges or within a STEM-focused discipline were not absent from the literature (Budney et al., 2010; Holland et al., 2012; Rice, FitzGerald, Whaley, & Gibbs, 1995); however, they were in the minority. This suggests a need for additional research on specific populations.

Outcomes studied in the literature on first-year seminars have emphasized long-term success by focusing on grade point average (M. H. Clark & Cundiff, 2011; Friedman & Marsh, 2009; Jamelske, 2009; Lang, 2007; Sidle & McReynolds, 2009; Weissman & Magill, 2008; Williford et al., 2001), retention (M. H. Clark & Cundiff, 2011; Friedman & Marsh, 2009; Jamelske, 2009; Lang, 2007; J. W. Miller et al., 2007; Schnell & Doetkott, 2003; Sidle & McReynolds, 2009; Weissman & Magill, 2008; Williford et al., 2001), and even graduation rates (Lang, 2007). Within this literature there are mixed results. It is plausible that the lack of conclusive results are due to the distal nature of the outcomes. Very few studies are focused on short-term outcomes. Bell (2012) assessed first-year seminar course outcomes; Friedman and Alexander (2007) assessed first-year seminar course grades. To date, I have not located any studies that have explored the impact on successful transitions and reducing the struggles many

freshmen experience as a result of the "freshman myth" (Stern, 1966, p. 413).

Finally, when examining issues in higher education, especially those related to student transition and success, many researchers turn a standard set of theories. Astin's (1977) theory of involvement, Pace's (1979) theory regarding quality of effort, or Tinto's (1988) theory of student departure dominate the literature. These theories have merit and are widely accepted. However, they all focus on the decisions a student makes once they arrive on campus. They do not necessarily take into account the internal characteristics of the students. As are most college students, the freshmen at this institution are very social, and given their age, also very impressionable. In addition, many are mentally unprepared for the rigor of higher education; some, in fact, have been given false expectations. Based on interviews I conducted with freshmen, it appears that many high school teachers are telling these students that college will be easy since they are so smart. What does work to the advantage of the students, however, is the fact that this institution is a residential campus. With just a few exceptions, all freshmen live on campus. These four attributes (social, impressionable, unprepared, and residential) lend credence to social learning theories, situated in behaviorism. In addition, Painter, Bailey, Gilbert, and Prior (2006) noted that "students process information differently when the information comes from a peer" (p. 74). As such, a theory that has merit, but is often overlooked in the current literature, is Bandura's (1986) social cognitive learning theory.

Social Cognitive Learning Theory

Behaviorism has been identified as the "predominant school of thought in learning theory for the first half of the twentieth century" (P. L. Smith & Ragan, 2005, p. 25). The main focus of behaviorism is how behavior (learning) can be impacted by the environment. Early behaviorists focused on behavior as either a response to a stimulus (Pavlov's classical conditioning) or as a

response to rewards and punishments (Skinner's operant conditioning). Later, a study on aggressive behavior in children would lead Albert Bandura to focus on observational learning and modeling. The famous Bobo doll experiment guided Bandura to an important conclusion: rewards for the observer are not necessary for behavior to occur (Boeree, 2006).

By merely observing others being rewarded or punished, behavior can be influenced. Bandura (1986) noted that "the capacity to learn by observation enables people to acquire rules for generating and regulating behavioral patterns without having to form them gradually by tedious trial and error" (p. 19). Further, "without informative guidance, much of one's efforts would be expended on costly errors and needless toil" (Bandura, 1986, p. 47). It stands to reason, then, that if modeling negative behaviors, as seen in the aggression studies, can successfully influence learning, modeling positive behaviors (e.g., study skills, time management) should also be successful.

Reciprocal Determinism

As the name itself suggests, social cognitive learning theory purports that there is both a social (observation of models) and a cognitive (decision-making process) component that observers must experience in the process of learning. Whereas strict behaviorism only focuses on how the environment influences behavior, Bandura (1986) further posited that behavior, personal factors, and the environment form a three-way interaction formally known as reciprocal determinism. It is important to note that these three factors are neither simultaneous (all factors exerting influence at the same time) nor equitable (all factors exerting the same amount of influence). As Bandura (1986) explained, "the relative influence exerted by the three sets of interacting factors will vary for different activities, different individuals, and different circumstances" (p. 24).

With social cognitive learning theory, "the social milieu provides numerous opportunities for individuals to acquire complex skills and abilities through the observation of modeled behaviors and the behavioral consequences" (Gredler, 2009, p. 351). According to Gredler (2009), "the primary function of the modeled behavior is to transmit information to the observer" (p. 354). This can be accomplished in a number of ways. Models can demonstrate new behaviors of which the observers are unfamiliar; they can alter one's perceptions of previously learned behaviors; and models can serve as social prompts, motivating the learners to engage in their previously learned behaviors (Bandura, 1986). Within the realm of a first-year seminar, it is likely that all three will be accomplished.

Processes Regulating Observational Learning

There are four processes underlying observational learning: attention, retention, production, and motivation. From the onset, learners must be paying attention to the model and accurately perceive the modeled behaviors. Accomplishing this task requires that the behavior is deemed important as well as beneficial to the observer. Attention is increased when the behaviors being modeled have been rewarded. In addition, the modeled behavior should not be too complex. Often, "repeated exposures are . . . necessary to acquire an adequate conception of [the] modeled activities" (Bandura, 1986, p. 53).

Next, the modeled behaviors must be retained by the observer. Bandura (1986) posited that "learners must . . . transform what they observe into succinct symbols to capture the essential features and structures of the modeled activities" (p. 56). Symbolic representations of the behavior can take the form of imaginal representations (abstractions) or verbal-conceptual representations (Bandura, 1986). As would be expected, retention of information is increased if

the modeled behaviors are related to activities the observer is likely to encounter. Mental

rehearsal and physical practice of the behaviors also lead to increased retention.

Retention of information is necessary so that the learner can make the cognitive decision

to retrieve the information and approximate the behavior in the given situation. Bandura (1986)

indicated that "behavioral production primarily involves a conception-matching process in which

the incoming sensory feedback from enactments is compared to the conceptions" (p. 64). That

is, the observer processes the situation to determine whether he/she has any knowledge that will

guide behavior. Further, "the behavior is then modified on the basis of the comparative

information to achieve progressively closer correspondence between conception and action"

(Bandura, 1986, p. 64). That is, the more one engages in the modeled behavior, the more one

can refine the behavior.

The most challenging of the four processes is motivation. It can be difficult to motivate

college students, especially when the behaviors being modeled are not of their choosing. It is

because of this process that social cognitive learning theory makes the distinction between

learning and performance. As Bandura (1986) pointed out, "people do not enact everything they

learn" (p. 68). In order for observers to be motivated, it is essential that the behaviors being

modeled have immediate utility and benefit the observer. Motivation can be induced through

vicarious and self-reinforcement (Bandura, 1986).

Reinforcement

As described by Gredler (2009), "when outcomes are viewed as personally attainable,

seeing others reinforced for successful behaviors arouses expectations of similar results in

observers" (p. 358). The sophomores who will be modeling the various college success skills

will have a full year of experiences from which to draw. Some of those experiences will be

success stories. By creating a cause-and-effect link in the minds of the freshmen, the successes

of the model should serve to motivate the freshmen to engage in similar stories. For example,

the freshmen may hear from their peers about being rewarded with higher grades and a higher

GPA after taking measures to improve their study skills. In addition, if follow-up conversations

were to take place in subsequent lessons, the success of others in the course could also serve as

vicarious reinforcement, with classmates now serving as the role models.

When role models are punished for their behavior, observers can also be influenced.

Within the sophomores' experiences, there will likely be a few failures. These could include

failing to study early enough in the quarter, not getting involved with an organization, or staying

up late every night, among others. It will be important to illustrate that negative repercussions do

occur, even to smart people. In theory, this should motivate the freshmen to avoid the

unsuccessful behaviors.

Gredler (2009) further discussed that "individuals establish performance standards for

themselves and tend to respond to their behavior in self-rewarding ways if their performance

matches or exceeds the standard. Similarly, they respond in self-criticizing ways if their

performance fails to meet the standard" (p. 360). It is imperative that students create a plan for

their academic success and establish goals as early on in the quarter as possible. As students

follow through with those goals, they can serve as their own reinforcement.   One student in my

action research projected commented on the course evaluation that he/she had learned to study

because of the first-year seminar and, as a result, started seeing an improvement in grades.

Behavioral Model

According to Bandura (1986), "modeling has always been acknowledged to be one of the

most powerful means of transmitting values, attitudes, and patterns of thought and behavior" (p.

47). Modeling goes beyond simply imitation and focuses on "psychological matching processes" (Bandura, 1986, p. 48). There are three mediums through which modeling can take place: physical demonstrations of the behavior, pictorial representations of the behavior, or verbal descriptions of the behavior (Bandura, 1986). There are two different types of modeling stimuli that can be used: live and symbolic. Peers are one example of a live stimulus, and will be pertinent for a collegiate environment. Bandura (1986) noted that "learning may take varied forms, including new behavior patterns, judgmental standards, cognitive competencies, and generative rules for creating behaviors" (p. 69).

Selecting the right models is critical to the success of observational learning. It will be imperative to select peers that the freshmen will find relevant, credible, and proficient. Credibility can be obtained by selecting models that are closer in age to the students than the instructor and who are able to relate to the challenges and struggles of the freshman year. For the current study, sophomore students would fulfill both criteria. Gredler (2009) noted that students who are "more talented and venturesome are likely to derive the greatest benefit from observing proficient models" (p. 355). I have found that proficiency is a subjective condition. For my action research project, I utilized seniors as they represented the most proficient class, given their years of experience and success. However, when the students were surveyed regarding these guest speakers, they felt that a combination of class years would be preferred. Proficiency, in their eyes, did not require successful completion of three to four years.

The impetus for the use of peers in a first-year seminar is to deliver a sense of relevance. That is, we want the material to be relevant so that students will be engaged in the classroom, which then fosters learning. This idea of ensuring relevancy is not a new concept. Ralph Tyler, a developmental curriculum theorist, believed that "schools are established to help students

acquire behavior that is important for constructive out-of-school activities" (Willis, Schubert, Bullough, Kridel, & Holton, 1994, p. 397). Tyler was very cognizant that "if something is learned in school that is not used by the student in relevant situations outside of school, most of the value of learning has been lost" (Willis et al., 1994, p. 397). By bringing in peers to discuss what is actually going to happen the freshman year, experiences outside the classroom have now been introduced inside the classroom, creating a sense of relevance.

Parallel to the idea of relevance is the idea of interest. David-Lange (2011) summarized this idea with the acknowledgment that engagement will result when the material is interesting to the students. She further suggested that one way to spark interest is to use guest speakers. These firsthand accounts of information are deemed more interesting than if presented by a traditional instructor. This was realized in the action research project I conducted. When asked their favorite part of the lesson, the students reported the guest speakers. In addition, Padgett (2011) noted that interacting with other students is a good practice that fosters achievement of learning outcomes.

A number of research studies have investigated the impact of observational learning. In a qualitative study of preservice teachers, Buehl and Fives (2009) reported that one of the main themes to emerge was "observing others teach, whether that teaching was considered to be done well or poorly, was itself an important source of knowledge about teaching" (p. 380-381). Though the study is dated, Lange (1971) also found significant results with a group of preservice teachers. By utilizing a pretest/posttest control group design, Lange (1971) found that "a single 20-minute exposure to a model demonstrating a specific set of behavior produced a significant amount of the same behavior in the student teachers who observed in" (p. 153). Studying students with faculty role models, Erkut and Mokros (1984) discovered that "by observing their

model they [the students] learned how to formulate their thoughts better and to have more confidence in themselves" (p. 414). These studies illustrate the utility of incorporating observational learning into an educational setting.

Summary

Most high school students have not spent deliberate time preparing for their transition to college. While many students can successfully make the transition, a number of students will struggle in the process. Part of the struggle is facing situations not previously encountered; part of the struggle arises from a discrepancy between one's expectations and the resulting experiences. Knowing this, most institutions have developed a first-year seminar geared toward transitional issues inherent at a specific institution. While the research on these programs illustrates their utility, there appears to be an opportunity to further their success by incorporating peers in an instructional capacity. Bandura (1986) saw the potential of observational learning through peer modeling, though few researchers have studied first-year seminars from this theoretical perspective. In addition, the research is focused on the question of whether first-year seminars have an impact on retention, rather than focusing on how they have an impact.

CHAPTER 3

METHODOLOGY

The purpose of this research study was to explore the challenges faced by the freshman population at Rose-Hulman in the transition to college and to understand the influence of observational learning towards preparation for those challenges. By incorporating sophomores as peer educators in a first-year seminar, the freshmen were exposed to models who have successfully navigated the first year of college.

Research Questions

There were two primary research questions guiding this study:

1. What are the academic and social challenges freshmen face in the transition to Rose-Hulman, a small, private, highly selective, STEM-focused institution?

2. How does the presence of sophomore peer educators in a first-year seminar influence freshman preparation for fall quarter challenges?

Philosophical Paradigm

Given the nature of the research questions, this study was guided by a postpositivism paradigm. According to Creswell (2013), hallmarks of postpositivism include a "view [of] inquiry as a series of logically related steps, [a] belief in multiple perspectives from participants rather than a single reality, and espous[ing] rigorous methods of qualitative data collection and analysis" (p. 24). Though much of qualitative research is not prescriptive, there was a logical set

of steps employed to answer the research questions. In addition, the research questions suggest

that freshmen will experience fall quarter in different ways; thus, it was important to capture

those multiple viewpoints. Other researchers have described postpositivism from the standpoint

that "inquiry [is conducted] in more natural settings, collecting more situational information, and

reintroducing discovery as an element in inquiry" (Guba & Lincoln, 1994, p. 110). The primary

source of data for this study was collected through student journals. These reflections were

completed in an environment chosen by the students rather than in a contrived research setting.

Design of the Study

This exploratory qualitative study utilized a phenomenological design to investigate the

research questions. Phenomenology is an appropriate design when trying to understand and

describe the lived experiences surrounding a phenomenon (Creswell, 2013). There are two basic

phenomenological designs: hermeneutical phenomenology and transcendental phenomenology.

This study utilized the transcendental phenomenology approach. As described by Creswell

(2013), this approach involves selecting the phenomenon of interest, setting aside my personal

experiences with the phenomenon, collecting data from those who have personally experienced

the phenomenon, analyzing the data in search of significant statements, developing themes by

further combining the significant statements, and combining a description of what happened and

how it happened in order to fully explain the essence of the phenomenon.

For this study, the phenomenon of interest was the challenges faced by freshmen in the

transition to Rose-Hulman, a small, private, highly selective, STEM-focused institution. Of

further interest was how the phenomenon was influenced by the presence of observational

learning. Phenomenological studies typically collect data through the use of individual

interviews with participants (Creswell, 2013). Inquiry projects involving individual interviews

have not been successful at this particular institution. Given this constraint, the current

phenomenological design incorporated student journals in place of the individual interviews.

Creswell (2013) noted that journals are an appropriate form of data, which is supported by their

use in other research studies (Everett, 2013; Risquez, Moore, & Morley, 2007). In addition to

the journals, this study also incorporated observational fieldnotes and focus group interviews.

  Researcher bias is the main threat to validity with any qualitative study. This research

study was no exception and carried with it the potential for additional bias given that I am

employed at the institution under study and teach one section of the targeted course. In order to

reduce researcher bias, a number of strategies were employed. First, data were not collected

from any of the students enrolled in my section of the first-year seminar. In addition,

observations were conducted in a separate section of the course. Second, my experiences with

the topic have been bracketed within this document, both for my own reflection and for reader

awareness. Third, a researcher's journal was created to document the journey, providing a

rationale for decisions made throughout the study. Finally, another researcher was enlisted to

serve as a second coder on a sample of journal entries.

Setting of the Study

Institution

  This research study was conducted on the campus of Rose-Hulman Institute of

Technology (Rose-Hulman), a small, private, STEM-focused college in the Midwest. The

mission of Rose-Hulman is "to provide our students with the world's best undergraduate science,

engineering, and mathematics education in an environment of individual attention and support"

(Rose-Hulman, n.d.b, para. 1). Rose-Hulman operates on a 12 week quarter system. Fall quarter

runs from September through November; winter quarter runs from December through February;

and spring quarter runs from March through May. There are a few summer courses of differing

lengths offered from June through August. Within each quarter, 10 weeks are designated for

instruction, 1 week is designated for final exams, and 1week serves as a break in preparation for

the next quarter. Each school day is divided into 10 50-minute periods, starting at 8:05 am and

ending at 5:10 pm.

There were a number of events that took place during fall quarter that affected the

students. New Student Orientation was a six-day event (Friday through Wednesday), that

occurred right before the start of classes. Classes began, then, on Thursday, informally known as

Week 0. Each quarter Rose-Hulman hosts a Career Fair. For this academic year, the Fall

Quarter Career Fair took place on Wednesday of Week 4. Homecoming took place at the end of

Week 4 on Friday, Saturday, and Sunday. The following week, Week 5, students had a four day

weekend for fall break.

According to the 2014-2015 Common Data Set (Rose-Hulman, 2014a), total fall

enrollment for Rose-Hulman is 2,388, with undergraduates comprising 2,280 of that total.

Admission is highly selective, with only 58.8% of the applicants actually admitted. The current

student-to-faculty ratio is 13:1. Rose-Hulman has a retention rate of 93.9% and a six-year

graduation rate of 77.9%. A majority of the degrees awarded are in engineering (82.2%).

All freshmen entering Rose-Hulman are first-time, full-time, degree-seeking students.

There were 582 new first-year students of which 78.2% were men. A majority of the freshmen

(70.3%) reported White, non-Hispanic for their racial/ethnic category. The average age of the

freshman class was 18.6, which suggests a very traditional group of students. Over two-thirds of

the freshmen (68.2%) were from out of state. With very few exceptions, freshmen are required

to live on campus. According to the Enrollment Management Databook (P. Trifone, personal

communication, October 2, 2014), 21% of the freshman class were first-generation students; 12.2% were legacy students (i.e., they had a brother, sister, father, mother, grandparent, or another relative who attended Rose-Hulman). The median adjusted gross income of those filing the FAFSA was just under $112,000.

In terms of academic achievement, the 2014-2015 Common Data Set (Rose-Hulman, 2014a) indicated that the median freshman SAT Math score was 690, the median SAT Critical Reading score was 590, and the median ACT composite was 29. The median high school grade point average was 3.98 with 63% of the freshmen ranked in the top tenth of their high school graduating class. Nearly 30% of the students had declared mechanical engineering for their major, followed by chemical engineering (12.9%) and electrical engineering (11.5%) as the second and third most popular major. Rose-Hulman offers two summer programs that allow qualified students to earn calculus and physics credit at an accelerated pace. According to the Enrollment Management Databook (P. Trifone, personal communication, October 2, 2014) there were 30 participants in the Fast Track Calculus program and 26 in the Accelerated Math Physics program. Over half (54.0%) transferred in Advanced Placement (AP) credit with a median of 14 AP credits.

First-Year Seminar

College and Life Skills, the first-year seminar at this particular institution, is a one-credit hour course taught during the fall quarter. According to the catalog description,

the course will assist Rose-Hulman students in acquiring life skills and in learning more

about themselves. These new skills will assist the student in a smooth transition from

high school to college and will provide the students with the tools necessary for success

as a student and in life. Additionally this course will introduce students to people and

resources at Rose-Hulman who can assist them in providing a positive educational as well as personal experience. (Rose-Hulman, n.d.a, para. 1)

A version of the first-year seminar has been in existence since 1978. The course was developed by the Associate Vice President for Student Affairs/Dean of Student Affairs and is administratively housed under Student Affairs. All freshmen are required to pass this course as part of their graduation requirements.

There are approximately 50-55 sections of the course offered each fall. To facilitate small group learning, enrollment in each section of the course is limited to approximately 10-12 students. For any given year, the actual number of sections, and the enrollment in each section, is determined by the size of the freshman cohort and the number of professional staff willing to teach. For all practical purposes, the enrollment in a given section is random. The Registrar uses a computer program to schedule freshmen into their fall quarter classes. Each major has a template defining the courses that should be taken each quarter. The software places students in sections of the necessary courses, "randomly picking a section . . . [in attempt to] keep the sections balanced" (J. Pink, personal communication, March 7, 2014). No additional criteria are applied in placing students into the course. Given that freshmen are pre-enrolled in courses for the fall quarter, students are not self-selecting into a particular section with a particular instructor.

Each section meets once a week (Tuesday, Wednesday, or Friday) for 50 minutes and employs a small group/large group model. For 6 of the 10 instructional weeks, students meet in their small group (i.e., 10 students with 1 instructor). For the remaining four weeks, multiple sections meet together (e.g., all Friday 4th hour sections) to hear a presentation by an important area on campus (e.g., the library). The course does not meet during finals week.

Official curriculum. The official curriculum makes provision for exposing students to a number of topics, such as campus involvement, resume development, professional etiquette, time management, the library and learning center, stress management, study skills, health and wellness, and money management. For the current academic year, the curriculum included one large group and one small group lesson related to Title IX (civil rights equity), in place of a lesson on study skills, stress management, and health and wellness. The course syllabus outlines the area of focus for each of the 10 instructional weeks. See Appendix A for a copy of the most recent course syllabus. These topics have been arranged across the quarter in order to align with fall quarter activities, namely the Career Fair. Information related to the course and the official curriculum is communicated during a one-hour instructor workshop held in the summer, via the course website, and periodic emails from the course administrator throughout the quarter.

Operational curriculum. Each instructor operationalizes the official curriculum for his/her section. There is an expectation that the course will center on discussion; thus, attendance is very important as students need to engage in discussion to get the most benefit. This structure makes it feasible to incorporate a sophomore student as a peer educator to assist in the discussion. Homework assignments vary among the sections in both content and frequency; no exams are given.

Role of the staff instructors. The first-year seminar is not taught by faculty, but rather by professional staff (defined as a staff member who holds or is pursuing an advanced degree) and graduate assistants (defined as students who are working in Student Affairs in pursuit of a graduate degree). Serving as an instructor is completely voluntary, with no additional compensation provided. The staff who taught during the fall of 2014 represented almost all of the major functional units on campus, including Admissions, Athletics, Career Services,

Communications and Marketing, Enrollment Management, Financial Aid, Human Resources, Institutional Advancement, Institutional Research and Assessment, Instructional Technology, Learning Center, Library, Sports and Recreation, Student Activities, Student Affairs, and Ventures.

Staff members teaching the course serve in a dual capacity. Like a faculty member, staff instructors are responsible for selecting the instructional strategies and materials for the pre-selected topics during each small group week. Attendance must be recorded in some fashion, as it accounts for 50% of the student's final grade; any assignments given must be graded. In addition, midterm and final grades must be entered into the institution's student information system. Yet at the same time, the staff instructors are referred to as mentors. In this role, their job is to guide the freshmen and serve as a resource. Ideally, the freshmen will view the staff as facilitators rather than as authority figures.

Role of the sophomore peer educators. The role of the sophomore peer educators is also twofold. These sophomores are responsible for facilitating a portion of each small group lesson. This includes both sharing their personal experiences with the topics as well as engaging the freshmen in active learning with the topic. At the same time, the sophomores also serve as an additional campus resource for the freshmen. The literature suggests that frequency of interaction with peers is an important aspect in a mentoring situation (T. Smith, 2008; Walker & Taub, 2001). As such, the sophomores attend all 10 lessons, even though neither the staff member nor the sophomore have a role to play in the large group lessons.

At Rose-Hulman, the Vice President for Academic Affairs has promulgated the philosophy that everyone on campus is an educator. Upcraft et al. (2005) noted that this viewpoint also aligns with Tinto's theory of student departure in that retention "is the

responsibility of all members of the institution" (p. 45). Given that this role goes beyond serving as a resource or answering questions outside of class, the term peer educator, rather than peer mentor, was chosen. These sophomores will have an opportunity to actually educate the freshmen in the skills they will need to be successful.

Participants

Participants for this study were selected from the incoming freshman class. However, given that the focus of the study is on applying a proactive program to select sections of the first-year seminar (i.e., observational learning via sophomore peer educators), a three-phase non-probability purposeful sampling strategy was necessary in order to select (a) the sophomores to serve as peer educators, (b) the first-year seminar sections in which to incorporate the sophomores, and (c) the freshmen from which to collect data.

First, criterion sampling was utilized to select the sophomores to serve as peer educators. Social cognitive learning theory posits that for maximum effectiveness of observational learning, the models should be relevant, credible, and proficient (Bandura, 1986). Sophomores, by virtue of successfully completing the freshman year, possess these characteristics. To ensure quality role models, the Associate Vice President for Student Affairs/Dean of Student Affairs recommended inviting the Sophomore Advisors selected for the 2014-2015 academic year to serve as peer educators. As promoted on the instituion's website, "SAs [Sophomore Advisors] live on the freshman floors . . . and contribute their time to helping freshmen students with homework questions, planning and promoting floor activities, encouraging student participation in campus organizations, and helping the RAs [Resident Assistants] to build a floor community" (Rose-Hulman, n.d.d).

There are four criterion inherent in the Sophomore Advisor application process. These

include completing at least 45 credit hours but no more than 89 credit hours, earning at least a 2.5 cumulative grade point average, having spent at least one quarter living in a residence hall, and being in good standing for conduct. Sophomore Advisors are then selected based on recommendation letters and an interview with the Assistant Director of Residence Life. From the interview, the candidates are rated on their communication skills, concern for others, self-confidence, leadership characteristics, motivation/enthusiasm, and flexibility. The characteristics that make for a successful Sophomore Advisor are also the characteristics that would make for a successful peer educator. In addition to these traits, the final criteria used to select sophomores for the research study was the availability of the Sophomore Advisors. All of the Sophomore Advisor's schedules indicated availability during at least one of the nine time slots for the first-year seminar, thus all were invited to serve as a peer educator.

A total of 13 sophomores responded to the invitation to serve as a sophomore peer educator. Eleven of the sophomores served in sections of the course from which the freshmen were invited to participate in the study. One sophomore served in a section of the first-year seminar that was used for observational data collection. A final sophomore served in my section of the first-year seminar to provide a first-hand account of the logistical issues that surrounded implementation.

The demographic breakdown of this group included 8 men and 5 women, with an average age of 19.7. With respect to academics, the sophomore peer educators were pursuing a variety of majors, including biochemistry, biomedical engineering, chemical engineering, computer science, engineering physics, and mechanical engineering. Their average cumulative grade point average at the start of fall quarter was 3.39.

The second phase was determining which of the 51 sections of the first-year seminar

would incorporate the sophomore peer educators. Criterion sampling was also utilized in this

phase. There were two inclusion criteria: the instructor must have taught the course before and

the section must be scheduled at a time that aligns with the sophomore peer educator availability.

Sections scheduled to be taught by new instructors (i.e., staff who have not taught the course

before) were excluded due to unfamiliarity with the course. Most sections are taught by

professional staff; however, there are six sections taught by graduate assistants. These six

sections were excluded as well, given the close proximity of ages between the freshmen and the

graduate assistants.

There are between four and seven sections of the course taught during each of the nine

designated time slots. Given that all of the sophomores had availability in these time slots, all

eligible instructors were invited to participate. A total of 13 instructors, including myself, agreed

to have a sophomore co-teach a section of the first-year seminar. Of this group, 7 were men and

6 were women with an average age of 42.6. They represented a variety of offices on campus,

including Admissions, Career Services, Enrollment Management, Human Resources,

Institutional Research and Assessment, Instructional Technology, Learning Center, Sports and

Recreation, Student Activities, and Student Affairs. The average number of years employed at

Rose-Hulman was 10.0, with a minimum of 1.2 and a maximum of 37.2 years. Two are alumni

of Rose-Hulman.

The final phase involved criterion sampling of the freshmen. There were three criterion

used to select the freshmen. The freshmen had to be enrolled in one of the 11 sections of the

first-year seminar with a sophomore peer educator, live on campus to represent the traditional

student experience, and given that this is a research study, participants had to be at least 18 years

of age. While not prescriptive, Creswell (2013) indicated that a sample of 5 to 25 individuals

who have experienced the phenomenon should be adequate. This research study oversampled by inviting all 113 first-year students who met the criterion. Oversampling was necessary as it was unlikely that everyone would agree to participate from the onset. Further, given that the main source of data was from student journals, it was important to have enough participants so that each participant only had to respond to four journal entries (as opposed to every week), and to compensate for any attrition that might occur over the duration of the study. Of the 113 invited students, 41 agreed to participate in the study (40 participated in the fall quarter journal data collection; an additional student participated in the winter quarter focus group).

In terms of demographic data, the freshman sample was similar to the entire cohort. A majority of participants were male (70.7%) and White, non-Hispanic (78.0%). The average age of the sample was 18.7. Over two-thirds (70.7%) were from out of state, and given the sampling criterion all lived on campus in the residence halls. A quarter of the sample were first generation (24.4%), and 7.3% were legacy students. The median adjusted gross income was just over $110,000.

In terms of academic achievement, the median SAT Math score was 670, the median SAT Critical Reading score was 580, and the median ACT Composite score was 30. Three-quarters (75%) of those who submitted high school rank were ranked in the top tenth of their graduating class; the median high school grade point average was 4.00. The three most popular majors were biomedical engineering (17.1%), mechanical engineering (17.1%), and chemical engineering (14.6%). There was one participant in the Fast Track Calculus program and four in the Accelerated Math Physics program. Over half (58.5%) transferred in Advanced Placement (AP) credit with a median of 18 AP credits.

Instruments

This study utilized two different instruments to answer the research questions: a journal template and a focus group interview protocol. The journal template was administered during fall quarter, while the focus group interview protocol was implemented during winter quarter.

Journal Template

The journal template consisted of a one item open-ended reflection prompt. Creswell (2013) stated that when conducting a phenomenological study, participants are asked "what have you experienced in terms of the phenomenon? . . . [and] what contexts or situations have typically influenced or affected your experience of the phenomenon?" (p. 81). By doing so, it will "focus attention on gathering data that will lead to a textual and structural description of the experiences, and ultimately provide an understanding of the common experiences of the participants" (Creswell, 2013, p. 81). Three different prompts were used throughout the quarter. See Appendix B for a copy of each of the journal prompts.

Research suggests a disconnect exists between freshmen expectations of college and the reality that they experience (Meyer et al., 2009; J. S. Smith & Wertlieb, 2005; Stern, 1966). To better understand some of the expectations the freshmen have upon entering college, participants were given the following prompt for the first journal entry: "As you begin your college career, tell me about the biggest challenge you expect to face."

The literature has documented various challenges that freshmen face in the transition to college, including living with roommate (Keup, 2007), making new friends (Paul & Brier, 2001), handling an increased workload (Gibney et al., 2011), and feeling a sense of belonging (Pittman & Richmond, 2008). However, given that most research is conducted at large, research-focused institutions, it is unclear whether or not these are the same challenges that freshmen at this

institution will face. To better understand the challenges faced by this unique population across the fall quarter, participants were given the following prompt for the second through ninth journal entries: "Tell me about your college experiences this week. What academic and social challenges did you encounter? Why were these challenges? How did you respond?"

The first-year seminar has been designed to facilitate preparation for the presumed fall quarter challenges. To better understand whether this is being achieved, or whether gaps exist, participants were given the following prompt for their final journal entry: "Looking back on fall quarter, tell me about the ways you felt prepared for the challenges you encountered? In what ways did you feel unprepared for those challenges?"

The journal prompts were field tested with the sophomore peer educators. An email was sent to the sophomore peer educators asking them to review the three prompts and provide feedback as to whether or not they could have answered the questions during their freshman year. In addition, sophomores were asked to comment on the clarity of the journal prompts. One sophomore responded to the email acknowledging that the prompts were clear.

Focus Group Interview Protocol

The focus group interview protocol consisted of ten open-ended items. The protocol was designed to be semi-structured, with a set of questions determined ahead of time, but allowing for additional questions as needed to probe for more information. The first question, related to the biggest surprise during fall quarter, was included both to build rapport between the participants and myself as well as to frame the discussion about their fall quarter experiences. The second and third questions were written in response to the data collected via journal entries. These were written to further explore the idea that time management was expected to be the biggest challenge and the idea that Rose-Hulman freshmen enter survival mode. The fourth

question was written so as to understand the influence the first-year seminar, the staff instructor, and the sophomore peer educator had on their preparation for fall quarter challenges. While the primary interest is the effect of the sophomore peer educator, all three facets are included so as not to lead participants. Bandura's (1986) social cognitive learning theory posits that selecting the right models is critical to the success of observational learning. As such, the next four questions were aimed at understanding more about the perceived characteristics of the sophomore peer educators, in terms of what made them effective and/or ineffective.

While this study is not employing a mentoring program, the sophomore peer educators, by virtue of their role as Sophomore Advisors, were living on freshman floors in the residence halls. Thus, it was highly probable that there was interaction between the sophomores and the freshmen outside of the first-year seminar. As a result, a question was included to capture any interactions and the influence those interactions may have had on their fall quarter experiences. The final question was included so as to understand what changes should be considered if sophomore peer educators were to be utilized in the future. See Appendix C for a copy of the focus group interview protocol, including six pre-planned probing questions.

Researcher as Instrument

I have taught one section of the first-year seminar for the past six years. Every year I watch as it takes my students eight weeks or more before they have the all-important revelation that college is not going to be like high school. These students have excelled in high school with minimal effort, being in the top of their classes academically. Very few had to develop regular study habits, as the high school curriculum was not challenging. Unfortunately, this mindset carries over to their first quarter of college. As a result, too many freshmen will end their fall quarter with a low grade point average, some even on single probation. For those who do

manage good grades, it is probable that they struggled through the quarter more than they

expected. The first-year seminar is designed for the very purpose of facilitating the transition

and preparing them for the challenges they will encounter. However, no matter what I say to my

students, they cannot grasp the fact that I know how the quarter is going to end for them. While I

try to instill behaviors that will facilitate their success, there is no evidence that the information I

transmit is retained.

In addition to my firsthand look at the transition freshmen make during fall quarter, I am

also a member of the Retention Task Force charged with studying factors of attrition and

solutions for improving retention. In this role I have spent a fair amount of time investigating the

reasons why our students leave Rose-Hulman. I have also spent time identifying and

implementing potential interventions that could increase the number of successful students. This

study will add to the discussion as the task force pursues new avenues of student support.

I have conducted two prior qualitative research studies at this institution that lend

credence to the current study. First, I conducted three interviews with freshmen for a study on

freshman perceptions of academic success. One of the main themes that emerged from this data

was the fact that going to college is a whole new experience. As such, I feel it is the

responsibility of the institute to provide guidance and training on how students can succeed. In

addition, all students mentioned the importance of behaviors consistent with academic success.

However, the students acknowledged that these behaviors were not always executed. This leads

me to believe that it is not necessarily a complete lack of knowledge, but more of a motivational

issue that needs to be addressed.

I also conducted an observational study of the Rose-Hulman's Learning Center,

specifically focusing on the peer tutoring program. What emerged was the fact that peer

relationships are very effective at this institution. I felt that that part of this success was due to the fact that the tutors were dressed like the students (reinforcing the peer image), and that the tutors knew how to engage in effective strategies to help the students (e.g., asking relevant questions, encouraging the students). It stands to reason, then, that incorporating peers proactively into the classroom would also be successful.

Procedures

Recruitment

During the spring of 2014, the Assistant Director of Residence Life interviewed and selected 32 current freshmen to serve as Sophomore Advisors for the 2014-2015 academic year. Once the students were selected, the Assistant Director of Residence Life provided their names. The online schedule look-up page, which is available to all campus, was used to determine which sophomores had schedules that would allow them to be a part of the first-year seminar. All sophomores had availability for at least one section of the first-year seminar. An email was sent to these students inviting them to participate as a peer educator. A reminder email was sent to non-responders four days later to encourage additional sophomores to consider the opportunity. Both email solicitations requested a reply email for convenience.

The 13 sophomores who accepted the invitation were invited to an evening dinner meeting to explain the purpose of the sophomore peer educator program. Four sophomores were not in attendance. During this meeting, the sophomores were reminded about the structure of the first-year seminar and provided with an explanation of their responsibilities as peer educators, including attending a meeting before school starts. A timeline of events from the start of summer through the end of the program was also provided. Students were given an opportunity to ask questions.

Concurrent to the recruitment of sophomore peer educators, the Associate Vice President for Student Affairs/Dean of Student Affairs recruited professional staff members to teach the first-year seminar in the fall. Once the list was finalized, discussions with the Associate Vice President for Student Affairs/Dean of Student Affairs ensued to determine which course sections matched with the sophomores' schedules. Once the criterion sampling was applied, an email was sent to all the instructors eligible for inclusion in the study. This email provided details of the sophomore peer educator program and a brief overview of the staff responsibilities. The staff were asked to reply to the email indicating interest in participating.

Only eight staff members, including myself, responded to the initial email request. With 13 sophomores, it was important to find 13 staff members to match up. In order to recruit five additional staff members, the Associate Vice President for Student Affairs/Dean of Student Affairs recommended five names from the list of eligible non-responders. His criteria for selection were (a) having a sophomore peer educator would be helpful to him/her (i.e., the staff member is not overly independent) and (b) the staff member would know how to utilize a student as a co-instructor (i.e., the staff member had experience working with students and would know how to engage them). In person visits were made to three of the staff; all three expressed interest. One staff member was on vacation, but was able to express interest via Facebook. The final staff member was off for the summer, but was able to express interest via phone.

Scheduling sophomores into the eligible sections of the fist-year seminar was done by hand at the beginning of summer. Each staff member's name and course section was written on a purple sticky note and placed on a posterboard. Each sophomore's name and available course sections were written on a green sticky note to be moved around and placed on the posterboard. There were a few parameters for scheduling the dyads. These included: (a) one of the

sophomores worked for one of the staff members in a work-study position, thus they were matched for familiarity; (b) there were three sophomores who were assigned as Sophomore Advisors to residence hall floors used for our living-learning community, thus they were matched up to the living-learning community specific sections of the first-year seminar; (c) at the time of scheduling one of the staff members had not responded and one of the sophomores was not 100% committed to the program, thus they were matched up in case one or the other declined participation; (d) the remaining sophomore who did not attend the information meeting was assigned to my section in case he was not planning to continue participation; and (e) based on student schedules, burdens were avoided where possible (e.g., co-teaching after being in class for three hours straight; teaching during lunch hour unless he/she did not have class before and/or after lunch and could adjust the time lunch was eaten).

The first sophomores to be placed were the three who only had one or two available times. The rest of the sophomores, then, were placed in the first section that worked with his or her schedule, with an attempt to match on gender where possible to facilitate a comfortable working environment. Following the scheduling process, each staff-sophomore dyad was emailed to provide a brief introduction of whom each would be working with during fall quarter and to indicate the first-year seminar day/time they would be co-teaching. By virtue of the email, each dyad would have the other's email address should they wish to communicate over the summer.

Toward the end of summer, a meeting was conducted with the participating staff instructors who were going to be a part of the program to discuss how to consistently incorporate the sophomores into the existing lesson plans. Ideally, the group would have met and created a common lesson plan for each small group session to increase consistency among the sections.

However, due to factors out of our control, the group was not able to meet until early August which resulted in limited time for curriculum development. As a trade-off, the staff decided to focus on incorporating the sophomores in a similar fashion. This ensured that each section was attempting to utilize the sophomores in a consistent manner. The specific details of how the sophomores were to be used, along with the updated syllabus, were sent to the sophomores via email for review. The sophomore peer educators had about a month to create the content they were responsible for prior to the start of school. They were also notified that there would be a final meeting during their Sophomore Advisor training.

Before the start of school, a joint meeting was held with the participating staff instructors and the sophomore peer educators to provide final details about the course. A majority of the time was designated for the staff instructors to meet the sophomore peer educators and discuss logistics for their section of the course. Each dyad was free to determine how often to meet throughout the quarter and in what capacity (e.g., in person, via email).

During new student orientation week, the Office of Enrollment Management was contacted for a list of freshmen who were at least 18 years of age, living in the residence halls, and enrolled in the 11 sections of the first-year seminar. Information requested included name, residence hall and room number, campus mailbox number, email address, and first-year seminar section. An invitation packet was created for the 113 freshmen enrolled in those 11 sections. Each packet, which was delivered to the freshmen by their Resident Assistant, included a welcome and introduction letter, two copies of the informed consent, and an addressed campus mail envelope in which to return one signed copy of the informed consent. The letter requested that students read the informed consent, check "yes" or "no" for participation in the study, sign the form, and return it either directly via campus mail or to his/her Resident Assistant who would

then send it via campus mail. The Resident Assistants were utilized as they have better access to

the freshmen; however, the informed consent was designed so that they would not know who

was participating in the study. On Monday, following the distribution of the packets, an email

was sent encouraging non-responders to read the packet of information and return the consent

form. A final list of participants was compiled for data collection.

Data Collection and Observation

    Journals. The primary data source for this study was collected through student journals.

As described by English and Gillen (2001),

> the word *journal* has its roots in the French word *jour* (day). The corresponding word
>
> *journey* came to refer to the amount of traveling that a person could do in a day. In turn,
>
> the word *journal* has come to mean daily writing about one's journey (Schiwy, 1996). A
>
> journal provides a place where a learner or an educator can record what is happening in
>
> class, everyday life, or a professional relationship, whether daily or weekly or monthly.
>
> (p. 87)

Dunlap (2005) described guided journals as "a powerful research tool for capturing students'

reflective practice, conceptual change, thinking, and learning" (p. 72). Further, data collected

through journals and analyzed through a phenomenological lens allowed for capturing

experiences from their perspective. Doing so resulted in "avoiding the imposition of externally

conceived assumptions or measurements" (Risquez et al., 2007, p. 187).

    In order to collect data via student journals, this study took advantage of electronic

options, rather than using traditional paper journals. This was chosen for two reasons. First,

technology is an integral part of the educational experience at this institution. All students are

required to purchase an institute approved laptop. Students typically have their laptops with

them throughout the day; thus, electronic data collection would not require students to keep track of additional materials. Second, technology is ubiquitous to this generation of students. They have grown up using technology and, as a result, are very comfortable with a myriad of devices and software. To increase the chances of participation, it was desirable to find a medium that the students would find effortless and convenient. Taking all of this into consideration, Google Forms were selected for collecting the journal entries.

According to various staff members at the institution, Google Forms have been well received on campus. This particular tool was also chosen as it does not require a login to complete the form, which will help protect student identity. The goal of the study was not to examine growth across the quarter, therefore responses were not tracked by participant. As an added benefit, a Microsoft Excel file was automatically created to collect the responses, which facilitated printing for analysis. The various Google Forms were created in my personal Google Drive account. Even though no identifying information was collected in the journal responses, the Google Drive account required me to login in with a username and password in order to create the forms and retrieve the data. This added another layer of protection for student identity, as the data were not publically available.

To reduce burden and attrition, each participant was asked to complete four journal entries across the quarter, rather than every week. All participants were asked to complete the first journal entry during Week 1 and the final journal entry during Week 10. For Weeks 2 through 9, participants were randomly assigned to two of those weeks. Random assignment occurred by taking an alphabetical list of participants and then sequentially assigning weeks, with each participant given a pre-midterm and post-midterm week. The first participant was assigned to Weeks 2 and 6, the second participant was assigned Weeks 3 and 7, the third

participant was assigned Weeks 4 and 8, the fourth participant was assigned Weeks 5 and 9, and

then the cycle repeated to the end of the list. This random assignment ensured that a cross-

section of responses were obtained each week that when analyzed together would paint a picture

of the entire quarter.

Each week an email was sent to the corresponding participants asking them to complete a

journal entry, providing the appropriate link to the Google Form. The email was sent each

Friday at lunch time and requested a response by Monday at midnight. Starting with Week 3, a

reminder email was sent each Monday around lunchtime. Each week's form was officially

closed on Tuesday between 3:00 pm and 5:00 pm. Responses were then printed.

Observation. During fall quarter, observations were conducted in one section of the

first-year seminar. In order to determine which section of the first-year seminar to observe, a

meeting was held with the Director of Assessment at Rose-Hulman to discuss options. The

Director of Assessment suggested a particular staff member's section because he had the second

most bias in this project. He and I have worked together on numerous projects related to the

first-year seminar as well as for the Retention Task Force. With his background knowledge, his

section would be an exemplar of best practice implementation. By removing the best practice

from formal data collection, the diversity and range of experiences with the remaining sections

of the course should provide a more accurate picture.

Observations were conducted on a total of four small group lessons (one lesson did not

have a formal gathering as the freshmen were encouraged to attend the Career Fair that week)

and collected observational fieldnotes, including both descriptive and reflective notes. These

observations focused on how the lessons were implemented with both a staff instructor and

sophomore peer educator. In addition, the student-student, student-staff, student-peer educator,

and staff-peer educator interactions were also observed. Collecting observational fieldnotes allowed for (a) describing the program in detail, (b) confirming whether or not the focus group questions were appropriate, given that they reference the course, (c) providing a frame of context for interpreting the data collected in the study, and (d) understanding the utility of continuing the sophomore peer educator program in the future. Given the small class sizes, my presence was noticed. To minimize disruption, observations were conducted from the least obtrusive spot (in the back corner) and fieldnotes were collected on paper to reduce noise from a laptop computer.

Focus group. While the journals were utilized to address the first research question, a focus group was utilized to address the second research question. Focus groups are valuable as it provides the participants "the chance to discuss and react to one another's ideas, possibly expressing ideas and reactions that we as researchers might not have asked about, and stimulating thoughts that might not have come up in individual interviews" (Krathwohl, 2009, p. 248).

At the beginning of winter quarter, while the first-year seminar course was still relatively fresh in their minds, participants were invited via email to take part in a focus group discussion. From experience conducting focus groups, the ideal size at this institution is around eight students. This provides enough perspectives for the topic while giving everyone an opportunity to speak. A majority of the targeted freshmen were invited to the focus group. As with journal recruitment, freshmen enrolled in my section as well as the freshmen enrolled in the observational section of the first-year seminar were excluded.   A follow-up email was sent a week later in attempt to recruit more participants. Based on feedback from the staff participants, one sophomore did not complete his duties after the first week. As such, the freshmen in that section were excluded from the follow-up email given that they would not have much to

contribute to a discussion on the impact of the peer educator program. A total of two freshmen participated. One of the freshmen had participated in the fall quarter data collection.

At the beginning of the focus group, participants were thanked for their participation. They were told that the focus group is part of a research study and that it was necessary to collect informed consent. Students were given two copies of the informed consent, one to sign and return, the other to keep for their records. They were informed that the discussion would be audiotaped, but that no identifying information will be attached to their responses. The focus group recording was transcribed verbatim for analysis. Following standard practice at Rose-Hulman, pizza and drinks were provided to encourage attendance. The focus group was held in a conference room in the library, a central location on campus.

Data Analysis

In order to analyze the data collected through the journal template, Creswell's (2013) steps for a phenomenological study were followed. First, the responses were printed and read through for an initial understanding. During the initial reading a list of possible codes was created. Afterwards, that list was condensed by eliminating duplications (i.e., codes that represented the same idea). Once the final list of codes was established, a second reading of the data allowed for application of those codes to words, phrases, and even paragraphs of data. These codes helped to "describe the essence of the phenomenon" (Creswell, 2013, p. 190). In order to keep bias in check, the data were coded literally so as to avoid assuming the themes that would surface. Once the data were coded, themes were then fully developed from the significant statements found in the data. In addition, a description of what happened (textural) and how it happened (structural) was created. Examples were pulled verbatim from the data in order to support the themes. Finally, a "composite description of the phenomenon incorporating both the

textural and structural descriptions" (Creswell, 2013, p. 194) was created so as to relay the essence of the lived experience. This same process was applied to the focus group transcripts.

Trustworthiness

Given the qualitative nature of this research study, the issue of trustworthiness needs to be addressed. Even though the results will have limited generalizability, at the end of the study it is important that the findings do contribute to the body of knowledge. This research study followed the Guba (1981) model of trustworthiness as described by Krefting (1996).

Credibility reflects the ability of the researcher to accurately capture the reality that exists for the participants. Several strategies were employed to ensure a credible study, including reflexivity and triangulation. For the purposes of reflexivity and to provide an auditable trail of the study, a researcher journal was created to document the process, decisions made, and my thoughts and feelings along the way. Triangulation was achieved via methods of collecting data and theories supporting the results.

One of the purported limitations of qualitative research is whether or not findings can be or should be generalized to other populations. For the purposes of this study, the goal was to generalize the findings from the sample to the entire freshman population at this institution. Beyond this generalization, it will be up to the reader to determine the extent of transferability. Transferability was addressed via rich, thick descriptions of the participants, the setting of the study, and the implementation of the sophomore peer educator program. This allows the reader to understand which students and situations the research results could potentially be generalized. Given the unique, homogenous student body and institutional mission, it is likely that only other small, private, STEM-focused institutions will directly benefit from this research.

Dependability refers to the idea that if the study were to be replicated similar results

would be obtained. Confirmability refers to the idea that if others were to analyze the data similar results would be obtained. Issues of dependability and confirmability were both addressed through the researcher journal. That is, detailed accounts of the process, along with reflexivity, will allow others to audit this research study. In addition, confirmability was addressed through researcher triangulation.

Prior to formally analyzing the data, the Director of Assessment at Rose-Hulman served as a second coder on a sample of journal entries. She is familiar with the student body, which aided in understanding the context of the data, and has over a decade of experience with data collection and analysis. However, she works within academic affairs, rather than student affairs. Thus, she is removed from the issues of college transition and retention of students, providing a less biased viewpoint.

The Director of Assessment and I both independently coded the same four journal entries. Afterwards we discussed our results. Overall, we both felt that our coding was aligned. At times the exact same codes were used (e.g., "time management," "sleep"). At other times different codes were used, but through discussion it was evident that the same idea was being described (e.g., "opportunities" versus "new possibilities"). The Director of Assessment had incorporated codes not previously identified, but through discussions it was evident that we each focused on a different aspect of those statements. Her unique codes were incorporated for the final analysis (e.g., "peer support").

<div align="center">**Summary**</div>

Through a postpositivistic philosophical paradigm, this exploratory qualitative study utilized a phenomenological design to investigate two research questions: what are the academic and social challenges freshmen face in the transition to Rose-Hulman and how does the presence

of sophomore peer educators in a first-year seminar influence freshman preparation for fall

quarter challenges. A total of 41 freshmen, across 11 sections of the first-year seminar,

participated in the study. Data were collected through student journals and focus group

interviews. In addition, observational fieldnotes were collected to create a rich, thick description

of the sophomore peer educator program. The issue of trustworthiness was addressed via

reflexivity, qualitative triangulation, thick description, and a researcher journal.

CHAPTER 4

RESULTS

Locks et al. (2008) noted that "despite the wealth of high education research on college students, higher education scholars and administrators need to continue to work on building better insights into the transition process for students" (p. 259). They further explained that this work should be conducted "on the challenges students face and appropriate responses of support" (p. 259). Given that the challenges students encounter could vary with institutional type, part of the data collected in this study focused on identifying the academic and social challenges faced by students at a small, private, highly selective, STEM-focused institution. In terms of learning the requisite skills for success, M. R. Clark (2005) found that "students may be unreceptive to the knowledge [for success] until it becomes personally relevant to them" (p. 311). As such, the other goal of this study focused on how peer educators influenced freshman preparation for fall quarter challenges.

Research Question 1

To uncover the academic and social challenges faced by Rose-Hulman students, 40 freshmen completed a one item open-ended reflection prompt at various times throughout the quarter. To keep my bias in check, and address issues of confirmability, researcher triangulation was utilized prior to analysis. The response rate for each week's journal prompt varied throughout the quarter. The average response rate across the 10 weeks was 57.5%. Response

rates peaked at 70.0% during Weeks 2, 5, and 8; the lowest response rate (40.0%) occurred during Week 9.

The freshmen who completed the journal entries provided a breadth of information, but not necessarily depth to fully explain why they chose to focus on certain topics. This is not completely surprising given that the sample is comprised of students pursuing STEM majors. These students are typically mathematically, rather than verbally, oriented. As a result of this breadth, 130 unique codes were found in the data.

A total of 11 themes were developed from these codes: understanding the academic environment, forming study habits, exerting personal effort, leveraging the social environment, focusing on co-curricular involvement, desiring more time, discovering one's independence, establishing residence life, confronting new emotional states, assessing prior experience, and possessing a future orientation. The codes within each theme were designated as a major code or a minor code. Each instance (once per person per week) of the code was tabulated. A code that had four or more instances was considered major, as it represented a substantive idea (i.e., a common experience rather than an outlier). A code that had less than four instances was considered a minor code. Using Creswell's (2013) textural and structural approach to data analysis, any given code could crossover the various themes. For the purposes of this study, the major codes under each theme will largely be unpacked in the textural context. See Appendix D for a full list of codes.

Understanding the Academic Environment

Students who attend Rose-Hulman have aspirations of graduating in four years with a degree in engineering, mathematics, or science. The academic realm of college, then, constitutes

a big part of these students' lives. While not all learning takes place in the classroom, it is through the academic environment one will earn a Bachelor of Science degree.

Some of the literature suggests that "college is far less challenging than first-year students expected" (Upcraft et al., 2005, p. 5) and that "academic challenges . . . remain low in their hierarchy of worries" (Holmstrom et al., 2002, p. 438). Other literature suggests just the opposite. In their study on engineering freshman attitudes, Doolen and Long (2007) reported that "students worried most frequently about difficult classes, their workload, the costs of studying at OSU, and calculus courses" (p. 729). Similarly, from interviews with at-risk engineering students, Cliff (1995) found that "all [the students] said that this year had been the first time in their study histories that they had encountered workload pressures" (p. 177).

The freshmen at Rose-Hulman, however, fell in between these two opposing viewpoints. While their expectations did not center on academic challenges, they did report academics as a constant challenge throughout the quarter. Specifically, they mentioned challenges within their courses, quizzes and exams, grades, faculty, and the workload and pace. The overarching reason for the challenge was attributed to the fact that their collegiate experience was not consistent with their high school experience.

Courses. Many of the freshmen specifically mentioned the courses they were enrolled in, typically referencing an assignment, quiz, project, competition, or something occurring within the course. These courses included traditional courses one would expect a Rose-Hulman freshman to take: Calculus, College and Life Skills, College English (for international students), Conservation Principles and Material Balances, Differential Equations, German, Graphical Communications, Introduction to Signal Processing, Organic Chemistry, Physics, and Rhetoric and Composition.

As the quarter progressed, many began describing how difficult the courses were. For one freshman, "classes begin to become harder and harder." One student admitted he/she has "struggled in each of my classes at different times." Students also contemplated dropping a course. Overall, these courses were more rigorous than the students had previously experienced. As explained by one student, "the homework and classes themselves were more difficult tha[n] I was used to." This was also supported in the focus group when a student commented that "the curriculum was definitely a lot harder than high school."

Quizzes and exams. Respondents repeatedly described quizzes and exams throughout the quarter, often in conjunction with the grades they earned. The challenging nature of those quizzes and exams was largely due to issues of awareness and preparation. At the beginning of the quarter, students talked about their "first quiz" and "first exam." These were the students' first exposure to assessments at Rose-Hulman. Not only were the students unfamiliar with Rose-Hulman assessments, for at least one student, "the first tests were slightly wider (more general) than expected." After the first week of exams, familiarity helped, to an extent, with future exams. One student explained, "in this second round, I was able to really get into my stride and settle into a routine, particularly since I felt far more comfortable with the material." For another, "with this week came the second week of exams. This was a struggle in some ways, but also far easier than the first week of exams in a way."

Others focused on the fact that there were multiple exams in the same week, as illustrated by the comments "I had three tests in various subjects which were very academically challenging" and "this week (9th week) was laden with many tests and quizzes." For one freshman, he/she lacked awareness of the content to be covered on the exams, stating, "Sometimes I wouldn't know exactly what was going to be on the test so I learned more of the

material than necessary and forgot some of the stuff that I needed to remember." Another freshman admitted being unaware that there was an exam, stating "there was no homework for this week, so I assumed that there was no test."

In terms of preparation, many students felt they were prepared for the quizzes and exams, until they received their grades. This called into question just how prepared they really were. For example, as one student described,

I also received a bit of a shock when I found out some of my quiz grades were far lower than expected. It was a surprise especially since I was very confident on the material. This has caused me to doubt whether or not I am really understanding what is being taught in class.

Another freshman explained, "The biggest challenge for me this week are first exam grades. I somehow lose the confidence to get an A in there courses, and . . . [the] only way out is studying harder." Later in the quarter, a student mentioned "despite studying a lot for a calculus exam, I still ended up bombing it when I took it on Friday, which was distressing." Putting more effort towards exams was a beneficial strategy. One of the freshmen explained, "Though I didn't do too well on the first tests, I quickly rebounded and began to study harder to do well on the later ones."

The lack of class preparation surfaced in the comments as well. At the beginning of the quarter, one freshman described his/her experience:

In different subjects (such as calculus), I've taken these classes already and seen the material, however it's been two-three years since I've seen any of it. This made the first week of exams (stuff I really didn't remember how to do, yet was 'assumed knowledge') awfully challenging.

For this student, the course did not spend time on material that should have already been learned. The exams, then, required the student to draw upon prior knowledge. At the end of the quarter, one freshman acknowledged,

> I don't think I was ready for how little a class prepared me for the test because I learn best with homework and when the required homework only covers the basics without going more indepth [*sic*], I think that that's what will be on the test.

This comment suggests that the model for exams was different in high school, largely based on the information contained in the homework.

Not all students were unprepared, however. One student commented, "I had my first quiz this week . . . and did well on the quiz." Another reported, "This week, I had my first exam. It was in physics, and . . . I felt prepared." In terms of how the freshmen prepared for exams, one student indicated "study[ing] before every test for at least two hours and went to study sessions also. I studied with friends and by myself. I did everything I could do to prepare for these tests." While this student did not comment on his/her grades, he/she did indicate that "college this week has been good."

Interestingly, the fear of failure affected a couple of students' preparation. As described by one student,

> With all the tests and stress, I was sleep deprived and on edge. I was scared of doing horribly—which ended up not helping me study at all as I found out this week when I got my tests back.

Later in the quarter, a freshman explained that he/she "had to go through the entire week thinking about upcoming tests; would I pass or not; did I need to possibly drop a class."

In general, freshmen described the quizzes and exams as "difficult" and "challenging." This rigor was noted by one student after the first set of exams in the statement "it made me realize how tough future tests could be, especially in other classes." For another freshman, the first week of exams made him/her realize that "the smart thing to do is to study every day so weeks with multiple tests aren't as stressful."

Grades. There were a few instances where students talked about grades independently of quizzes and exams. One student reported doing poorly halfway through the quarter with the comment "I was having difficulty understanding the material and had gotten a D for a midterm grade." Similarly, "I have been doing a poor job studying and so my grades have dropped." Another freshman described having "not-so-amazing grades." He/she further accepted this fact by stating "I decided to learn from my mistakes that I make this quarter and get what I get. Stupid yes; learning experience acquired–most definitely." Rather than failing a laboratory course, one student decided to simply drop the course.

One comment does shed light into the deeper reason why students chose to write about grades. As stated by one freshman, "I was able to pull my grades up all my grades to As and Bs (which in high school I would've considered very disappointing, but I know better now)." This suggests that freshmen have to re-evaluate their standards. Getting a B in college is now acceptable, whereas a B in high school would have been devastating.

Faculty. There were only two instances where the faculty were viewed as a challenge. One student indicated that he/she "did not learn well from one of the professors." Another student, reflecting back on the quarter, indicated that he/she "would have felt more prepared if there was more input in what classes and when we took our classes rather than the adviser setting

them up for us." All other references to the faculty were stated in a positive light, as a response to other challenges.

From early on, the students recognized that the faculty are a valuable resource, describing them as patient, understanding, nice, and willing to help. One of the freshmen, after doing poorly on an exam, commented,

> I know that if I have a problem I can go to them [the faculty] for help in my study habits or with understanding a concept in general. In fact, I'm trying to get a time to meet up with my math teacher so he can help me find a different study habit that helps me.

Another student, after having difficulty with the homework, explained,

> Any challenges that came through homework I was able to work out by getting help from friends or teachers. For example, my lab project . . . wouldn't work in MATLAB, so I was able to talk to my professor so he showed me what I was doing wrong.

Across the quarter, students reported that the faculty provided guidance for fall quarter, for finals, and for the future.

Workload and pace. Given that Rose-Hulman is on a quarter system, each course is more intense than the traditional semester-long course. As a result, students described both the workload and the pace of the courses as challenges. In general, students noted an increase in workload, often expressing difficulty in keeping up. Further, the increased workload interfered with other aspects of college. For one respondent, "I ended up losing a fair amount of sleep and social interaction while trying to keep up with my workload." As explained by another student, "it was difficult to find the time to spend with people because of the increased homework load."

At times, comparisons were made with high school and their peers. When asked to reflect on the biggest challenge expected, one freshman wrote "The biggest challenge that I

expect to face in college is the transition of going from a light amount of work and responsibility in high school, to a large amount of work and responsibility in college." Another student noted that "friends at other colleges seem to be thoroughly enjoying their time and not having a lot of stress or work bearing down on them."

As for the pace, with less time available each course had to cover material much more quickly. As described by one freshman, "everything felt like it was accelerating." Another student explained these challenges when reflecting back on the quarter:

> My high school prepared me for the work load of the classes, but I was unprepared for
> the speed. I'm use to less intelligent kids holding back the class making it easy to learn
> without studying. Here, everyone is so smart so classes cover material quickly.

Forming Study Habits

Whereas the academic environment is largely dictated to the students, study habits are those that the student makes a conscious decision to employ. By and large this effort takes place outside of the classroom. The literature stresses that in order to be successful, college students must take responsibility for their own learning (e.g., Kidwell, 2005; Roderick & Carusetta, 2006). Data from the journals indicated that Rose-Hulman students reflected an internal locus of control and discovered a need for an expanded set of study habits that had not previously existed. Doolen and Long (2007) reported that "81% of current students [engineering freshmen] felt that they needed to spend more time studying" (p. 727). At Rose-Hulman, this need was due to issues of quantity and quality. The quarter system necessitates that more information be covered in a shorter amount of time. As such, there was a large quantity of coursework to complete. Further, students came to the realization that college would require higher levels of learning, not merely memorizing facts to recall on an exam. The study habits that surfaced in the journal

entries encompassed a range of activities that go beyond studying for an exam, including completing assignments, understanding the material, seeking help, and utilizing the available resources.

Assignments. The freshmen frequently mentioned assignments (e.g., homework, projects) as a challenge across the quarter. In general, the students described the assignments as "difficult" and "really hard." Based on the comments, the quantity of assignments the students were expected to complete is greater than they were expected to complete in high school. As stated by one freshman, "I have also had more homework than I am use to." Other students commented about having several homework assignments due on the same day.

As a result of this quantity, students were devoting a lot of their time to complete the assignments. As described by one freshman, "there was a GraphCom homework assignment that I spent 4 frustrated hours trying to figure out before someone finally noticed and took pity on me." Students were often staying up very late to complete their assignments. This is supported by comments such as "I stayed up later than I ever have before to do homework," and "I was up until 3am making up for the homework that should have been done."

Amplifying the challenge is the fact that assignments are only one of many activities that students involve themselves. When thinking about fall quarter, students anticipated an issue with the proper time allotment for assignments. As stated by one freshman, "all the college traditions that I'm 'required' to take part in that make it a lot harder for me to do homework." Similarly, "getting all the homework done along with participating in clubs and spending time with friends will most likely pose a challenge." In spite of these challenges, a number of freshmen indicated that they were able to start their work early and even work ahead. This saved at least one student from having to stay up all night.

Studying. Studying seriously is a new concept for some of the freshmen. High school did not pose a challenge, as illustrated by the comment, "I'm use to less intelligent kids holding back the class making it easy to learn without studying." Others described the importance of developing study habits now, alluding to the idea that is was not necessary previously. One freshman felt that "right now is the best time to start developing better study…habits, and the longer I wait to practice these the harder it will be." For another, "I've gotta make sure that I stop thinking lightly of studying."

Other students, however, were not challenged by studying because of their high school experiences. One student attended a "relatively competitive high school so studying was not an issue" while another "experienced some difficult classes in high school, so I knew how to study when I really needed to." Unfortunately, even at the end of the quarter, the freshmen recognized that they still have work to do in the realm of studying. This is supported by comments such as "the only times I felt unprepared was studying for finals, since I still do not have my studying habits perfected" and "I have little to no study skills/habits."

Similar to courses, studying was mentioned as one activity in a litany of events taking place. Students reported that finding the right amount of time was at the forefront. One student described this as an expected challenge with his/her comment, "trying to strike the right balance between all of the activities going on along with my studies."

Understanding material. Students recognized a need to go beyond merely memorizing information, but also understood that this was not an easy task. Student indicated that it was a struggle "applying in class concepts to the homework assigned" and "extracting the most you can from that work and truly learning those concepts." Early on, students began to doubt how much they really understood the material. After receiving low quiz grades, one freshman indicated that

"this has caused me to doubt whether or not I really am understanding what is being taught in class."

Sometimes understanding the material just happens; for others, this process is facilitated if time is spent doing the homework. Several of the freshmen noted that as time passes, it becomes easier to understand the material. In reference to the second set of tests, one student commented, "In this second round, I was able to really get into my stride and settle into a routine, particularly since I felt far more comfortable with the material." For another respondent, he/she "finally mastered the material" after spending a significant amount of time at the library. In reflecting back on fall quarter, one student indicated that he/she "felt more prepared for the academic challenges that faced me as the quarter progressed and as I became more familiar with the material."

Seeking help. Based on student responses, seeking help, like many behaviors in the study habits theme, has not always been put into practice. Given their high aptitude and success in high school, Rose-Hulman students were often the ones sought after for help. Reversing that role, and admitting to themselves that they cannot do something on their own, requires them to lay down their pride. One freshman indicated that he/she expected this to be a challenge, while others indicated throughout the quarter that this was a challenge. This response sheds light into a probable reason why:

> The largest challenge I have faced so far–am still facing–is trying to reach out to people. Both academically and socially, it's difficult to take initiative. I'm struggling with the mindset that "I should be able to figure this out on my own" and a desire not to appear unworthy or vulnerable.

This mindset is further supported by the comment "I just need to stop thinking that being dependent on people is a weakness."

Not all freshmen felt that seeking help was a challenge, however. There were a number of references where students were actively seeking help. Students sought help from a number of groups for a number of reasons. For a difficult class assignment, one student received help from his/her "RA [Resident Assistant] and other kids in my class" acknowledging that he/she "was able to get further than I would have by myself." Students also reported "talk[ing] to my professor" when given a challenging assignment or when having trouble with the software used in class.

Resources. Parallel to the idea of seeking help is also seeking out the resources available on campus. As new freshmen, there is a learning curve as they transition "away from activities and resources available at home, versus those available…here [Rose-Hulman]." One freshman had the foresight to recognize that "friends and faculty around campus…tend to be each other's biggest . . . resources." Another freshman, however, anticipated that he/she would underutilize the available resources.

Almost all student comments in this category suggested that the resources they did utilize throughout the quarter were beneficial. These included attending study sessions, visiting the library, and referencing course syllabi. For one student, "the learning center especially has helped me stay on top of course work." Another student, however, indicated that even after getting tutored in the residence hall, he/she "still struggled with the material."

Campus resources also surfaced in the focus group. When asked about the biggest surprise during fall quarter, one student commented "the help mostly." He/she further explained,

I know in high school [you had] the internet or you just got lucky, because my parents

didn't really know that much about calculus or physics. You went home [after school]

and there were no teachers, there were no peers, there was no…learning center, so that

was really nice, surprisingly good.

Exerting Personal Effort

In recent years, collegiate professionals have noticed "hovering parents who are

potentially over-involved in the lives of their child" (Padilla-Walker & Nelson, 2012, p. 1177),

resulting in a reduction in the responsibility placed on a young adult. In spite of this pervasive

helicopter parent phenomenon (Cutright, 2008), college students will ultimately need to exert

their own effort in order to succeed. This requires a level of effort that may or may not have

been expended previously. In addition, with all of the people, events, and opportunities on

campus, there are a lot of distractions competing for attention. As a result, the freshmen students

reported varying levels of working hard, productivity, completion, procrastination, falling

behind, perseverance, and self-efficacy.

Working hard. Putting forth effort often manifests itself as working hard. Though not a

lot of detail was provided, the idea of working hard was present in student comments. At Rose-

Hulman, one student knows that he/she "will still have to work hard." To another student,

working hard means "putting my 'nose to the grindstone.'" When faced with multiple exams in

one week, one student responded by "work[ing] harder and earlier" and another "worked harder

to catch up" after falling behind.

Productivity. Productivity, as reported by the freshmen, surfaced in two directions.

Several of the students described situations which resulted in unproductive days. Often this was

early in the quarter when other competing activities were present. One student noted that "the

stress that came with preparing for the [career] fair was nerve-wracking, and the post-stress

afterwards caused me to do absolutely nothing productive because I was so exhausted." As

described by another student,

On Tuesday, I had an interview . . . This was stressful because it was my first interview

of the year and because it occurred right before jazz band practice. I most likely got

nothing accomplished that night, but on the bright side, I ended up getting the job!

Normally, study groups are encouraged as the whole is greater than the sum of the parts.

However, one student described an attempt to work on "homework with friends" stating that "the

amount of talking more than overpowered the amount of productivity."

In contrast, however, one student felt that planned extra-curricular activities provided a

much needed break which "helps to deal with these academic challenges." He/she further

explains that the alternative of "sitting down and watching TV" makes him/her "feel

unproductive afterwards." From a different perspective, one freshman aimed to "be productive

like they [adults] have learned to be."

Completion. Parallel to the idea of productivity is completion. Early on students

thought it would be "tough to get all the things done." Over the quarter this turned out to be true

in varying degrees. For some, they were simply not able to complete their assignments. Others

indicated that they completed everything, but often at a cost. One freshman reported that he/she

"had to stay up late finishing them [long term assignments] right before they were due." Another

explained that "while I was able to get my work done on time, I found that I was generally

completing it far too close to the deadline for comfort" and further "had to stay up rather late

working on assignments on several occasions."

Procrastination. One barrier to productivity and completion is procrastination. Procrastination was an expected challenge noted at the beginning of the quarter. One freshman even posed the scenario where he/she felt "it will be difficult to say no [to other activities] and then all of a sudden it will be midnight and there will be an assignment due that I have yet to start." Another student provided insight as to why procrastination happens, explaining that "putting things off seems far easier than doing them ahead of time." It seems, at times, there is no explanation for procrastinating, as suggested by the comment "I feel extremely overwhelmed [academically]…but I still put off my work until the last minute." Though in the minority of comments, one student indicated that "when it came to homework, I didn't procrastinate or waste time doing useless activities."

Procrastination is a widely studied topic throughout the literature. In a qualitative study, Klingsieck, Grund, Schmid, and Fries (2013) were able to identify the personal and situational antecedents to procrastination. From the journal entries, Rose-Hulman students identified with the competence-related personal antecedent (focused on the estimation of time needed and procedural task competence) as well as the external structure situational antecedent (which takes into account the amount of other tasks, distraction by friends and social events, among others).

Falling behind. If a student is not productive and has been procrastinating, it does not take long to fall behind. However, the comments made by the freshmen suggest that even when one is productive, falling behind still happens. Throughout the quarter, the freshmen described general feelings of falling behind. This is supported by comments such as "I struggled to have the motivation to study hard enough to keep up" and "keeping up with the work is difficult." At other times, the students described more specific instances of falling behind. For one respondent, "all that stress [from the Career Fair] causing me to be more unproductive made me

feel a bit behind in my classes." Other students referenced the idea of having to "catch up" on their assignments. At times the social environment was thought to be the cause of falling behind. Students expressed the ideas that "catching up on work after homecoming kept me occupied" and "it was hard to keep up with my classwork due to engagement in social activities."

Perseverance. Many individuals live by the mantra "when the going gets tough, the tough get going." Rose-Hulman freshmen are no exception. Responses throughout the quarter described perseverance both in theory and in practice. Right off the bat, students felt a connection with each other in terms of "we are all in this together and we are not going to let each other fail." Others described how "nothing would stop me from reaching my goals." One freshman was confident that he/she "will conquer all of this stress and all of the many distractions, and like my new bumper sticker says, 'I will survive Rose-Hulman!'"

Beyond having a mindset of perseverance, students also reported specific instances in which they did persevere. After spending "long house in the library" one student reported that he/she "finally mastered the material." When a student felt homesick, he/she "responded by keeping on with my school and extracurricular activities and turning to my friends for comfort and relief" and after a tough week one freshman reported "I made it through." After receiving poor grades on tests, one freshman "quickly rebounded and began to study harder to do well on the later ones." In spite of "not learn[ing] well from one of the professors" a student reported "I made it through and am a more prepared student because of it."

Self-Efficacy. According to Bandura (1986), "perceived self-efficacy is a judgment of one's capability to accomplish a certain level of performance" (p. 391). This concept is found in the literature on higher education, but often in the context of student attrition (Hsieh, Sullivan, & Guerra, 2007) or as an influence to career choice (Zeldin & Pajares, 2000). While students

aligned with the research on procrastination, self-efficacy in the current study was described more in the context of feeling prepared or a lack of self-efficacy in being able to solve some of the problems.

Throughout the quarter, some of the freshmen described scenarios related to self-efficacy. As stated by one student, "there is nothing that I cannot do." At times the notion of self-efficacy surfaced through a feeling of being prepared. Students made comments such as "I was very confident on the material" and "I felt prepared."

At other times, however, students described a lack of self-efficacy. As illustrated by one freshman, "My . . . homework was also very stressful because it was comprised to four problems that took forever to solve, and had me freaking out because I couldn't solve the systems of equations needed to find all of the variables." Others described "struggling with the mindset that 'I should be able to figure this out on my own'" and "los[ing] the confidence to get an A in these courses." Though not explicitly stated, this lack of self-efficacy probably stems from the fact that these students had all the answers in high school; they were the ones others sought out for assistance. They are facing, for the first time, the fact that they do not have all the answers and will need help.

Leveraging the Social Environment

Colleges desire for their incoming students to feel welcome and at home in their new environment. The social environment begins to take shape as one moves onto campus and participates in orientation. Students are surrounded by people, some of whom become their friends and classmates, in addition to numerous events and opportunities.

The literature suggests that making friends is a prevalent concern among first-year students (Paul & Brier, 2001; Keup, 2007; Terenzini et al., 1994). Amelink and Creamer (2010)

found that for engineering students "peer support and respect received from fellow students was noted as especially important to pursuing an engineering major" (p. 88). Allendoerfer et al. (2012) found that students at various institutional types reported the importance of friends for creating a sense of belonging, providing a break from studies, emotional support, and assistance to stay on track and get through the homework.

Contrary to the literature, Rose-Hulman freshmen did not appear to be as concerned about making friends. In fact, friendship and socialization were often seen as a distraction, hindering their ability to focus on other pursuits. A few students, however, understood that peer support was extremely important. The key was finding a balance.

Friends. There are numerous studies suggesting that making friends is a major challenge in the transition to college (e.g., Terenzini et al., 1994). For a couple of Rose-Hulman freshmen, this rang true. Students talked about some of their approaches for making friends, including attending "social events" and "find[ing] things in common with them." They mentioned that they "wish there was an easier way to get to know more people" and that it can be difficult "trying to reach out to people." One presumed international student explained, "I don't have many friends here although I am used to it. It seems that Americans don't like me much. Perhaps I just look hard to get along with." It may be that the difficulty of making friends changes depending on whether or not one is part of the dominant culture. That was the extent of the challenge, though.

Interestingly enough, when freshmen talked about friends as a collection of people it typically had a negative connotation. For the freshmen, both the expectation and reality was that it was hard to maintain friendships with all that competes for their time. One student described "having a very hard time managing my time, all of my new friends, & my money." Another

challenge described by the freshmen was dealing with friends outside of Rose-Hulman who are not facing the same struggles. As explained by a student,

> I think maybe the hardest part is talking to friends at other colleges that seem to be thoroughly enjoying their time and not having a lot of stress or work bearing down on them. Going to parties multiple times a week and still handling their course load without breaking a sweat, and they are still going to good schools.

For another freshman, "I also had the challenge of meeting an old friend…that I have not seen in years. It was challenging, because I did not know how to act and how to handle changes in both me and her." This story implies that former friendships do not always last, which can have ramifications on the future depending on how much each was supporting the other.

 Socializing. Students described socializing from a number of perspectives. Several of the freshmen described how they socialized. This included spending time with friends, attending social events, watching movies, and playing video games. Other freshmen felt that they did not always have adequate time to devote to their friends. As stated by one freshman, "it was difficult to find the time to spend with people because of the increased homework load." For another, "I honestly still struggle with finding the perfect balance between academic dedication and maintaining relationships with my friends."

 While some struggled to find time to spend with friends, others described how socializing interfered with other pursuits. This implies that perhaps too much time was dedicated to social endeavors. As described by one freshman, "every week there is a constant struggle between hanging out with friends and getting everything else done." For another, "I found that it was hard to keep up with my classwork due to engagement in social activities." One freshman described an attempt to study with friends. However, he/she reports that "the amount of talking

more than overpowered the amount of productivity." Socializing was even termed "social distraction" by one student. As he/she described, "I'm not used to hanging out with people every night, so when the opportunity to hang out with friends pops up, I of course take advantage of it."

Still others described how they limited their social activity when they realized it was having a detrimental effect. One student recalled "losing a fair amount of sleep and social interaction while trying to keep up with my workload." For another, "recovery from midterms" resulted in "restricting social activity." After the College and Life Skills time management lesson, one freshman realized that he/she "spent too much time doing activities and mingling with people." In order to survive another week of tests, he/she planned to "keep mingling with my friends to a minimum."

Peer support. While students had mixed experiences with socializing, they frequently described how their peers supported them in their collegiate endeavors. From the beginning, one student was able to articulate that "friends…tend to be each other's biggest supporters…and we are not going to let each other fail." Most described peer support in academic ventures. This support was helpful for figuring out software issues, completing challenging homework assignments, and studying. One freshman recognized that by "get[ting] help from my RA [Resident Assistant] and other kids in my class . . . I was able to get further than I would have by myself."

Beyond specific academic challenges, the students referenced the support they received from peers for the transition as a whole. As described by one freshman, "so far, luckily, all of my professors and peers have been incredibly patient and understanding, and have made the transition much more comfortable than I was expecting." Another explained,

I was also able to confide in some seniors that I work with that told me that it is always more difficult first quarter for freshmen…They told me not to freak out and to ask for help, to reach out to everyone around me for help and that others would reach back and give me the aid I needed.

Focusing On Co-Curricular Involvement

While technical skills are being developed through courses, personal and professional skills are often developed or refined through co-curricular involvement. Co-curricular involvement also provides an outlet for relaxing and managing stress, as long as one is not overcommitted. There are a number of avenues for co-curricular involvement at Rose-Hulman, including athletics, band, choir, Greek life, hobbies, musical theater, and volunteering.

While Rose-Hulman freshmen touched on each of these areas, the a majority of references fell into the categories of extra-curricular activities (non-specific), clubs and organizations (non-specific), Greek life, opportunities at Rose-Hulman, and working. While Keup (2007) found that first-year students were "much less involved during their first year of college than they were in high school" (p. 18), it appears that Rose-Hulman students are much more involved in college. The central challenge, then, with co-curricular involvement was a tendency to tip the scales toward those extra activities, rather than achieving a balance.

Extracurricular activities. Rose-Hulman provides numerous opportunities for students, and this was noticed by the freshmen. They made comments such as "all of the activities going on" and "the vast multitude of activities offered." As noted by a student, "if there is something going on I want to be involved." With such variety, it is easy to spend more time than desired or even planned on these activities. Reflecting back on the quarter, one freshman indicated "I was unprepared for the amount of time spent on…extra curricular [*sic*] activities."

From the beginning of the quarter, the freshmen were expecting to run up against the challenge of balancing the fun side of college with studying. As explained by one student, "It is going to be important for me to make sure I have time for homework and studying but at the same time be able to be involved in other things." While some were able to "make multiple decisions regarding what not to do" others realized that they "spent too much time doing activities." As expressed by a freshman, "I honestly feel like I cannot have a fair balance of social to studies."

For others, the challenge was overcoming a reserved nature in order to participate in extracurricular activities. As one student described,

> I may strive to be outgoing and get involved in many groups and programs, but I honestly have never been a "social butterfly." This past week, I have tried to go to many social events (I actually made some friends too) but I still often feel introverted.

Though no formal data have been collected to assess introversion/extraversion on this campus, the stereotype is that students who pursue STEM fields are often introverted and lack social skills. For this group of students, however, introversion was only briefly mentioned.

Clubs and organizations. As with extra-curricular activities, there are myriad clubs and organizations for students to get involved with. According to the Rose-Hulman (n.d.c) website, there are currently 112 registered organizations. These organizations cover every interest from astronomy to yoga. If a student has an interest that is not currently an organization, he/she is encouraged to form a new organization.

Students reported being "very involved with the available clubs and activities here on campus." Again, with such variety, students tend to overcommit. As described by one freshman, "I found myself diving head-first into everything I had the slightest interest in."

Similar to extracurricular activities, students must make decisions about how much and when to be involved.

Students do recognize that they cannot be involved in everything, as often times there are conflicts. One student explained that, "one of the clubs I am joining conflicts with my floor dinner, which means I'm missing out on one of the aspects of the rose [Rose-Hulman] community." However, their level of involvement appears to be contributing to their stress level. As described by one freshman, "I had my first stressful week this week. It was a combination of all of the events that where [*sic*] going on, homecoming, test, and club events, and a lack of sleep." Other freshmen echoed this sentiment, whereby clubs and organizations were the cause of a very busy week.

Greek life. Greek life is a subset of the organizations on campus, but was specifically mentioned enough times to warrant analysis. Rose-Hulman allows freshmen to pledge a fraternity or sorority during their first quarter on campus. This had a noticeable impact on the students throughout the quarter. Affiliating with Greek fraternities and sororities is very time consuming. As described by one freshman, "because I had also very recently affiliated with one of the Greek organizations here on campus, I was very busy outside of classes with new members socials." Another student listed "rush events at fraternities" as one of many activities that led him/her to feel like "there is no time to do anything." One student explained the bigger impact that Greek life has had:

> I have been doing a poor job studying and so my grades have dropped. Soccer takes up a
> lot of my time as well as fraternity stuff…However, not all of my efforts are given
> toward school work. And actually, most effort is given towards soccer and triangle
> [fraternity].

Many freshmen are expending effort towards Greek life that could be better spent focused on academics. Other students, however, felt that being affiliated with a Greek organization has aided or could aid their studying. This is supported by comments such as "I am also much closer to my sorority, and I have found the group helpful for studying as there are older girls from my major" and "I think that having an additional group of people will aid me through both academic and social challenges."

Opportunities. The idea of opportunities, as explained by the students, is very hard to describe. When freshmen mentioned this idea, it was typically very vague in nature. However, given the context of their comments it appears that they saw opportunities as both a resource and a distraction. As a resource, a student questioned whether they will miss out on "opportunities of a life time." In reflecting back on the quarter, one freshman felt "prepared for the challenges that I have faced this quarter because I saw (and used) all of the opportunities that are available to me here at Rose [Rose-Hulman]."

As a distraction, students mentioned "[with] all the other things that rose [Rose-Hulman] has to offer, I think that it could be hard to choose what to do and what to skip out on" and "with all the new possibilities posed by college, I think it will be difficult to say no." As further described by one student, "I struggled to have the motivation to study hard enough to keep up. I was always thinking about the Career fair and other fun opportunities."

Working. The freshmen mentioned the idea of working in a matter of fact context; that is, stating the fact that they had a job. Students also described having interviews, being offered jobs, and starting their new jobs. For one freshman, acquiring a job was necessary so that he/she "could continue to partake in so many activities & chauffeur my friends to town." One student anticipated being stressed by his/her work study job, but reported that "this turned out false as all

of my assumptions have to this point." One freshman did mention his/her job as one of many activities that "have begun to take up a great deal of time" but this was the only support for the time consuming nature of working.

Desiring More Time

As mentioned, there are myriad activities competing for students' attention. Whether they are curricular (class and studying) or co-curricular (clubs and organizations), students have a finite amount of time each week in which to engage in these activities. It is up to the student to decide the best use of that time.

Time management surfaces in numerous studies on college transition, often as one of the biggest challenges (Hoffman et al., 2002-2003). Ari and Shulman (2012) reported that "students need to find a new balance between school, work, and leisure activities, while still finding time to sleep" (p. 274). Gibney et al. (2011) found that nearly a third of the University College Dublin students they surveyed rated their time management abilities as below average or in the lowest 10%. Further, in a college of engineering, Amenkhienan and Kogan (2004) discovered that "most participants agreed that good time management was particularly difficult at the beginning of their college career, often because they had been successful in high school with far less overall effort" (p. 528).

Similar to the literature, the most frequent challenge reported by Rose-Hulman freshmen was time management. However, throughout the quarter, the freshmen described the idea of time in both traditional (e.g., managing time, balance, staying up late) and unique ways (amount of time). Ultimately, students have difficulty establishing the appropriate balance between academics and their social life.

Managing time. Even though a couple of freshmen felt they entered college with the necessary time management skills, managing time was still by far the most frequently reported challenge they expected to face during fall quarter. One student expressed his/her challenge by stating, "Relearning time management. There is nothing that I cannot do assuming that I learn to manage my time." After running out of time, several students realized that better time management is in order. This is the case not only for immediate tasks but for future tasks as well. Regarding tests, one student wrote,

> The smart thing to do is to study every day so weeks with multiple tests aren't as stressful, but that is difficult to carry out as there are five classes in which we have homework, so something always gets left out. It is definitely doable, but requires better time management than I currently have.

Another student noted the need for "budgeting time for longer term assignments, such as weekly problem sets, alongside daily homework." One freshman explained that he/she responded to the challenge of time management by "actually doing work before the night before it was due."

Throughout the quarter some of the freshmen felt like they were actually learning to manage their time. However, several freshmen reported their struggle all the way to the end of the quarter. They mentioned that they "struggled with handling my work in a time friendly way" and plan to "teach myself the necessary social & time management skills that I will need to survive in the real world."

Balance. Part of the necessity of managing one's time is to find a balance between academic pursuits and social endeavors. Students saw a need to balance a variety of things, including extracurricular activities, academic studies, campus events, and time with friends. As stated by one freshman, it was challenging to balance "all of the events . . . while also doing

homework and getting a decent amount of sleep." The ideal balance was described by the freshmen as right, fair, and perfect.

Though they were in the minority, some students indicated that they were able to achieve this balance. One freshman "managed to balance everything and . . . [as a result] enjoyed this week." For another student, focusing on homework during the day instead of waiting until the evening allowed him/her "to balance my school work and outside time with friends." Many others, however, felt this balance was unattainable. As described by one freshman, "I honestly feel like I cannot have a fair balance of social to studies."

Prioritizing. Being able to balance one's schedule so that there is time for everything often requires prioritizing. The freshmen could anticipate this challenge. One student, in the first journal entry, was already aware that he/she would have to make choices. As illustrated,

> For example, one of the clubs that I am joining conflicts with my floor dinner, which
> means I'm missing out on one of the aspects of the rose [Rose-Hulman] community.
> Another is . . . a national convention is this term, and I'm really interested in going, but it
> is the last two days of week 9, so I am not sure if it is a good idea.

A couple of students described their experiences prioritizing with comments such as "I have had to make multiple decisions regarding what not to do" and "I used time management skills and prioritized well."

More often than not the freshmen indicated that they prioritized social activities over academics. For example, one of the freshmen acknowledged that "most effort is given towards soccer" and a fraternity. Based on student comments, this prioritization had several negative consequences. For the student above, the result was "a poor job studying and so my grades have

dropped." For others, it resulted in starting homework at the last minute and not getting important things accomplished.

Staying up late. The intensity of the curriculum at Rose-Hulman often dictates more time spent on homework and studying. As described by one freshman, this usually means staying up late:

> This week I had a Rhetoric paper, Physics homework, and Calc [Calculus] homework all on one day. I stayed up later than I ever have before to do homework . . . on a school night none the less . . . staying up crazy late for homework here is inevitable.

Another described the shift from high school to college:

> Back in high school, I thought it was a stretch to have to stay up til [*sic*] midnight in order to finish my homework. Here, that became routine (most nights I stayed up until at least 2); all-nighters finishing homework were also something that I had never experienced, while here I had one almost every other week.

One student discovered that working ahead meant not having to stay up all night to complete assignments.

While it appears that staying up later than usual is the norm, many students are staying up late into the night to finish homework because they prioritized social activities. One freshman who put effort into the Career Fair noted, "I was always thinking about the Career fair and other fun opportunities. I found out that it isn't fun to cram for a German test the next day at 2am." For a student who had an unproductive night due to a job interview and band practice, he/she "was up until 3am making up for the homework that should have been done that night."

Sleep. The natural consequence of staying up late is the loss of sleep. Throughout the quarter students described being "sleep deprived." Again, many are sacrificing sleep in order to

finish homework. As described by one student, "To catch up on my homework, I cut back on sleep and skipped concert band practice because I needed to get that problem set done."

Other students described a challenge of getting to sleep. For one student, "I have been a bit sleep deprived though, I find it hard to get myself to go to sleep, even when I have no more work to do." Another described the "struggle to stay awake in class but then once class is done I'm not tired anymore." Even though it is not directly stated, there is an underlying suggestion that perhaps once a routine is established whereby students are consistently losing sleep, it is hard to break out of that habit.

Even though most of the students who responded are losing sleep, they do recognize that it is not the ideal situation. Aptly noted by one student, "running on 3 hours of sleep is not a good thing." In one extreme case, a student made this observation:

> I completely messed up my life. I didn't sleep at night and played video games then slept in the daylight. For this reason I overslept many classes including my physics lab which led to no other options but dropping it if I didn't want to fail this course.

At least one student began taking naps during the day to make up for the lack of sleep at night. Another student made the decision to cut back on socializing in favor of sleep. At one point, a freshman indicated that he/she had "a lack of sleep" which elevated the stress of the week "until I got enough sleep on Thursday."

Amount of time. Students attending Rose-Hulman typically have a strong background in math, easily able to quantify things. At times students demonstrated this when describing the amount of time expended. For example, "I spent 4 frustrated hours trying to figure [the assignment] out" and "[I] had worked on it [assignment] for 6 hours." Surprisingly, though, most of the statements made related to amount of time were quantifiers, rather than quantified.

These included more than enough, a bit of each day, decent amount, bigger amount, long hours, some time, more time, no time, too much, a lot of, and forever.

One could speculate that part of the time management challenges these students are facing are due to a lack of quantifying the time they expend to fit into the allotted 168 hours each week. Students may be repeatedly over or underestimating how much time was devoted to an activity. One freshman reported "spending some time with friends and watching a movie." Right before this statement, the student described having issues with his/her studies, which calls into question just how much "some time" amounts to.

Other. There were a number of codes related to time that met the criteria for being labeled a major code; however, they lack any practical significance. These included students' descriptions of how they felt time was passing, noting when calendar events took place (e.g., fall break, homecoming, Halloween), commenting on the schedule of courses and getting into a routine, and a mention of free time.

Discovering One's Independence

Beginning a college career is often the first time young adults have exercised their independence, as this is often the first real experience living on their own. As students navigate these new environments they assert their independence. There are noticeable adjustments students make in the transition whereby students must take responsibility for themselves and learn life's lessons through experience. Holmstrom et al. (2002) noted from interviews with families a "pragmatic challenge . . . [to] manage their daily lives . . . with less parental involvement" (p. 450). Though not explicitly described, Rose-Hulman freshmen implied that the challenge was uncovering all of the different areas in which they would have to learn to handle

on their own. Whether it was doing laundry or asking for help, the fall quarter opened their eyes
to a new level of independence.

Adjustment. The transition process requires adjusting from the old to the new. This is
more than mere exposure to new situations and environments. Adjustment indicates that
students are acting upon the changes in front of them. They are choosing to respond in ways
under their control to situations that may or may not be within their control. The freshmen
participating in this study described a number of areas in which they expected to adjust. These
included the increased course loads and workloads, the amount of responsibility they would have
to assume, the activities and resources, the academic environment, and the collegiate lifestyle.

Throughout the quarter, students reported the areas in which they found themselves
actually having to make adjustment. For some, there was a general adjustment to the entire
college experience as noted in the comments "adjusting to college life and finding the most
efficient means of solving the challenges I faced" and "adjusting to college in general." Others
provided more specific examples. For example, the residence hall was reported as a challenge
on the basis of noise. At home, the noise level was controllable. In the residence hall, there are
too many people in a confined space.

When taking on a work-study job, one had to adjust "to the new environment." One
freshman responded by "getting to know my coworkers." The workload experienced by the
freshmen also required adjustment; however, different students found this process easier than
others. One student explained that his/her "high school prepared me for the work load of the
classes" and as a result "I think I've adjusted pretty well." Another cited the fact that
"challenging myself in high school . . . prepared myself for that [difficult classes and

assignments] to some degree." Another, however, reported that "transitioning straight into the high homework load of my classes was a bit of a shock."

Further, a couple of students highlighted influences on their transitional process. New student orientation was one vehicle that facilitated adjustment. According to one student, "thanks to orientation I had a decent friend base before even going into classes, which certainly helped smooth the transition coming from summer." As described by another freshman, "all of my professors and peers have been incredibly patient and understanding, and have made the transition much more comfortable than I was expecting."

Responsibility. To successfully adjust in college, one must take responsibility for him/herself. As accurately indicated by one student, high school had "a light amount of work and responsibility" whereas college will likely have "a large amount of work and responsibility." Part of one's responsibility is to take initiative. Other freshmen noted that they had to assume responsibility for everything from studying to eating. The reason for taking initiative and responsibility is that students do not have "parents here to tell me when to go to sleep or when to do my homework or anything else." As such, this freshman recognized "I am my own boss."

Lesson learned. It is inevitable that as a student learns to take responsibility for him/herself, lessons will often be learned the hard way. Without adults looking over their shoulder and helping in the decision making process, students will have to learn through experience. Fortunately, several freshmen recognized cause and effect. At the beginning of the quarter, one freshman recognized that staying up late made it "especially challenging the next day operating on just a couple of hours of sleep." This student decided to make "a mental note in my head that I was never going to do that again."

Another student had the challenge of multiple tests in the same week. Studying at the last minute caused him/her stress. He/she indicated that a lesson was learned and hopes to "study every day so weeks with multiple tests aren't as stressful." A busy week and not taking advantage of weekends caused one student to spend all of Sunday getting assignments completed. Finally, one student explained that "even with my not-so-amazing grades, I decided to learn from my mistakes that I make this quarter and get what I get. Stupid yes; learning experience acquired–most definitely."

Establishing Residence Life

Rose-Hulman requires first-year students to live on campus. As such, residence life is a significant part of their college experience. An in-depth process is used to place students in the residence halls and includes a housing survey completed by each freshman and an assignment process done by hand in the Office of Student Affairs. Every effort is made to accommodate preferences, including residence hall, smoking status, and any other details provided such as "religious preferences, music preferences, gaming preferences, view of the lake, etc." (K. Jones, personal communication, January 22, 2015). Students will not only live in the residence halls but live with a roommate, perhaps for the first time in their lives.

The literature suggests that living with a roommate is "one of the more challenging aspects of their first-year adjustment" (Keup, 2007, p. 20). While roommate conflicts did surface in a couple of comments by the freshmen, it was not pervasive throughout the journal entries as would be expected. Establishing residence life was more an extension of independence. The challenge lies in facing a new environment where they do not have nearly as much control as they did at home.

Residence hall. The residence hall provides the necessary living space for these students away from home. The residence hall room acted as a sanctuary of sorts, as illustrated by the comment "I can relax more in my own room without feeling stressed about anyone coming in, or bothering anyone." In addition, the furniture can be rearranged in many of the freshman rooms. One freshman and his roommate "rearranged the room so that it resembles suite style living" noting that "an added bonus of this is that I no longer have to deal with ceiling time [*sic*] crumbs falling onto my bed."

The residence hall also provides an immediate venue for social interaction. Students mentioned participating in floor activities. The freshmen also commented on the occupants of the residence hall as a valuable resource. For one freshman, "I have become aware just how important friendship and teamwork is with my hall and other friends and faculty around campus because they tend to be each other's biggest supporters and resources."

Unfortunately, a single resident does not have control over the other residents living on the floor. As such, noise can be an issue. As described by one student, "I am not really sure how to tell people to be quiet when later in the night without sounding rude, even though it is not really rude for me to do so." Further, at times students have to deal with "a drunk next door neighbor."

Roommate. The freshmen described a number of situations with their roommate. Though no indication is given as to who started the experiment, one freshman described how he/she and his/her roommate "got yelled at by an RA [Resident Assistant] for setting the concrete outside of our hall on fire." Others mentioned the challenge of getting along with a roommate. Some felt "unprepared for roommate conflicts . . . [and] confrontations." The freshman who described having a drunk neighbor also had to deal with a drunk roommate.

Confronting New Emotional States

All of the new environments and situations described thus far provide an opportunity for students to succeed or fail, depending on their choices and actions. When students are confronted with so many new situations, it seems logical that they will also confront new emotions as they react. Experiencing negative emotions is why most institutions have a counseling center. Over the past few years, the counseling center at Rose-Hulman has tripled its staff to accommodate the needs of the students.

In the literature, Ballantyne's (2012) study on first-year experiences identified a subtheme of knowing the cost of failing, which included "fear of the consequences of failing and a keen understanding of the financial and time-based implications of doing so" (p. 45). In addition, in a study on predictors of adjustment to college, Friedlander et al. (2007) reported that "students experienced their highest levels of stress when commencing the new school year" (p. 269). In line with the literature, Rose-Hulman students reacted to the various situations across the fall quarter in a number of ways. A majority of those reactions were negative emotional states, including surprise, stress, and defeat; although, a few described the positive emotion of having fun.

Surprised. There were a number of situations, mostly academic, that took the freshmen by surprise. Based on the comments, it appears that this is the first time they have encountered these situations. Two students described situations at the time they occurred. For one freshman, he/she "received a bit of a shock when I found out some of my quiz grades were far lower than expected." Another student described a situation in which he/she was surprised by a test:

This week, I ran into an issue with a test I didn't know was coming. This was because I

find it a lot easier to learn the class material if I just do the homework as the in-class

lectures really don't help me, but there was no homework for this week, so I assumed that

there was no test. The period before the test, however, someone asked me about it and I

was surprised.

Other freshmen illustrated their surprise at the end when reflecting back on the quarter. Again,

the connection between homework and exams was cited:

I don't think I was ready for how little a class prepared me for the test because I learn

best with homework and when the required homework only covers the basics without

going more indepth [*sic*], I think that that's what will be on the test.

Though not tied to exams, a student explained that he/she was shocked by the increased

workloads. On the social side, the constant interaction with other people came as a surprise. As

described by a freshman, "I did not feel entirely prepared for the shock of being around people

all the time and not having as much time to myself as I was used to."

Stress. By far, the most frequently described emotional state was stress. Their

descriptions of stress and being stressed fell into two categories, general and specific. As early

as the second week, students described "being stretched to a breaking point" which caused them

to "feel extremely overwhelmed." Later on in the quarter students cited that "the stresses of

college have exponentially grown" and looking back across the quarter felt "completely taken

out by the overwhelming stress."

While many of the students did not go into a lot of details, several freshmen highlighted

specific situations that caused stress. One freshman in particular was able to identify the

"multiple factors that, when combined, probably placed a lot of stress on my shoulders," noting

that these factors were the career fair, the fast pace of his/her courses, and the pervasive social

distractions. The Career Fair surfaced a number of times as a stressor during fall quarter, usually due to the amount of time and energy students devoted to getting prepared to talk to companies.

Other causes of stress included the class period schedule, procrastination, homework, tests, weeks with multiple tests, failing a test, feeling homesick, and going through one's first interview. In addition, the multitude of activities taking place caused students to feel overwhelmed. Only one student mentioned that "this is the first time I have actually felt stressed," though it is likely others had a similar experience.

Failure. It does not take much, when under a lot of stress, to feel a sense of failure. The idea of failure manifested itself in various forms. For some of the freshmen, there is a fear of failing. This is seen in comments such as "at this rate I won't be able to maintain any measure of quality or benefit for myself or the school" and "I was scared of doing horribly." These students felt a fear of failure before midterm.

Others, however, felt that they had already failed. This is seen in general comments such as "I keep messing up" and "I completely messed up my life." Specific situations in which student felt they had failed included exams, courses, and the Career Fair. Admitting defeat is another way that failure was described. One student was "ready to give up and pack my bags." Another freshman felt that it was "easier to just give up than to actually apply myself."

Fun. On occasion, the freshmen described the positive experiences they have had. From the onset, students expected this quarter to be "a challenging and exciting time." Being involved on campus provided an opportunity for fun. Spending time with friends was also a way to have fun amidst the stress. Reflecting back on the quarter led one student to realize that "Rose [Rose-Hulman] has a culture of openness and acceptance that I found I fit well into, leading to some of the best fun I have had in my life."

Assessing Prior Experience

When going into an unknown situation, one might draw upon prior experience to formulate expectations for a new situation. Unfortunately for the college transition, not all students have the necessary prior experience in high school from which to draw upon (e.g., study skills, time management). As mentioned, Amekhienan and Kogan (2004) found out from second year engineering students that "good time management was particularly difficult at the beginning of their college career, often because they had been successful in high school with far less overall effort" (p. 528). Haynes, Ruthig, Perry, Stupnisky, and Hall (2006) described this notion by asking the reader to "consider a bright student who completed high school with minimal effort, encountered few serious academic challenges, and consequently, has high expectations for future academic success" (p. 756). Holmstrom et al. (2002), however, suggested that college freshmen have "been students since age five and know the general routines associated with classrooms and coursework" (pp. 438-439).

The sample in this research study comprised first-time, full-time freshmen right out of high school. Similar to the literature, many directly referenced their high school experiences; others implied it as the likely source of the student expectations. Students further described how their high school and summer program experiences both facilitated and hindered their preparation for fall quarter. At the center of this challenge is whether or not their expectations for college were accurate or erroneous.

Expectations. The freshmen arrived at Rose-Hulman with a set of preconceived notions. In the context of these journal entries, all of their expectations had been challenged. One student expressed that "this [assumption] turned out false as all my assumptions have to this point." For another freshman, the transition to college was expected to be rough. He/she reported that "the

transition [was] much more comfortable than I was expecting." Early on, students were surprised as to how late they were staying up. These statements implied that either they did not have a need to stay up late in high school or perhaps were not allowed to stay up late.

Inside the classroom, freshmen reported that their expectations regarding the pace of the courses, exams, and grades were challenged throughout the quarter. Secondary school educators often have to teach to the lowest common denominator. As such, the pace of courses was faster than expected as there are often "less intelligent kids holding back the class." There are less of these distinctions in higher education, especially at Rose-Hulman. At times the grades they received were lower than they were expecting. This suggests that students are used to earning higher grades. Another student described how the "first tests were slightly wider (more general) than expected." While no other details were provided, it is plausible that the student is referencing a more concept-oriented application exam versus an exam where facts are memorized and recalled.

High school. A good portion of the respondents reflected positively on their high school experience in terms of facilitating preparation for college. Students felt prepared to do homework and study as a result of their prior experiences. As described by one freshman, "I was ready to do all the homework required of me because of how I studied in high school." Another explained that he/she came "from a relatively competitive high school so studying was not an issue." Other beneficial experiences in high school included working in groups, academic preparation, and learning time management.

While most references to high school were positive, a few students reported that their high school experiences were not conducive to the collegiate experience. For example, one

student's limited high school involvement did not prepare him/her for the variety that awaited in college. As he/she described,

> I was always involved in high school, but there I wasn't interested in as many things & there weren't as many people around. At Rose [Rose-Hulman], I found myself diving head-first into everything I had the slightest interest in & I ended up having a very hard time managing my time, all of my new friends, & my money.

Additionally, one student found him/herself "starting from scratch with my organizational system as my high school system was simply ill suited for the task."

RHAMP. Rose-Hulman offers a special summer program that allows freshmen to earn both Calculus and Physics credits. For those who are transferring in Advanced Placement credit for Calculus I and Calculus II, the Rose-Hulman Accelerated Math Physics (RHAMP) program allows students to earn credits in Physics I, Physics II, and Calculus III over the course of five weeks. In addition to high school experiences, the fast paced nature of this course also prepared the freshmen for their fall quarter. Right before midterms, one student indicated that it had been a very hard week. However, he/she explained that "it wasn't quite as hard as a normal week of RHAMP." Another described being prepared "for the demanding nature of Rose by taking RHAMP." Students also indicated a readiness for the fall quarter workload as the "biggest challenge [of RHAMP] was volume of work."

Possessing a Future Orientation

The theme of future orientation reflects the idea that students are making decisions that will impact them down the road. Their actions contribute to the future from both a short-term and long-term perspective. Students described this future orientation in a variety of ways, indicating that this focus can have both positive and negative consequences. This, too, goes back

to having a balance of focusing on high priority items now (e.g., studying for an exam) and making progress towards future goals.

Future thinking. Students described the power of developing relationships now for use in the future. One freshman indicated that making friends "will come as a valuable asset when I begin searching for a job or an internship." Similarly, "I need to talk to more people and find things in common with them to make more friends and connections for my future endeavors." Interestingly enough, both of these freshmen described themselves as reserved, and faced a significant social challenge.

One student recognized that "right now is the best time to start developing better study/socializing habits, and the longer I wait to practice these the harder it will be." Students realized that the first week of exams was not indicative of all future exams. Freshmen made comments such as "though I felt prepared [for the first exam], it made me realize how tough future tests could be, especially in other classes." Time management skills was another area to surface. As indicated by one student, "for future references though, I am going to teach myself the necessary social & time management skills that I will need to survive in the real world."

Being affiliated with a Greek organization led a couple of students to think about future benefits. One freshman felt that joining a fraternity could "save some money on housing" if he was able to live in the designated fraternity housing. Another freshman found the academic potential in her sorority, noting "I have found the group helpful for studying as there are older girls from my major."

Career Fair. At Rose-Hulman, all freshmen are expected to have a completed resume in time for the fall Career Fair (which is held before midterms). College and Life Skills is the vehicle through which students are first exposed to resume writing and Career Fair preparation.

While freshmen are not in the market for a full-time job their first quarter, the Career Fair is a venue for exploring summer internship opportunities.

The Career Fair was mentioned in the theme of emotional states as the freshmen often described the stress that the event caused. From the first week, at least one student was "really nervous about the career/job fair coming up later this trimester." Getting ready for the Career Fair takes a lot of time, as suggested by the comment "there was a lot of preparation needed for the career fair." All of the preparation, however, seems for naught as suggested by a couple of freshmen. One commented, "I knew my chances were limited with regard to internship and job opportunities." Though another freshman felt that it was a "fantastic experience" he/she further described the negative repercussions to expending so much time and energy:

> I thought a couple of conversations went well, but the communication I had after the Career Fair was nonexistent, since the company representatives never emailed me back. Also, I got shot down [by another company] straightaway since I wasn't a junior, which felt like a low blow. The stress that came with preparing for the fair was nerve-wracking, and the post-stress afterwards caused me to do absolutely nothing productive because I was so exhausted…I struggled to have the motivation to study hard enough to keep up. I was always thinking about the Career fair and other fun opportunities.

Research Question 2

To gather insight into the effect of peer educators in preparing freshmen for the challenges just described, I utilized observational field notes and a focus group. The observational field notes were collected during the small group lessons of one section of the first-year seminar in order to describe the implementation of the sophomore peer educator program. I

conducted a focus group to directly ask the freshmen about their experiences during fall quarter and with the first-year seminar.

Observation

In order to describe the implementation of the sophomore peer educator program, observational field notes were collected from the four small group lessons in one section of the first-year seminar (Week 1, Week 6, Week 8, and Week 10). This section of the first-year seminar was held on Wednesdays from 11:45 am – 12:35 pm in a conference room in the Student Union. The conference room has a table that seats 15, with traditional guest chairs (non-rolling, cushioned seats and backs). The walls are a white/gray color, with artwork hanging up. On one side of the room is a credenza along with a side table. The room also has a projector screen that can be pulled down, and a covered white board. There are two narrow windows that look out into a hallway. The blinds on the windows are closed for privacy and to limit distractions. There is a small end table in the back corner where I sit to observe.

There were three sections of the first-year seminar designated for the freshmen participating in the Home for Environmentally Responsible Engineering (HERE) living-learning community. The 10 students in this section of the first-year seminar (7 males, 3 females) were members of the HERE cohort. The sophomore peer educator for this section is one of the Sophomore Advisors assigned to the residence hall in which these students live. Thus, the students were familiar with the sophomore peer educator prior to the first class period. The staff instructor is employed in the Office of Student Affairs; he is also a graduate of Rose-Hulman.

During Week 1 the sophomore peer educator had a very active role. The topics of discussion included campus involvement along with professional development. In order to prepare students for the Career Fair, two lessons were presented this week instead of just one.

Before class began, the sophomore peer educator was able to help the instructor identify students for attendance. After the Two Truths and a Lie icebreaker activity, the instructor initiated a discussion about the student organizations fair and getting involved. The sophomore peer educator had an opportunity to tell his story about involvement freshman year. The sophomore peer educator brought prepared notes and gave a polished presentation. The staff instructor prompted the sophomore peer educator to further talk about the benefits of being involved as well as any "bad things about clubs." As students began asking questions, the sophomore peer educator was able to provide immediate answers without being prompted. The staff instructor often provided the big picture answer, while the sophomore peer educator provided his recent experiences.

Halfway through the class period the discussion transitioned to professional etiquette. The staff instructor began a discussion of what to wear to the Career Fair. The sophomore peer educator was dressed in a suit to model the appropriate attire, which the instructor pointed out. Moving on, the instructor and the sophomore peer educator performed a mock introduction. Following this demonstration, each explained a portion of what took place. After a discussion of first impressions, the instructor and sophomore peer educator each took half of the room to practice shaking hands with the freshmen. The freshmen asked additional questions about the Career Fair which are answered by both the instructor and the sophomore peer educator. Within this lesson there was constant interaction between the instructor, the sophomore peer educator, and the freshmen.

Week 6 was designated for a Title IX small group discussion on prevention of sexual violence and misconduct on campus. Due to the nature of this lesson (both the sensitive nature of the content and the fact that it was a new topic for the course), there was less opportunity for

the sophomore peer educator to engage with the students. At the beginning of the lesson, the

instructor provided a summary of the prior large group lesson on Title IX policies and

procedures. Afterwards the instructor transitioned to a video that was supposed to be shown by

all of the course sections. Halfway through, the instructor paused the video to ask a few

questions. At the end of the video the instructor led more discussion on the topic. The

sophomore peer educator was able to provide a few comments from his perspective. The next

activity involved reading through a handout containing advice for students. This was also led by

the instructor. At the end of the lesson, the instructor answered questions. Before concluding,

the instructor asked the sophomore peer educator if he had any thoughts to share. The

sophomore peer educator gave his advice. In terms of interaction, this lesson was mainly a one-

way flow of information from the instructor to the freshmen.

The topic for Week 8 was time management. The instructor spent several minutes

talking about time management and generating discussion about past time management practices

the freshmen had experienced. When discussing "crunch times" the sophomore peer educator

provided his insight. The discussion then turned to studying for finals. The instructor shared his

story from when he was a student and then prompted the sophomore peer educator for additional

advice. The remainder of the class was spent filling out Excel worksheets to help in planning out

the ideal number of hours to be spent in various categories (e.g., sleep, class, study) and to

schedule those hours in such a way that the freshmen can follow the plan. The instructor walked

around the room several times during this activity; the sophomore peer educator remained seated.

At the very end, before class was dismissed, the sophomore peer educator provided a tip

regarding the ability to download schedules into Outlook. There was more interaction between

everyone in this lesson compared to the prior lesson.

The final week of the course, Week 10, is designated for filling out evaluations. Before the lesson began, the sophomore peer educator handed out snacks to everyone. The instructor talked about the importance of evaluations and guided the students to the self-service component of our student information system to find the two online evaluations. Halfway through the lesson, both the instructor and the sophomore peer educator engaged in conversation with some of the freshmen. When students began filling out the course evaluation, the instructor left the room. The sophomore peer educator remained in the room and offered more candy. Due to the content of this lesson, neither the instructor nor the sophomore peer educator had a very active role.

Focus Group

In order to assess the impact of the sophomore peer educator program on freshman preparation, a focus group was conducted. Even though repeated attempts were made to recruit freshmen, only two students volunteered to participate. The focus group was digitally recorded and transcribed verbatim. The transcript was analyzed for themes in a fashion similar to the journal entries. There were 5 themes developed from 15 unique codes: establishing rapport, contributing to the learning environment, exhibiting an appropriate demeanor, achieving success, and revising the curriculum. See Appendix E for a full list of codes under each theme.

Establishing Rapport

It was evident that the sophomore peer educators had developed a rapport with the students by virtue of their experience at Rose-Hulman. In comparing the staff instructor to the sophomore peer educator, one participant commented, "she was the teacher right, but she wasn't a Rose-Hulman student, so she didn't really know what went on, and he was a sophomore so he knew exactly like what was going on, which was really nice." This participant later described the

sophomore as "one of us." Within these statement it is implied that being a Rose-Hulman student brings about an understanding of the experiences at this specific institution. In addition, being a sophomore makes their personal experience proximal to the freshman year.

Part of this rapport was dependent upon age. Again, describing the staff instructor, participants made the comments "she's probably late 30's" and "[he] is young, but he's not as young as a sophomore." Students are keenly aware of the age differentiation. This is salient because "it's easier to talk to someone our age than someone twice our age." Even though the sophomore peer educators were enlisted in an instructional capacity, the freshmen viewed them more as a peer than an authority figure.

Contributing to the Learning Environment

By establishing rapport, the sophomore peer educators were able to make a number of contributions within the small group lessons. One freshman described the fact that the sophomore gave advice, even though he/she could not remember all the details of that advice. He/she stated,

> Well, he gave us like obvious advice like don't like get drunk the night before an exam or something like that, or uh, what was it. Something about Friday nights. I heeded the warning but like I can't remember it.

Another felt that he/she could "utilize him as a resource."

Relaying knowledge was another way the sophomores contributed to the learning environment. As described by one freshman, "when like she [the staff instructor] would talk about something, he would be like 'yeah' and then he'd explain it to us." Other comments such as "he [the sophomore peer educator] knew enough to know what he was talking about" and "[the sophomore peer educator] was able to speak up and say 'oh maybe you should go over this;

I think a few of them are struggling with that'" supported this idea. It is generally known on campus that the sophomore year curriculum is the hardest of the four years. One freshman pointed out this fact and the relevance to College and Life Skills by stating, "Everyone's always saying that sophomores are the ones that really get beat down by classes, so he's [the sophomore peer educator] the one talking to us about time management or whatever."

There were a number of comments made about the level of engagement within the class, both the engagement of the freshmen and the sophomore peer educators. In terms of freshman engagement, one participant noted that students "would ask him [the sophomore peer educator] specific questions." In terms of the sophomore peer educator engagement, the participants indicated that "he paid attention," "he asked questions," and "he prompted us to participate." As mentioned earlier, the sophomore peer educator was able to provide guidance to the staff member about topics he felt were challenging the freshmen. One freshman described the sophomore peer educator as "a little voice of reason in the class" and that he would be "the voice that filled the silence."

However, there were times the freshmen noted a lack of engagement. For example, "some days he [the sophomore peer educator] wouldn't say anything" and "if he would have put in the days he didn't really talk then I think it could have been better." This was also noted by another participant in the comment, "sometimes it seemed like he was just sitting there." Given the description of implementation, this lack of engagement is likely attributable to the content of the course.

Exhibiting an Appropriate Demeanor

Throughout the focus group the participants provided insight into the conduct of the sophomores. One freshman felt that the sophomore provided a relaxing atmosphere. Given the

comment, "he showered, he dressed appropriately," it is implied that the sophomore took the role

of peer educator seriously as any other professional would. It was also noted that the sophomore

peer educator's demeanor was "a little less professional," but this was stated in a positive

context. As explained by one freshman, "[we] were talking about something kind of personal

and I think that made it easier to listen to him about it." In this context, it is implied that the

structure and rigidness than can come with professionalism was not evident, making a more

comfortable atmosphere. Further, the sophomore peer educator was described as "very

approachable."

Achieving Success

While only two comments were made they suggested that the freshmen acknowledge the

achievements of these sophomores. As stated, "I also kind of know that he's [the sophomore

peer educator] generally successful cause he's an SA [Sophomore Advisor]." This freshman

knows that it takes hard work to get to the second year and that there has to be evidence of

successful behaviors in order to be selected for a position in residence life. Further, "I think that

makes him more of a positive role model." Again, the idea that the sophomore has overcome a

lot of challenges that can serve as an example to others.

Revising the Curriculum

Most of the information obtained in the focus group related to the sophomore peer

educators. However, there were a couple of comments that referenced the curriculum. When

asked how the first-year seminar prepared them for fall quarter, one student replied,

> I really wish they would have done the time management and the Logan Library tour
>
> earlier. I think that was maybe sixth week, and by that time I had already been there like
>
> multiple times. So going there was, I went there so I could get marked for attendance.

Even when specifically talking about recommendations for the peer educator program in the future, this student immediately said:

> The topics definitely. I mentioned earlier about the time management and Logan Library tour. I would definitely push those up further. I mean I understand there was a Title IX talk that they had to talk about, but uh, yeah, just the different topics that they talk about.

This suggests that for the topics to be relevant, they need to be taught prior to the immediate need. Having already navigated the library on his/her own, this student attended the lesson merely to earn attendance points. Another participant thought "It was good to sit down and look at resumes." This student would have preferred more time to focus on resumes, but acknowledged that "other people who hadn't already experienced time management skills and kind of needed someone they could go to talk to about that, they needed it."

Even though participation was low, the information obtained from the freshmen aligned with the ideas that surfaced in two other focus groups. Every year, program evaluation is conducted on the first-year seminar for the Associate Vice President for Student Affairs/Dean of Student Affairs. As part of the annual program evaluation for the 2014-2015 academic year, two focus groups (one with participating staff members, one with sophomore peer educators) were conducted, in addition to administering student course evaluations. While the components of the program evaluation were beyond the scope of the research questions in the current study (i.e., they focused on the logistics and satisfaction of the course, respectively), the participating staff members and the sophomore peer educators echoed similar sentiments as the freshmen.

Not only was the information obtained from freshmen consistent with other perspectives of the pilot program (i.e., the staff instructors and the sophomore peer educators), this data also aligns nicely with the tenants of Bandura's (1986) behavioral model: relevancy, credibility, and

proficiency. The way the freshman participants described the knowledge and advice provided by the peer educators, in addition to the ways the peer educators engaged in the classroom, established a level of relevancy. In addition, the fact that the peer educators were actual Rose-Hulman students and only one year removed from the freshmen enrolled in College and Life Skills enhanced their relevancy and established credibility. Proficiency was suggested through the comment that the sophomore peer educator has been successful at Rose-Hulman.

Summary

Incoming freshmen face a multitude of academic and social challenges as they begin their collegiate career. Understanding the academic environment was important as the courses were more rigorous, resulting in a faster pace and an increased workload. Grades were often lower than they had received in high school. While some freshmen had academically challenging high school experiences that prepared them for the intensity of Rose-Hulman, many had to develop and engage in study habits. This involved going beyond memorization of facts to deeper levels of understanding, overcoming the challenge of asking for help, and utilizing the resources available. The freshmen reported exerting various levels of personal effort, noting the challenge of getting everything done. When students procrastinated (failing to exert personal effort) it often required staying up late to compensate.

Within the social environment, making friends was not a pervasive challenge for the freshmen. They described how socializing interfered with other pursuits, but the support they received from their peers was invaluable. With respect to co-curricular involvement, more often than not the freshmen acknowledged spending too much time on extra-curricular activities. This over-commitment was one cause of the stress they experienced. The students reported mixed

feelings as they established residence life. They felt that their peers provided support but were also a source of distraction.

Time management was the most frequently reported challenge across the quarter. The students desired to find a balance between their academic endeavors and social pursuits but felt that this balance was unattainable. Too often the freshmen prioritized social activities over studying, resulting in staying up late and sacrificing sleep. This ties in with the fact that students were discovering their independence, and learning lessons the hard way.

The freshmen reported a number of emotional states that they experienced during fall quarter. The most frequent emotions were surprise in their new academic environment, stress from both academic and social situations, and a sense of failure. When reflecting on their prior experience, students noted that their expectations were not always aligned with their experiences. While high school prepared some for the challenges they faced, others did not have that preparation to draw from. However, those who participated in one of the summer programs obtained a preview of the demanding nature of Rose-Hulman. Finally, students often reflected on their short-term and long-term futures.

Having been through these new situations, and successfully overcome the challenges, peers have an opportunity to assist freshmen in the transition to college. The impact of the sophomore peer educator program was examined through direct observation and a focus group. The course syllabus this year impeded the pilot program by lessening the amount of time the sophomores were able to spend educating the freshmen. Observation of the small group lessons indicated that the use of the peer educator started out strong. However, his interaction with the course and with the freshmen diminished across the quarter.

From the focus group, the freshmen noted that rapport was established given that the peer educators were Rose-Hulman students and closer in age than the staff instructors. The sophomore peer educators contributed to the learning environment by giving advice, serving as a resource, suggesting topics of conversation, asking and answering questions, and filling the silence. The freshmen commented that the sophomore peer educators were exhibiting an appropriate demeanor which made them very approachable. By virtue of being sophomores, the freshmen felt they had already achieved success. Though unrelated to the sophomore peer educator program, the freshmen also suggested revisions to the curriculum, indicating that the sequence of topics was not beneficial as many had already figured out the information earlier in the quarter.

CHAPTER 5

DISCUSSION

The results of this study confirm that the transition to a small, private, highly selective,

STEM-focused institution is just as complex as the transition to other types of institutions.

Further, students at this institution reported similar academic and social challenges as those

identified in other studies. The application of modeling, however, was not strong enough to

determine whether observational learning influenced these transitional challenges.

Journals

Though the data were summarized within 11 distinct themes, these themes were often

interrelated. Many of the challenges could stand on their own and yet at the same time surface as

a secondary challenge to another area. Further, where one student identified a challenge, another

student felt confident. This suggests that each student will experience the transition to college in

a different manner. If the transition to college is this complex, preparing students for that

transition also becomes a complex endeavor.

As mentioned, the challenges identified by the freshmen in this study have been

identified in the literature as well. In a study on transition to college, Kelly et al. (2007) noted

that "when asked what would have helped in the transition from secondary school to college,

most indicated the need for special study skills, time management skills, and general coping

skills to deal with the stress of life" (p. 1029). Even though the study was conducted at a

doctoral university, these are the strongest areas of concern for the freshmen at the current small, private institution.

Doolen and Long (2007) reported that nearly half (48%) of the engineering freshmen participating in a survey research study "worried frequently or very frequently about hard classes . . . 38% of students worried frequently or very frequently about their homework and workload levels" (p. 727). Though the current study did not quantify levels of worrying, understanding the academic environment placed emphasis on difficult classes and an increased workload. In a discussion of supplemental instruction, McGuire (2006) indicated that "students must be taught that performing well in college requires higher-level thinking skills; analysis, synthesis, and evaluation" (p. 4). Further, "though most of these students performed quite well in high school by memorizing and regurgitating information, they will discover quite rapidly that these skills will not produce the same results in college" (McGuire, 2006, p. 4). Early on, the freshmen in the current study questioned how well they understood the material. This suggests that they had transferred their memorization skills from high school into the collegiate context with less than desirable results.

While some of the freshmen in the study reflected on the idea of working hard, many of the students indicated that personal effort was not always exerted. Nilson (2013) provided an explanation as to why students find exerting personal effort so challenging. In her book on self-regulated learners she questioned, "Effort didn't seem necessary in elementary and high school, where many of them received credit just for showing up, so why should learning require so much time and hard work now?" (Nilson, 2013, p. 2). The answer, according to Nilson (2013) is that freshmen "are speaking from twelve years of experience in school, more than half their lives,

making their expectations quite reasonable. These students were also led to believe that they

were born smart, furnishing another justification for their not having to work hard" (p. 2).

The mixed feelings regarding the social environment found in the current study has also

been documented in other studies. Yazedijian et al. (2007) found in their study on adjustment

that peer support had both benefits and drawbacks. While peers were able to provide

socialization and academic support, they were also a source of distraction. Donahue (2004) also

described peers as a social distraction in the residence hall, but facilitated "learning that seemed

to bridge both the curricular and co-curricular walls" (p. 91). Co-curricular involvement was

frequently found in the literature (Bowen et al., 2011). Tieu and Pancer (2009) studied quality

versus quantity of involvement and concluded that quality of involvement was a significant

predictor of adjustment to the university. The authors noted that quality was the key predictor

and not quantity of involvement. Webber et al. (2013) analyzed data from the National Survey

of Student Engagement and found that students who had higher levels of involvement (defined as

a greater number of activities or spending more hours on one or more tasks) had higher GPAs

and satisfaction. Students in the current study discussed their involvement; however, they often

focused on quantity rather than quality. More often than not, these students felt that involvement

was a distraction to their academic success. With respect to residence life, Donahue's (2004)

study on learning environments and co-curricular learning identified issues with roommates and

noise, in addition to distractions.

An overarching theme in the current study was the need for balance, given the abundance

of activities competing for students' attention. This aligns with Ari and Shulman's (2012)

comment that "students need to find a new balance between school, work, and leisure activities,

while still finding time to sleep" (p. 274). From their cluster analysis they found that students

getting less sleep had higher levels of stress and were generally labeled as maladjusted. This, too, highlights the interrelatedness of themes. In the development of an instrument to measure sense of belonging, Hoffman et al. (2002-2003) found that "students reported academic concerns to be their greatest stressor in the collegiate environment and identified academics and time management as their greatest challenge since beginning college" (p. 237).

Stress levels were not quantified in the current study, but their presence aligns with Friedlander et al.'s (2007) study on predictors of adjustment. They concluded that "students experienced the highest levels of stress when commencing the new school year" (Friedlander et al., 2007, p. 269). Similarly, the participants in Roderick and Carusetta's (2006) study indicated through interviews that they encountered the most stress in the first two months.

In the process of developing an engineering student attitude assessment, Besterfield-Sacre et al. (1998) conducted focus groups with freshmen to better understand their first-semester experiences. They noted that "students' expectations about 'going to school' carried over from high school" (Besterfield-Sacre et al., 1998, p. 136). In the current study, many of the freshmen referenced high school as a source of expectations.

Horstmanshof and Zimitat (2007) reported that students with an orientation to the future were more likely than other students to report higher levels of academic application and academic orientation, and to adopt productive educational behaviors. This aligns with Bandura's (1986) notion that "people do not simply react to their immediate environment, nor are they steered by implants from their past. Most of their behavior, being purposive, is regulated by forethought" (p. 19). In the current study, however, freshmen who possessed a future orientation did not always report focusing on academics. Many were struggling with academics because too much thought was put towards the future.

While individual codes and themes did not come as a surprise, Rose-Hulman students appeared to place more emphasis on the core (academic) rather than the periphery (social) of the collegiate experience. In Terenzini et al.'s (1994) qualitative study on the transition to college, over half of the emerging themes were socially oriented (e.g., high school friends, family). Paul and Brier's (2001) quantitative study was focused entirely on the effect of friendsickness on college adjustment, discovering that over half of the first-year students missed their pre-college friends. In the current study, pre-college friends only surfaced in the journal entries twice; neither indicated friendsickness. Keup (2007) reported that college-bound seniors' expectations largely centered on social themes (e.g., changes in relationships with family and friends, creating new relationships and friendships, future roommates). In the current study, rarely did the freshmen mention their family. Further, making friends was not a pervasive issue.

Other literature has specifically focused on social anxiety (e.g., Parade et al., 2010). While a couple of students indicated that they desired to overcome their reserved nature, it did not appear that the Rose-Hulman freshmen in this study suffered from social anxiety. Sense of belonging is also frequently studied in the literature on college transition (e.g., Locks et al., 2008; Pittman & Richmond, 2008). There was no indication in the current study that freshmen struggle with belonging to the institution. However, this may be the result of self-selection bias among the participants.

Focusing more at the core of the collegiate experience, freshmen described struggles with the workload and pace of their courses in much more detail, and much more frequently, than they did on making friends or roommate conflicts. This makes sense in light of institutional characteristics. Rose-Hulman is a highly selective, STEM-focused school. This means that applicants must meet the entrance requirements set forth to ensure that the incoming class has

high aptitude for learning the subject matter. In addition, because of the limited programs of study, most students enter the institution with their major declared. Rose-Hulman is not an institution where a student can explore a diverse set of fields to determine what interests to pursue. Further, Rose-Hulman has been ranked #1 in the Best Undergraduate Engineering Programs by the U.S. News and World Report for the past 16 years (Rose-Hulman, 2014b).

While the observation learning component of social cognitive learning theory did not surface in the journal entries, the experiences reported by the freshmen illustrated Piaget's concepts of assimilation and accommodation. As described by Davis and Palladino (1997), Piaget's theory on cognitive development posits that children will go through two phases when acquiring new knowledge. First, when a child encounters a novel experience, he/she will try to relate the experience to previous similar experiences, a process known as assimilation. The second phase, accommodation, "is the process of altering our ways of thinking (schemas) so that we can include new information that does not fit into existing ways of thinking" (Davis & Palladino, 1997, p. 420).

Repeatedly, the freshmen would describe a fall quarter experience, compare that experience to high school, and then discuss how they have changed their thought on the topic. For example, on the schema of assignments one student explained,

> Back in high school, I thought it was a stretch to have to stay up til [*sic*] midnight in order to finish my homework. Here that became routine (most nights I stayed up until at least 2); all-nighters finishing homework were also something that I had never experienced, where here I had one almost every other week.

This student, when encountering assignments, recalled his/her assignments schema from high school. When the experience did not match, he/she expanded the assignment schema to include staying up late and devoting a large amount of time for the task.

Another student described having to expand his/her schema for acceptable grades. As explained in the journal entry, "I was able to pull my grades up all my grades to As and Bs (which in high school I would've considered very disappointing, but I know better now)." Acceptable grades in high school only included As. Now, having experienced a new environment, acceptable grades also include Bs.

Focus Group

While the data from the focus group was limited, the core ideas are supported in the literature. In a qualitative study on factors that influence engineering students' performance, Amenkhienan and Kogan (2004) found that peer interaction had utility. Supporting this idea was a quote from a student who indicated that it "really helps to have a friend who has been there, done that, and knows a little bit of the tricks" (Amenkhienan & Kogan, 2004, p. 532). The participants in the current study made several references to the fact that the sophomores had enough experience to know what they were talking about. Results from a study conducted by Meyers et al. (2010) on first-year engineering students indicated that the students felt "a greater comfort in approaching upperclass engineering students regarding campus life and roommate issues . . . time management and decision making such as remaining in engineering" (p. 171). Again, freshman students in the current study reported that they felt comfortable having discussions with the sophomore peer educator.

The focus group results also align with Vygotsky's (1978) notion of the more knowledgeable other. As a social constructivist, Vygotsky (1978) identified social dimensions in

the construction of knowledge. Though the current study did not measure levels of learning, the premise behind the peer educator program in a first-year seminar is to facilitate the zone of proximal development. As defined by Vygotsky (1978), the zone of proximal development "is the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers" (p. 86). While Vygotsky (1978) studied younger children, the translation to higher education would focus on aiding students as they develop the requisite skills for college success, skills they did not previously possess. While the staff instructors are knowledgeable about higher education in general, very few of the instructors experienced college at Rose-Hulman. Thus, the sophomore peer educators are more knowledgeable in that respect, bringing specific and practical information.

T. Smith (2008) implemented a pilot study with peer mentors into women's studies, developmental studies, and general studies courses. The students reported that increased engagement of the peer mentor would be desired. One student commented, "It would be great if the tutor was present in the classroom during tutorials. I feel that the effectiveness of a tutor would be increased by 100% with classroom involvement" (Smith, 2008, p. 58). Another student commented, "make sure the tutors are in class and interacting with us–this establishes a relationship, trust and credibility. Which is VERY necessary" (Smith, 2008, p. 58). While the sophomore peer educators were present during the small group lessons, it was noted by the freshmen that it could have been more effective had there been engagement each week.

While the goal was to gather evidence in support of social cognitive learning theory, there were too many barriers. However, one comment from the focus group suggests that observational learning took place. As described by one freshman,

Well, he gave us like obvious advice like don't like get drunk the night before an exam or

something like that, or uh, what was it. Something about Friday nights. I heeded the

warning but like I can't remember it.

Though the information is vague, the basic idea is that the sophomore peer educator verbally

modeled appropriate behavior. The student attended to that behavior and chose to act in

accordance with the advice.

Implications

From the literature and the results of this study, it is evident that college is a different

experience than high school. Further, "there is evidence that, for students in the United States,

primary and secondary education systems do not always adequately prepare students to be

successful in higher education, particularly in those disciplines requiring strong mathematical

and scientific reasoning skills" (Doolen & Long, 2007, p. 723). It is not surprising, then, that the

freshmen at Rose-Hulman encounter transitional challenges stemming from insufficient prior

knowledge and experiences. Recognizing that this deficiency exists should instill a sense of duty

among the faculty and staff. As an institution of higher education, we assume the responsibility

to educate students to become future engineers, mathematicians, and scientists. Before this goal

can be achieved, however, there is a duty to educate the freshmen on *how* to be successful

college students.

From an historical perspective, Upcraft et al. (2005) wrote that "the history of American

higher education . . . prior to 1960 has an historic sink-or-swim attitude toward student success"

(p. 1). Similarly, Meyers et al. (2010) concluded that "the first-year experience in engineering

and other STEM fields has long been associated with a 'weed out' philosophy" (p. 169). Unlike

these historical attitudes, the mindset at Rose-Hulman is to engage with all students in a family-

like atmosphere to provide individual attention and support. Leveraging the results of this study, the focus of institutional efforts can be directed at preparation for the challenges identified by the freshmen so as to foster student success.

The first-year seminar is an appropriate vehicle for educating freshmen on the skills necessary for college success, given that all freshmen are required to complete the course. The results of this study should provide direction for future curricular revisions. Whereas in the past the course has focused on more of the social challenges, the data justifies an intentional focus on the academic challenges. To this end, a committee has been formed to review the entire first-year seminar curriculum.

Social cognitive learning theory posits that learning and behavior are two separate events (Bandura, 1986). Thus, if students are going to succeed at this institutions, not only do they need to be exposed to the necessary skills (via the first-year seminar curriculum), but they also need to be inspired to enact upon those skills. It is crucial, therefore, that the curricular revisions focus on presenting material in such a way that it is perceived by the freshmen as relevant to their needs. In their book, J. W. Miller et al. (2005) described why establishing relevancy is so important:

> With the adolescent's new cognitive abilities comes the recognition that the world is an overwhelmingly complex place. Not to mention the hypothetical possibilities! One can't begin to attend to, much less process, all of the many stimuli received through the senses. One has to narrow down the stimuli to the essential ones, namely, "only those relevant to me." (J. W. Miller et al., 2005, p. 16)

While the application of modeling was not strong enough to determine whether observational learning influenced transitional challenges in this study, the data supports

revisiting the idea. None of the data collected suggested that having peer educators in the classroom had negative repercussions. In addition to re-examining the use of peer educators, the experiences of the freshmen in the current study paint a powerful picture of how the topics relate to success. These stories can be utilized as a voice in the classroom.

Limitations

The main limitation inherent in all qualitative research is generalizability. This study utilized a specific set of participants (STEM-focused, high aptitude) in a specific educational setting (small, private institution). The goal of the study was not to generalize beyond this institution; however, given that the themes aligned with findings from other institutional types, the results may extend further than anticipated. It will be up to the reader to determine whether this study will generalize to his/her institution.

There were four limitations to this particular qualitative study, two relating to the logistics of implementing the sophomore peer educator program, one related to the use of models, and one related to sample size. First, there were not enough small group lessons to induce strong observational learning. There were only a total of four small group lessons, given that the final lesson was designated for completing evaluations. Many of the sections only had three small group lessons due to the Career Fair. As such, the amount of time the sophomore peer educators were able to impart knowledge to the freshmen was minimal. Bandura (1986) felt that "chance meetings are most likely to affect life courses when individuals come to like the people they meet or gain other satisfaction from them . . . binding relationships serve as a vehicle for personal changes that can have long-range effects" (p. 34). Further, "when people observe modeled activities only briefly or sporadically, they generally acquire, at best, a fragmentary

sketch of the activities" (Bandura, 1986, p. 65). With limited contact time between freshmen and sophomore peer educators, there was limited time to form a binding relationship.

Further, of those four small group lessons, only two were pertinent to the challenges described by the freshmen: campus involvement and time management. In the case of campus involvement, the official message is for students to get involved, rather than focusing on appropriate levels of involvement. Bandura (1986) posited that "people do not simply react to their immediate environment, nor are they steered by implants from their past. Most of their behavior, being purposive, is regulated by forethought" (p. 19). In this situation, it appears that the freshmen were reacting to their immediate environment. The goal of the course is to help guide them towards purposeful thinking. Based on the journal entries, this was not achieved.

Second, the operational curriculum was not standardized, thus the use of the sophomore peer educators was not standardized. Over the summer, staff participants met to discuss the ways the sophomore peer educators could be implemented in the first-year seminar. While an outline was created for each lesson (the official curriculum), this plan was not followed by every section. This was discovered during discussions with both the participating staff instructors and the sophomore peer educators. It was beyond the scope of this study to observe every small group lesson for every participating section of the course. As a result, the influence of the sophomore peer educators likely varied from section to section. This is similar to a limitation noted by Mattanah et al. (2010) in their study on a social support intervention in that "we did not systematically assess fidelity to treatment so we do not know that the groups were implemented consistently" (p. 106).

Based on the literature, there are suggested limitations when using models. The models, in this study, relied heavily on verbal descriptions of behaviors. According to Bandura (1986),

observational learning is more effective when the modeling contains both verbal and behavioral components. Bandura (1986) acknowledged that "verbal modeling is used extensively, because one can convey with words an almost infinite variety of behaviors that may be too inconvenient or time-consuming to portray behaviorally" (p. 70). Further, "actions are usually more effective than words in commanding attention" (Bandura, 1986, p. 72). This is even more salient at Rose-Hulman where a majority of the freshmen have a strong preference for learning visually as opposed to verbally. However, this is more difficult to carry out in a first-year seminar as the behaviors are typically mental activities that occur outside of the classroom.

Van Gog and Rummel (2010) recorded three possible limitations with modeling; however, only the first limitation is of concern to this study. First, with modeling there is "much more opportunity for learners to attend to irrelevant details (e.g., the model's clothes, tone of voice, and salient but irrelevant objects present in the environment or on the screen" (Van Gog & Rummel, 2010, p. 158). With the small group setting, it would be obvious if a freshman was not paying attention; however, a student can appear to be paying attention but not actually attending to the information presented. Second, "the model could also be a peer student with a lower, equal, or higher level of performance than the learner, in which case the demonstrated procedure may contain errors" (Van Gog & Rummel, 2010, p. 158). Given the nature of the first-year seminar, there are few "right" and "wrong" answers. A majority of the discussion centers on finding the solution that best fits the need and the person. Finally, "modeled behavior that is too complex for the learner may result in fragmentary learning" (Van Gog & Rummel, 2010, p. 160). The content of the first-year seminar is often viewed as common sense. The material is very basic, and given the aptitude of the students, it should not be difficult for them to learn.

Finally, the sample size for the focus group was a limitation. While not prescriptive, Creswell (2013) indicated that a sample of 5 to 25 individuals who have experienced the phenomenon should be adequate. For this study, there were a sufficient number of students who completed journal entries; however, there were only two individuals who participated in the focus group aimed at capturing the effect of observational learning. While the information gathered suggests potential in expanding the peer educator program in the future, it would have strengthened the study to capture additional viewpoints given the complex nature of the transition to college and the inconsistent implementation of modeling. There were no direct incentives, other than dinner, for the freshmen to participate in the focus group. In the past, providing food has been successful in reaching our target size. In retrospect, given that we do not have a strong research culture on campus, additional incentives should have been considered.

Future Research

Given that the observational learning component was not implemented to the expected degree, future research will be futile if the first-year seminar remains unchanged. There are three suggested changes for future implementation. The first change is to incorporate additional small group lessons so as to increase the contact time between the peer educators and the freshmen. This is further supported by Stebleton, Jensen, and Peter's (2010) study on a first-year experience course that incorporated both large group and small group meetings. From the data collected via journals they concluded that "the majority of students indicated that they felt most engaged during the small discussion session and less engaged during the large lecture" (Stebleton et al., 2010, p. 2). Bandura (1986) discovered that "observational learning is shown most clearly when models exhibit novel patterns of thought or behavior which observers did not already possess but which, following observation, they can produce in similar form" (p. 49).

From the students own admission, they did not always have accurate thoughts or fully developed skills for success during fall quarter. Increasing contact time will give the sophomore peer educators an opportunity to relay more of those new ideas that are crucial to success.

The second change is to update the curriculum to address the major challenges in the transition to Rose-Hulman. Currently, topics such as study skills and stress management are not addressed. Time management, a challenge that was both anticipated and realized across the entire quarter, is only given 50 minutes of attention, and currently placed near the end of the quarter. Incorporating these topics, in addition to devoting more discussion to the issues of time, would align the course with the major findings of this study.

Finally, additional work should be conducted to standardize the curriculum as much as possible. This will ensure that the freshmen are receiving a consistent experience. These revisions can also strengthen observational learning by incorporating both verbal and behavioral components.

If these three revisions to the first-year seminar model can be made, additional research would be valuable. Specifically, mixed methods research on the effectiveness of observational learning would provide insight into whether the institution is making strides towards preparing freshmen for the challenges identified in this study. With peer educators in half of the first-year seminar sections, course evaluations between sections with and without a peer educator could be compared. In addition, now that the specific challenges have been identified, quantitatively measuring preparation towards those challenges would help inform curricular revision each year. Conducting another focus group could provide insight into how and why the peer educator program is achieving its goal, if a sufficient number of students participate. If the peer educators are able to help the freshmen in their preparation for fall quarter challenges, a quasi-experimental

longitudinal study would be of value to determine if there are significant differences in retention and graduation rates between groups that utilized a peer educator and those that did not.

Ragins and Cotton (1999) in their distinction between formal and informal mentoring noted that "formal mentors are selected on the basis of their competency, but this judgment is made by the program coordinator rather than the protégé" (p. 531). While this comparison was made through the lens of career mentoring, it is equally important in the educational setting. With staff administrators selecting the peer educators, it is important to evaluate the freshman perspective of competency to ensure that they are aligned. Thus, future research could measure peer educators on the dimensions of social cognitive learning theory (e.g., relevant, credible, proficient, relatable).

Finally, the literature suggests that the peer educators themselves can also benefit from the experience. Power et al. (2011) reported that the peer mentors in their study were able to "develop strong leadership, communication, organization and management skills and extend their knowledge of . . . [the] subject matter" (p. 78). Shook and Keup (2012) highlighted the skill development of peer leaders, including "self-direction, leadership, oral communication, intercultural skills, civic engagement, teamwork, and critical thinking" (p. 10). Stout and McDaniel (2006) reported a number of benefits to Supplemental Instructions leaders, including self-confidence, self-esteem, assertiveness, setting boundaries, interaction with diverse students, leadership, teamwork, written and verbal communication, self-assurance, administrative duties, and collaboration among professionals. It would be interesting to assess peer educator development through this experience, incorporating both self-reported data as well as a rubric for the staff instructors to rate the peer educators on these dimensions (pre- and post-course).

Conclusion

Knowing that the transition to college is a complex process, fraught with inaccurate expectations due to high school experiences, institutions have the responsibility to help facilitate that transition. Krumrei-Mancuso, Newton, Kim, and Wilcox (2013) stated that "Admitting a student into an institution carries with it a certain level of commitment on the part of the institution to support the success of the student" (p. 247). Bandura (1986) stated that "even if people know how to reason logically, they make faulty judgments when they base their inferences on inadequate information or fail to consider the full consequences of different choices" (p. 19). Students entering Rose-Hulman have the aptitude to learn new skills, but often revert to their high school behaviors assuming that what worked then will work in this new environment.

Though their study was focused on undergraduate students' enculturation into engineering, Foor et al. (2007) described the idea of dominant and non-dominant cultures in such a way that translates to the first-year experience. They state:

> Habitus can be thought of as the internalized set of experiences, outlooks, and beliefs that individuals accumulate from their immediate environment. The habitus of students from the non-dominant culture contains only rudimentary knowledge of the dominant culture. In other words, students from the non-dominant culture do not know how to play the game of academia as well. Academia considers the ability to play the game to be the responsibility of the non-dominant who are expected to stretch out and bridge the gap between the experiences of their lives and those of the dominant. (Foor et al., 2007, p. 106)

For this comparison, the upperclassmen are the dominant culture and the incoming freshmen are the non-dominant culture. It is expected that incoming freshmen will arrive with a mindset of how academia functions. However, the authors point out that "in order for non-dominant students to survive in the dominant culture they have to be the watchers to become familiar with the language and customs of the dominant" (p. 106). Expanding on the idea of a collegiate culture, Hunter and Murray (2007) noted that "higher educators have only more recently seen the need to help beginning college students become acclimated to the culture of their institutions and to collegiate learning in general, because these cultures differ significantly from that of high school" (p. 25). Thus, there is a learning curve for incoming students.

One way to facilitate that acclimation is to incorporate more knowledgeable peers into a first-year seminar. The literature highlights several benefits to employing peers in a first-year seminar. Latino and Unite (2012) suggested that peers are cost-efficient, plentiful, "complement the role of the seminar instructor" (p. 33), less intimidating, share connections with students, and "motivate students academically" (p. 33). While the data surrounding a social cognitive learning theory based peer educator program is minimal, it does point in the right direction. Additional research is needed to fully understand the effect at this institution.

REFERENCES

Allendoerfer, C., Wilson, D., Bates, R., Crawford, J., Jones, D., Floyd-Smith, T., Plett, M., Scott, E., & Veilleux, N. (2012). Strategic pathways for success: The influence of outside community on academic engagement. *Journal of Engineering Education, 101*(3), 512-538.

Amelink, C. T., & Creamer, E. G. (2010). Gender differences in elements of the undergraduate experience that influence satisfaction with the engineering major and the intent to pursue engineering as a career. *Journal of Engineering Education, 99*(1), 81-92.

Amenkhienan, C. A., & Kogan, L. R. (2004). Engineering students' perceptions of academic activities and support services: Factors that influence their academic performance. *College Student Journal, 38*(4), 523-540.

Ari, L. L., & Shulman, S. (2012). Pathways of sleep, affect, and stress constellations during the first year of college: Transition difficulties of emerging adults. *Journal of Youth Studies, 15*(3), 273-292.

Astin. A. W. (1977). *Four critical years: Effects of college on beliefs, attitudes, and knowledge*. San Franciso, CA: Jossey-Bass.

Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco, CA: Jossey-Bass.

Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development, 40*(5), 518-529.

Ballantyne, J. (2012). Valuing students' voices: Experiences of first year students at a new campus. *International Journal of Pedagogies and Learning, 7*(1), 41-50.

Bandura. A. (1986). *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ: Prentice-Hall.

Barefoot, B. O. (2000). The first-year experience: Are we making it any better? *About Campus, 5*, 12-18.

Barton, A., & Donahue, C. (2009). Multiple assessments of a first-year seminar pilot. *The Journal of General Education, 58*(4), 259-278.

Bell, B. J. (2012). Assessing the effectiveness of an adventure-based first-year experience class. *Journal of College Student Development, 53*(2), 347-355.

Besterfield-Sacre, M., Atman, C. J., & Shuman, L. J. (1998). Engineering student attitudes assessment. *Journal of Engineering Education, 87*(2), 133-141.

Boeree, C. G. (2006). *Albert Bandura: 1915 – present.* Retrieved May 28, 2013, from http://webspace.ship.edu/cgboer/bandura.html

Bowen, G., Burton, C., Cooper, C., Cruz, L., McFadden, A., Reich, C., & Wargo, M. (2011). Listening to the voices of today's undergraduates: Implications for teaching and learning. *Journal of the Scholarship of Teaching and Learning, 11*(3), 21-33.

Bowles, T. J., McCoy, A. C., & Bates, S. (2008). The effect of supplemental instruction on timely graduation. *College Student Journal, 42*(3), 853-859.

Budny, D., Paul, C. A., & Newborg, B. B. (2010). Impact of peer mentoring on freshmen engineering students. *Journal of STEM Education, 11*(5-6), 9-24.

Buehl, M. M., & Fives, H. (2009). Exploring teachers' beliefs about teaching knowledge: Where does it come from? Does it change? *The Journal of Experimental Education, 77*(4), 367-407.

Cavote, S. E., & Kopera-Frye, K. (2004). Subject-based first-year experience courses: Questions about program effectiveness. *Journal of The First-Year Experience & Students, 16*(1), 85-102.

Clark, M. H., & Cundiff, N. L. (2011). Assessing the effectiveness of a college freshman seminar using propensity score adjustments. *Research in Higher Education, 52(*6), 616-639.

Clark, M. R. (2005). Negotiating the freshman year: Challenges and strategies among first-year college students. *Journal of College Student Development, 46*(3), 296-316.

Cliff, A. (1995). A qualitative review of study behavior before and during the first year of engineering studies. *Higher Education, 29*(2), 169-181.

Conti, R. (2000). College goals: Do self-determined and carefully considered goals predict intrinsic motivation, academic performance, and adjustment during the first semester? *Social Psychology of Education, 4*(2), 189-211.

Credé, M., Roch, S. G., & Kieszczynka, U. M. (2010). Class attendance in college: A meta-analytic review of the relationship of class attendance with grades and student characteristics. *Review of Educational Research, 80*(2), 272-295.

Creswell, J. W. (2013). *Qualitative inquiry & research design: Choosing from among five approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.

Cutright, M. (2008). From helicopter parent to valued partner: Shaping the parental relationship for student success. *New Directions for Higher Education, 2008*(144), 39-48.

David-Lange, J. (2011). *Current education book summaries: The highly engaged classroom.* Retrieved from

http://www.centergrove.k12.in.us/cms/lib4/IN01000850/Centricity/Domain/1217/The%2 0Main%20Idea%20-%20The%20Highly%20Engaged%20Classroom.pdf

Davis, S. F., & Palladino, J. J. (1997). *Psychology* (2nd ed.). Upper Saddle River, NJ: Simon & Schuster.

Donahue, L. (2004). Connections and reflections: Creating a positive learning environment for first-year students. *Journal of the First-Year Experience, 16*(1), 77-100.

Doolen, T. L., & Long, M. (2007). Identification of retention levers using a survey of engineering freshman attitudes at Oregon State University. *European Journal of Engineering Education, 32*(6), 721-734.

Dunlap, J. C. (2005). Problem-based learning and self-efficacy: How a capstone course prepares students for a profession. *Educational Technology, Research and Development, 53*(1), 65-85.

Engberg, M. E., & Mayhew, M. J. (2007). The influence of first-year "success" courses on student learning and democratic outcomes. *Journal of College Student Development, 48*(3), 241-258.

English, L. M., & Gillen, M. A. (2001). Journal writing in practice: From vision to reality. *New Directions for Adult and Continuing Education, 2001*(90), 87-94.

Erkut, S., & Mokros, J. R. (1984). Professors as models and mentors for college students. *American Educational Research Journal, 21*(2), 39-417.

Everett, M. C. (2013). Reflective journal writing and the first-year experience. *International Journal of Teaching and Learning in Higher Education, 25*(2), 213-222.

Fayowski, V., & MacMillan, P. D. (2008). An evaluation of the supplemental instruction programme in a first year calculus course. *International Journal of Mathematical Education in Science and Technology, 39*(7), 843-855.

Foor, C. E., Walden, S. E., & Trytten, D. A. (2007). "I wish that I belonged more in this whole engineering group:" Achieving individual diversity. *Journal of Engineering Education, 96*(2), 103-115.

Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of College Student Development, 48*(3), 259-274.

Friedman, D. B., & Marsh, E. G. (2009). What type of first-year seminar is most effective? A comparison of thematic seminars and college transition/success seminars. *Journal of The First-Year Experience & Students in Transition, 21*(1), 29-42.

Gall, T. L., Evans, D. R., & Bellerose, S. (2000). Transition to first-year university: Patterns of change in adjustment across life domains and time. *Journal of Social and Clinical Psychology, 19*(4), 544-567.

Ganser, S. R., & Kennedy, T. L. (2012). Where it all began: Peer education and leadership in student services. *New Directions for Higher Education, 2012*(157), 17-29.

Gibney, A., Moore, N., Murphy, F., & O'Sullivan, S. (2011). The first semester of university life; 'will I be able to manage it at all?' *Higher Education, 62*(3), 351-366.

Gifford, D., Briceño-Perriott, J., & Mianzo, F. (2006). Locus of control: Academic achievement and retention in a sample of university first-year students. *Journal of College Admission*, *191*, 18-25.

Gok, T. (2012). The impact of peer instruction on college students' beliefs about physics and conceptual understanding of electricity and magnetism. *International Journal of Science and Mathematics Education, 10*(2), 417-436.

Goodman, K., & Pascarella, E. T. (2006). First-year seminars increase persistence and retention: A summary of the evidence from how college affects students. *Peer Review, 8*(3), 26-28.

Gredler, M. E. (2009). *Learning and instruction: Theory into practice* (6th ed.). Upper Saddle River, NJ: Prentice-Hall.

Guba, E. G. (1981). Criteria for assessing the trustworthiness of naturalistic inquires. *Educational Resources Information Center Annual Review Paper, 29*, 75-91.

Guba, E. G., & Lincoln, Y. S. (1994). Competing paradigms in qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 105-117). Thousand Oaks, CA: Sage.

Hall, C., Smith, K., & Chia, R. (2008). Cognitive and personality factors in relation to timely completion of a college degree. *College Student Journal, 42*(4), 1087-1098.

Hand, C., & Payne, E. (2008). First-generation college students: A study of Appalachian student success. *Journal of Developmental Education, 32*(1), 4-15.

Handelsman, M. M., Briggs, W. L., Sullivan, N., & Towler, A. (2005). A measure of college student course engagement. *The Journal of Educational Research, 98*(3), 184-191.

Haynes, T. L., Ruthig, J. C., Perry, R. P., Stupnisky, R. H., & Hall, N. C. (2006). Reducing the academic risk of over-optimism: The longitudinal effects of attributional retraining on cognition and achievement. *Research in Higher Education, 47*(7), 755-779.

Hendel, D. D. (2006-2007). Efficacy of participating in a first-year seminar on student satisfaction and retention. *Journal of College Student Retention, 8*(4), 413-423.

Hoffman, M., Richmond, J., Morrow, J., & Salomone, K. (2002-2003). Investigating "sense of belonging" in first-year college students. *Journal of College Student Retention, 4*(3), 227-256.

Holland, J. M., Major, D. A., & Orvis, K. A. (2012). Understanding how peer mentoring and capitalization link STEM students to their majors. *The Career Development Quarterly, 60*(4), 343-354.

Holmstrom, L. L., Karp, D. A., & Gray, P. S. (2002). Why laundry, not Hegel? Social class, transition to college, and pathways to adulthood. *Symbolic Interaction, 25*(4), 437-462.

Horstmanshof, L., & Zimitat, C. (2007). Future time orientation predicts academic engagement among first-year university students. *British Journal of Educational Psychology, 77*(3), 703-718.

Hsieh, P., Sullivan, J. R., & Guerra, N. S. (2007). A closer look at college students: Self-efficacy and goal orientation. *Journal of Advanced Academics, 18*(3), 454-476.

Hunter, M. S. (2006). Fostering student learning and success through first-year programs. *Peer Review, 8*(3), 4-7.

Hunter, M. S., & Murray, K. A. (2007). New frontiers for student affairs professionals: Teaching and the first-year experience. *New Directions for Student Services, 2007*(117), 25-34.

Jamelske, E. (2009). Measuring the impact of a university first-year experience program on student GPA and retention. *Higher Education, 57*(3), 373-391.

Johnson, V. K., Gans, S. E., Kerr, S., & LaValle, W. (2010). Managing the transition to college: Family functioning, emotion coping, and adjustment in emerging adulthood. *Journal of College Student Development, 51*(6), 607-621.

Kelly, J. T., Kendrick, M. M., Newgent, R. A., & Lucas, C. J. (2007). Strategies for student transition to college: A proactive approach. *College Student Journal, 41*(4), 1021-1035.

Keup, J. R. (2007). Great expectations and the ultimate reality check: Voices of students during the transition from high school to college. *NASPA Journal, 44*(1), 3-31.

Keup, J. R. (2013, March). *Leveraging programmatic decision points for first-year seminar success.* Paper presented at the 2013 ACPA Conference, Las Vegas, NV. Retrieved from http://www.sc.edu/fye/research/research_presentations/index.html

Keup, J. R., & Barefoot, B. O. (2005). Learning how to be a successful student: Exploring the impact of first-year seminars on student outcomes. *Journal of The First-Year Experience & Students in Transition, 17*(1), 11-47.

Kezar, A. J., & Kinzie, J. (2006). Examining the ways institutions create student engagement: The role of mission. *Journal of College Student Development, 47*(2), 149-172.

Khazanov, L. (2011). Mentoring at-risk students in a remedial mathematics course. *Mathematics and Computer Education, 45*(2), 106-118.

Kidwell, K. S. (2005). Understanding the college first-year experience. *The Clearing House, 78*(6), 253-255.

Klingsieck, K. B., Grund, A., Schmid, S., & Fries, S. (2013). Why students procrastinate: A qualitative approach. *Journal of College Student Development, 54*(4), 397-412.

Kolkhorst, B. B., Yazedjian, A. Y., Toews, M. L. (2010). A longitudinal examination of parental attachment, college adjustment, and academic achievement. *Journal of The First-Year Experience & Students in Transition, 22*(1), 9-25.

Krathwohl, D. R. (2009). *Methods of educational and social science research: The logic of methods* (3rd ed.). Long Grove, IL: Waveland Press.

Krause, K. L., & Coates, H. (2008). Students' engagement in first-year university. *Assessment & Evaluation in Higher Education, 33*(5), 493-505.

Krefting, L. (1996). Rigor in qualitative research: The assessment of trustworthiness. In A. K. Milinki (Ed.), *Cases in qualitative research* (pp. 173-181). Los Angeles: Pyrczak.

Krumrei-Mancuso, E. J., Newton, F. B., Kim, E., & Wilcox, D. (2013). Psychosocial factors predicting first-year college student success. *Journal of College Student Development, 54*(3), 247-266.

Kuh, G. (2009). What student affairs professionals need to know about student engagement. *Journal of College Student Development, 50*(6), 683-706.

Kuh, G., Cruce, T. M., Shoup, R., Kinzie, J., & Gonyea, R. M. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *The Journal of Higher Education, 79*(5), 540-563.

Lamb, C. H., Lee, J. B., & Vinton, K. L. (1997). Developing a freshman seminar: Challenges and opportunities. *Journal of Management Education, 21*(1), 27-43.

Lang, D. J. (2007). The impact of a first-year experience course on the academic performance, persistence, and graduation rates of first-semester college students at a public research university. *Journal of The First-Year Experience & Students in Transition, 19*(1), 9-25.

Lange, D. N. (1971). An application of social learning theory in affecting change in a group of student teachers using video modeling techniques. *Journal of Educational Research, 65*(4), 151-154.

Larose, S., Cyrenne, D., Garceau, O., Harvey, M., Guay, F., Godin, F., …Deschênes, C. (2011). Academic mentoring and dropout prevention for students in math, science and technology. *Mentoring & Tutoring: Partnership in Learning, 19*(4), 419-439.

Lasry, N., Mazur, E., & Watkins, J. (2008). Peer instruction: From Harvard to the two-year college. *American Journal of Physics, 76*(11), 1066-1069.

Latino, J. A., & Unite, C. M. (2012). Providing academic support through peer education. *New Directions for Higher Education, 2012*(157), 31-43.

Lichtenstein, G., McCormick, A. C., Sheppard, S. D., & Puma, J. (2010). Comparing the undergraduate experience of engineers to all other majors: Significant differences are programmatic. *Journal of Engineering Education, 99*(4), 305-317.

Locks, A. M., Hurtado, S., Bowman, N. A., & Oseguera, L. (2008). Extended notions of campus climate and diversity to students' transition to college. *The Review of Higher Education, 31*(3), 257-285.

Malm, J., Bryngfors, L., & Mörner, L. (2012). Supplemental instruction for improving first-year results in engineering students. *Studies in Higher Education, 37*(6), 655-666.

Mattanah, J. F., Ayers, J. F., Brand, B. L., Brooks, L. J., Quimby, J. L., & McNary, S. W. (2010). A social support intervention to ease the college transition: Exploring main effects and moderators. *Journal of College Student Development, 51*(1), 93-108.

McGuire, S. Y. (2006). The impact of supplemental instruction on teaching students how to learn. *New Directions for Teaching and Learning, 2006*(106), 3-10.

Meyer, M. D., Spencer, M., & French, T. N. (2009). The identity of a "college student": Perceptions of college academics and academic rigor among first-year students. *College Student Journal, 43*(4), 1070-1079.

Meyers, K. L., Silliman, S. E., Gedde, N. L., & Ohland, M. W. (2010). A comparison of engineering students' reflections on their first-year experiences. *Journal of Engineering Education, 99*(2), 169-178.

Miller, J. W., Janz, J. C., & Chen, C. (2007). The retention impact of a first-year seminar on students with varying pre-college academic performance. *Journal of The First-Year Experience & Students in Transition, 19*(1), 47-62.

Miller, T. E., Bender, B. E., Schuh, J. H., & Associates. (2005). *Promoting reasonable expectations: Aligning student and institutional view of the college experience*. San Francisco, CA: Jossey Bass.

Nadelson, L. S., Semmelroth, C., Martinez, G., Featherstone, M., Fuhriman, C. A., & Sell, A. (2013). Why did they come here? The influences and expectations of first-year students' college experience. *Higher Education Studies, 3*(1), 50-62.

National Center for Education Statistics. (2013). *Enrollment rates of 18- to 24-year olds in degree-granting institutions, by level of institution and sex and race/ethnicity of student: 1967 through 2012.* Retrieved from https://nces.ed.gov/programs/digest/d13/tables/dt13_302.60.asp

Nilson, L. B. (2013). *Creating self-regulated learners: Strategies to strengthen students' self-awareness and learning skills*. Sterling, VA: Stylus.

Ning, H. K., & Downing, K. (2010). The impact of supplemental instruction on learning competence and academic performance. *Studies in Higher Education, 35*(8), 921-939.

Nordstrom, C. R., & Segrist, D. J. (2009). Predicting the likelihood of going to graduate school: The importance of locus of control. *College Student Journal, 43*(1), 200-206.

Ogden, E. P., & Trice, A. D. (1986). The predictive validity of the academic locus of control scale for college students: Freshman outcomes. *Journal of Social Behavior and Personality, 1*(4), 649-652.

Pace, C. R. (1979). *Measuring outcomes of college: Fifty years of findings and recommendation for the future*. San Francisco, CA: Jossey Bass.

Padgett, R. D. (2011). *The impact of first-year seminars on student involvement and engagement in educational good practices*. Paper presented at the 2011 Midwest First-Year Conference, Elgin, IL. Retrieved from http://www.sc.edu/fye/research/research_presentations/index.html

Padilla-Walker, L. M., & Nelson, L. J. (2012). Black hawk down?: Establishing helicopter parenting as a distinct construct from other forms of parental control during emerging adulthood. *Journal of Adolescence, 35*(5), 1177-1190.

Painter, S. L., Bailey, R., Gilbert, M., & Prior, J. (2006). New directions for supplemental instruction. *New Directions for Teaching and Learning, 2006*(106), 73-84.

Parade, S. H., Leerkes, E. M., & Blankson, A. N. (2010). Attachment to parents, social anxiety, and close relationships of female students over the transition to college. *Journal of Youth and Adolescence, 39*(2), 127-137.

Parker, J. D. A., Duffy, J. M., Wood, L. M., Bond, B. J., & Hogan, M. J. (2005). Academic achievement and emotional intelligence: Predicting the successful transition from high school to university. *Journal of the First-Year Experience, 17*(1), 67-78.

Paul, E. L., & Brier, S. (2001). Friendsickness in the transition to college: Precollege predictors and college adjustment correlates. *Journal of Counseling & Development, 79*(1), 77-89.

Peterfreund, A. R., Rath, K. A., Xenos, S. P., & Bayliss, F. (2008). The impact of supplemental instruction on students in STEM courses: Results from San Francisco State University. *Journal of College Student Retention, 9*(4), 487-503.

Pittman, L. D., & Richmond, A. (2008). University belonging, friendship quality, and

   psychological adjustment during the transition to college. *The Journal of Experimental*

   Education, 76(4), 343-361.

Power, R. K., Miles, B. B., Peruzzi, A., & Voerman, A. (2011). Building bridges: A practical

   guide to developing and implementing a subject-specific peer-to-peer academic

   mentoring program for first-year higher education students. *Asian Social Science, 7*(11),

   75-80.

Pritchard, M. E., Wilson, G. S., & Yamnitz, B. (2007). What predicts adjustment among college

   students? A longitudinal panel study. *Journal of American College Health, 56*(1), 15-21.

Ragins, B. R., & Cotton, J. L. (1999). Mentor functions and outcomes: A comparison of men and

   women in formal and informal mentoring relationships. *Journal of Applied Psychology,*

   84(4), 529-550.

Rice, K. G., FitzGerald, D. P., Whaley, T. J., & Gibbs, C. L. (1995). Cross-sectional and

   longitudinal examination of attachment, separation-individuation, and college student

   adjustment. *Journal of Counseling and Development, 73*(4), 463-474.

Risquez, A., Moore, S., & Morley, M. (2007-2008). Welcome to college? Developing a richer

   understanding of the transition process for adult first year students using reflective

   written journals. *Journal of College Student Development, 9*(2), 183-204.

Roderick, C., & Carusetta, E. (2006). Experiencing first-year university in a problem-based

   learning context. *Journal of The First-Year Experience & Students in Transition, 18*(1),

   9-27.

Rodger, S., & Tremblay, P. F. (2003). The effects of a peer mentoring program on academic success among first year university students. *The Canadian Journal of Higher Education, 33*(3), 1-18.

Rose-Hulman Institute of Technology. (n.d.a). College and life skills. In *Course Descriptions*. Retrieved March 15, 2014 from https://www.rose-hulman.edu/course-catalog/course-catalog-2013-2014/course-descriptions/college-life-skills.aspx

Rose-Hulman Institute of Technology. (n.d.b). Mission and vision. In *About Rose-Hulman*. Retrieved March 15, 2014 from http://www.rose-hulman.edu/about/mission-vision.aspx

Rose-Hulman Institute of Technology. (n.d.c). *Student life*. Retrieved December 22, 2014 from http://www.rose-hulman.edu/offices-and-services/student-life/student-activities/student-organizations.aspx

Rose-Hulman Institute of Technology. (n.d.d). *Students supporting students*. Retrieved April 16, 2014 from http://www.rose-hulman.edu/student-life/campus-life/housing-and-residence-life/resident-assistants.aspx

Rose-Hulman Institute of Technology. (2014a). *Common data set 2014-2015*. Retrieved September 29, 2014 from http://www.rose-hulman.edu/irpa/wordpress/wp-content/uploads/2014/09/CDS_2014-2015.pdf

Rose-Hulman Institute of Technology. (2014b). *News.* Retrieved January 17, 2015 from http://www.rose-hulman.edu/news/on-campus/2014/rose-hulman-tops-undergraduate-engineering-rankings-for-16th-straight-year,-five-academic-programs-also-no-1-in-national-survey.aspx

Sanchez, R. J., Bauer, T. N., & Paronto, M. E. (2006). Peer-mentoring freshmen: Implications for satisfaction, commitment and retention to graduation. *Academy of Management Learning & Education, 5*(1), 25-37.

Schmidt, B. (2011). Teaching engineering dynamics by use of peer instruction supported by an audience response system. *European Journal of Engineering Education, 36*(5), 413-423.

Schnell, C. A., & Doetkott, C. D. (2003). First year seminars produce long-term impact. *Journal of College Student Retention, 4*(4), 377-391.

Schrader, P. G., & Brown, S. W. (2008). Evaluating the first year experience: Students' knowledge, attitudes, and behaviors. *Journal of Advanced Academics, 19*(2), 310-359.

Shim, S. S., & Ryan, A. M. (2012). What do students want socially when they arrive at college? Implications of social achievement goals for social behaviors and adjustment during the first semester of college. *Motivation and Emotion, 36*(4), 504-515.

Shook, J. L., & Keup, J. R. (2012). The benefits of peer leader programs: An overview from the literature. *New Directions for Higher Education, 2012*(157), 5-16.

Shotton, H. J., Oosahwe, E. S. L., & Cintrón, R. (2007). Stories of success: Experiences of American Indian students in a peer-mentoring retention program. *The Review of Higher Education, 31*(1), 81-107.

Sidle, M. W., & McReynolds, J. (2009). The freshman year experience: Student retention and student success. *NASPA Journal, 46*(3), 434-446.

Smith, J. S., & Wertlieb, E. C. (2005). Do first-year college students' expectations align with their first-year experiences? *NASPA Journal, 42*(2), 153-174.

Smith, P. L., & Ragan, T. J. (2005). *Instructional design* (3rd ed.). Hoboken, NJ: John Wiley & Sons.

Smith, T. (2008). Integrating undergraduate peer mentors into liberal arts courses: A pilot study. *Innovative Higher Education, 33*(1), 49-63.

Starke, M. C., Harth, M., & Sirianni, F. (2001). Retention, bonding, and academic achievement: Success of a first-year seminar. *Journal of The First-Year Experience & Students in Transition, 13*(2), 7-35.

Stebleton, M., Jensen, M., & Peter, G. (2010). Enhancing student engagement in a multidisciplinary first-year experience course. *College Teaching Methods & Styles Journal, 6*(1), 1-6.

Stern, G. G. (1966). Myth and reality in the American college. *AAUP Bulletin, 52*(4), 408-414.

Stout, M. L., & McDaniel, A. J. (2006). Benefits to supplemental instruction leaders. *New Directions for Teaching and Learning, 2006*(106), 55-62.

Strayhorn, T. L. (2009). An examination of the impact of first-year seminars on correlates of college student retention. *Journal of The First-Year Experience & Students in Transition, 21*(1), 9-27.

Terenzini, P. T., Rendon, L. I., Upcraft, M. L., Millar, S. B., Allison, K. W., Gregg, P. L., & Jalomo, R. (1994). The transition to college: Diverse students, diverse stories. *Research in Higher Education, 35*(1), 57-73.

Terrion, J. L., & Daoust, J. (2012). Assessing the impact of supplemental instruction on the retention of undergraduate students after controlling for motivation. *Journal of College Student Retention, 13*(3), 311-327.

Tieu, T., & Pancer, S. M. (2009). Cocurricular involvement and first-year students' transition to university: Quality vs. quantity of involvement. *Journal of the First-Year Experience & Students in Transition, 21*(1), 43-64.

Tinto, V. (1988). Stages of student departure: Reflections on the longitudinal character of student

    leaving. *Journal of Higher Education, 59*(4), 438-455.

Trice, A. D. (1985). An academic locus of control scale for college students. *Perceptual and*

    Motor Skills, 61(3), 1043-1046.

University of South Carolina. (n.d.). *History of the first university seminar & the university 101*

    program. Retrieved from http://www.sc.edu/univ101/aboutus/history.html

Upcraft, M. L., Gardner, J. N., & Barefoot, B. O. (2005). *Challenging and supporting the first-*

    year student: A handbook for improving the first year of college. San Francisco, CA:

    Jossey-Bass.

Van Gog, T., & Rummel, N. (2010). Example-based learning: Integrating cognitive and social-

    cognitive research perspectives. *Educational Psychology Review, 22*(2), 155-174.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.*

    Cambridge, MA: Harvard University Press.

Walker, S. C., & Taub, D. J. (2001). Variables correlated with satisfaction with a mentoring

    relationship in first-year college students and their mentors. *Journal of The First-Year*

    Experience, 13(1), 47-67.

Webber, K. L., Krylow, R. B., & Zhang, Q. (2013). Does involvement really matter? Indicators

    of college student success and satisfaction. *Journal of College Student Development,*

    54(6), 591-611.

Weissman, J., & Magill, B. A. (2008). Developing a student typology to examine the

    effectiveness of first-year seminars. *Journal of The First-Year Experience & Students in*

    Transition, 20(2), 65-90.

Wilcox, P., Winn, S., & Fyvie-Gauld, M. (2005). 'It was nothing to do with the university, it was just the people': The role of social support in the first-year experience of higher education. *Studies in Higher Education, 30*(6), 707-722.

Williford, A. M., Chapman, L. C., & Kahrig, T. (2001). The university experience course: A longitudinal study of student performance, retention, and graduation. *Journal of College Student Retention, 2*(4), 327-340.

Willis, G., Schubert, W. H., Bullough, R. V., Kridel, C., & Holton, J. T. (1994). *The American curriculum: A documentary history*. Westport, CT: Praeger.

Yazedjian, A., Purswell, K. E., Sevin, T., & Toews, M. L. (2007). Adjusting to the first year of college: Students' perceptions of the importance of parental, peer, and institutional support. *Journal of The First-Year Experience & Students in Transition, 19*(2), 29-46.

Young, D. G. (2013, May). *Examining the national picture of assessment of first-year seminars.* Paper presented at the 2013 Association of Institutional Research Annual Forum, Long Beach, CA. Retrieved from http://www.sc.edu/fye/research/research_presentations/index.html

Zeldin, A. L., & Pajares, F. (2000). Against the odds: Self-efficacy beliefs of women in mathematical, scientific, and technological careers. *American Educational Research Journal, 37*(1), 215-246.

APPENDIX A: FIRST-YEAR SEMINAR SYLLABUS FALL 2014

Rose-Hulman Institute of Technology
College and Life Skills – Fall Quarter

Course Description and Purpose
This course will assist first year students at Rose-Hulman in acquiring life skills and learning about campus resources. The skills and information acquired in this course will assist the first year student in making a smooth transition from high school to college. This course is designed to introduce students to professional staff and resources that will assist them in creating a positive educational experience at Rose-Hulman Institute of Technology.

Grading

Your grade will be based on the following:

Attendance & Participation = 50%
Assignments = 50%

Grade Scale
93-100 A
90-92 B+
83-89 B
81-82 C+
70-80 C
68-69 D+
60-67 D
< 59 F

Rose-Hulman Institute of Technology
College and Life Skills – Fall Quarter 2014

<u>Orientation – Tuesday, September 2, 2014</u>
- Ethics and Social Expectations
- Session One: 1:00 p.m. – 2:00 p.m. Hulbert Arena
- Session Two: 2:15 p.m. – 3:00 p.m. Small Group Discussion - SRC Fieldhouse

<u>Week 1: September 4 - 10</u>
- Campus Involvement & Leadership
- *Small Group*

<u>Week 2: September 11 - 17</u>
- Career Services – Building your Resume
- *Large Group – Myers Building M-137*

<u>Week 3: September 18 - 24</u>
- Career Services – Preparing for the Career Fair
- *Large Group – SRC Room 157 Multipurpose Room*

REQUIRED Evening Sessions Monday, September 22, 2014-Degree Program Presentations-Various Locations, Session 1 – 7:30 p.m.   Session 2 – 8:30 p.m.

<u>Week 4: September 25 – October 1</u>
- Professional Etiquette
- *Small Group*

<u>Week 5: October 2 – 8</u>
- Policy and Procedures for Civil Rights Equity
- *Large Group – Myers Building M-137*

<u>Week 6: October 13 - 17</u>
- Prevention of Sexual Violence and Misconduct on Campus
- *Small Group*

<u>Week 7: October 20 - 24</u>
- Tour of the Logan Library & Introduction to the Learning Center
- *Large Group MEET IN THE LOGAN LIBRARY – 1ˢᵗ Floor*

<u>Week 8: October 27 – October 31</u>
- Time Management
- *Small Group*

<u>Week 9: November 3 - 7</u>
- Money Management
- *Large Group – Myers Building M-137*

<u>Week 10: November 10 - 14</u>
- Evaluations, Freshman Poll, Wrap-Up
- *Small Group*

APPENDIX B: JOURNAL TEMPLATES

The Freshman Experience - Week 1

As you begin your college career, tell me about the biggest challenge you expect to face.

Submit

Never submit passwords through Google Forms.

Powered by

Google Forms

This content is neither created nor endorsed by Google.

Report Abuse - Terms of Service - Additional Terms

The Freshman Experience - Week 2

Tell me about your college experiences this week. What academic and social challenges did you encounter? Why were these challenges? How did you respond?

Submit

Never submit passwords through Google Forms.

The Freshman Experience - Week 10

Looking back on fall quarter, in what ways did you feel prepared for the challenges you encountered? In what ways did you feel unprepared for those challenges?

Submit

Never submit passwords through Google Forms.

APPENDIX C: FOCUS GROUP INTERVIEW PROTOCOL

1. What surprised you the most about fall quarter?

   a. In what ways did fall quarter meet your expectations?

   b. In what ways did it not meet your expectations?

2. During the fall quarter data collection, most freshmen felt that time management would be their biggest challenge. Why do you think that is?

   a. How did you expect time management to be different in college than in high school?

3. During the fall quarter data collection, one freshman commented that he/she intends to follow his/her bumper sticker that says "I will survive Rose-Hulman!" At any point did you feel like you were in survival mode? If yes, describe those experiences.

4. In what ways did the first-year seminar prepare you for fall quarter?

   a. How did your staff instructor help prepare you?

   b. How did your sophomore peer educator help prepare you?

5. What did you like the most about having a sophomore peer educator in the first-year seminar?

6. What characteristics did the sophomore peer educators possess that made them an effective part of the first-year seminar?

7. What did you like the least about having a sophomore peer educator in the first-year seminar?

8. What characteristics did the sophomore peer educators possess that made them an ineffective part of the first-year seminar?

9. Describe any interactions you had with your sophomore peer educator outside of class.

   a. Did these interactions have any influence on your fall quarter experiences? Why or why not?

10. What changes would you suggest if the peer educator program were to continue in the future?

APPENDIX D: JOURNAL THEMES AND CODES

Theme	Codes
Understanding the Academic Environment	Advisor
	Courses
	Exams
	Faculty
	Grades
	Learning Environment
	Lectures
	Major
	Midterms
	Quizzes
	Software
	Workload
	Pace
Forming Study Habits	Assignments
	Class Attendance
	Engagement
	Memorization
	Notes
	Organization
	Resources
	Seeking Help
	Studying
	Understanding Material
	Working Ahead

Theme	Codes
Exerting Personal Effort	Apply Myself
	Completion
	Falling Behind
	Laziness
	Motivation
	Perseverance
	Procrastination
	Productivity
	Self-Efficacy
	Working Hard
Leveraging the Social Environment	Culture
	Friends
	Language
	Making Friends
	Outgoing
	Parties
	Peer Pressure
	Peer Support
	Reserved
	RHIT Community
	Socializing
	Socially Awkward
	Teamwork
	Trouble
	United
Focusing on Co-Curricular Involvement	Athletics
	Band
	Choir
	Clubs/Organizations
	Extra-Curricular Activities
	Greek Life
	Hobby
	Musical
	Opportunities
	Traditions
	Volunteering
	Working

Theme	Codes
Desiring More Time	Allocate Time
	Amount of Time
	Balance
	Calendar
	Finding Time
	Free Time
	Managing Time
	Prioritizing
	Schedule
	Sleep
	Staying up Late
	Time Passing
	Wasting Time
Discovering One's Independence	Adjustment
	Away from Home
	Change
	Cleaning
	Decision Making
	Lesson Learned
	Lifestyle
	Meals
	Money
	Parents
	Responsibility
	Taking Risks
Establishing Residence Life	Illness
	Residence Hall
	Resident Assistant
	Roommate

Theme	Codes
Confronting New Emotional States	Alone
	Bored
	Conflicted
	Confused
	Courage
	Crying
	Depression
	Enjoyable
	Failure
	Fun
	Nervous
	On Edge
	Pretending
	Pride
	Relaxing
	Rewarding
	Sad
	Scared
	Stress
	Success
	Surprised
	Timid
	Unworthy
	Vulnerable
	Worried
Assessing Prior Experience	Achievements
	Applying to College
	Expectations
	High School
	Orientation
	RHAMP
	Scholarships

Theme	Codes
Possessing a Future Orientation	Career Fair
	Future Thinking
	Impressions
	Internship
	Interview
	Job Search
	Networking
	Resume

APPENDIX E: FOCUS GROUP THEMES AND CODES

Theme	Codes
Establishing Rapport	RHIT Student
	Sophomore
	One of Us
	Age
Contributing to the Learning Environment	Advice
	Knowledgeable
	Resource
	Engagement
Exhibiting an Appropriate Demeanor	Relaxed
	Professionalism
	Approachable
Achieving Success	Successful
	Role Model
Revising the Curriculum	Course Schedule
	Topics