

**The Development of Strategies for Success in
College Among First-generation College
Students: An Examination of a Focused
Intervention**

The Honors Program
Senior Capstone Project
Student's Name: Lindsey Weber
Faculty Sponsor: Dr. Sandra Enos
April, 2011

Table of Contents

Abstract	1
Introduction	2
Literature Review	3
Characteristics of First-Generation College Students	3
Academic Barriers.....	5
Social Barriers.....	7
Mental/Emotional Barriers.....	9
The Current Study	11
Method	12
Participants.....	12
Materials.....	13
Procedure	14
Results	18
Discussion	20
Limitations	24
Suggestions For Future Research.....	25
Appendices.....	27
Appendix A: Pre-test survey:.....	28
Appendix B: Post-test Survey	31
Appendix C: Life After High School Syllabus	33
Appendix D: Consent Form	37
Appendix E: Life After High School Syllabus, Revised.....	38
Appendix F: Text Annotation Handout	41
Appendix G: Agenda for Life After High School sessions, hosted at Bryant University ..	43
Appendix H: True Colors Activity.....	44
Appendix I: Wellness Handout	51
References.....	52

ABSTRACT

As a college education is becoming more crucial for career placement in today's economy, more individuals with diverse backgrounds are seeking a higher education. An increase in first-generation college students is one significant change in college demographics. These students who are the first in their families to attend an institution of higher education face academic, social, and mental/emotional challenges that students whose parents or elder siblings did attend college may not face. The current study had three objectives. The first was to create an assessment to measure college readiness. Secondly, an intervention program was created to address potential barriers to success in college. Thirdly, using a pre/post-test format, it was hypothesized that the intervention program would create changes in participants' attitudes and beliefs about college. Due to low reliability of the measure created in this study, no significant changes in attitudes were reported. However, qualitative data from open-ended survey questions suggest efficacy of the intervention program. The model employed here, which includes an undergraduate student as the instructor of the intervention program, should be modified and replicated to help high school students who are the first in their families to attend college better understand potential challenges in higher education, and adopt effective tactics to attend to such barriers.

INTRODUCTION

The demographics which define the college student population are undoubtedly changing. To begin, the number of students seeking a higher education is increasing: 14.3 million students were enrolled in a degree granting institution in 1993. In 2007 this statistic increased to 18.2 million students, and is projected to be 20.6 million students in 2018 (U.S. Department of Education, 2009, p. 9). In addition to the growth of this population as a whole, the demographics of this group are also changing. For example, more women are attending college: 55.2% of enrolled students were women in 1993, 57.1% in 2007, and projected 58.7% in 2018. Also, the growing population reflects greater racial/ethnic diversity than in past decades. For example, in 1993 25.9% of college students were non-white (Black = 9.8%, Hispanic = 7%, Asian/Pacific Islander = 4.9%, American Indian/Alaska Native = .7%, Nonresident aliens = 3.5%), and in 2007, 36.8% of students were non-white (Black = 13.2%, Hispanic = 11.5%, Asian/Pacific Islander = 6.6%, American Indian/Alaska Native = 1.1%, Nonresident aliens = 3.3%). Lastly, more students are also attending two-year institutions, where they can earn an Associate's Degree, instead of a four-year, Bachelor Degree granting institution. For instance, between the 2006-07 academic year and the 2018-19 year, it is projected that the number of Associate's Degrees granted will increase by 25% (16% for men and 31% for women). Meanwhile, the projected increase in Bachelor's Degrees granted from 2006-07 to 2018-19 is only 19% (14% for men and 23% for women) (U.S. Department of Education, 2009). This changing student population demands additional resources and programming in higher education.

Many researchers investigate the implications of diverse student bodies in terms of race/ethnicity, gender, and age. One student population which is sometimes overlooked, however, is first-generation college students. The U.S. Department of Education defines a first-generation college student as one whose parents did not have more than a high school education (U.S. Department of Education, 2009). These students typically face additional financial, social, emotional, and academic barriers which their peers with college educated parents do not face. Much of the literature on first-generation college students focuses on the student's performance once matriculated into an institution of higher education. There is little research on these students before they enroll in a college or university. The purpose of this study was to create an assessment which measures high school senior's college readiness. Also, an intervention

program was created to address social, academic, and mental/emotional barriers prospective first-generation college students (PFGCSs) may face during their transition into an institution of higher education. Finally, the effectiveness of this program was evaluated using the instrument created by the researcher.

LITERATURE REVIEW

First-generation college students are those who are the first in their families to attend college (Bryan & Simmons, 2009). Moreover, the parents of first-generation students have no formal education beyond high school (Gibbons & Borders, 2010). The term “first-generation student” typically refers to students who are the first in their families to enrolled in (or graduate from) an institution of higher education. Gibbons and Borders (2010) refer to middle and high school students whose parents did not receive a formal higher education as prospective first-generation college students (PFGCSs). The current study focuses on PFGCSs and their imminent transition into college.

Characteristics of First-Generation College Students

First-generation college students exhibit many unique characteristics which distinguish them from their peers. For instance, students who are the first in their families to attend college usually begin their endeavor with a limited understanding of higher education. Compared to their peers, they are oftentimes unprepared for the drastic transition into the college lifestyle, and the perceived freedoms which accompany this life (McMurray & Sorrells, 2009). Unlike their peers whose parents did attend college, PFGCSs generally cannot rely on their parents for guidance (Torres & Hernandez, 2009). PFGCSs cannot turn to their parents for advice about choosing a college or university, financial aid, or academic concerns they may have about being a college student. In addition to low parental involvement, these students have supplementary pull factors, or pre-college characteristics. Pull factors include high school social experiences and academic achievement. These factors are sometimes viewed as exerting “pulling away” or “drawing in” forces which affect students’ academic and social behaviors in college. For example, having to work off-campus, attending to family obligations, addressing financial issues, and teen pregnancy are pull factors that can interfere with students’ academic achievement (Crisp, Nora & Taggart, 2009).

Further, pull factors influence students' perceptions of their academic abilities. Once matriculated into a college or university, many PFGCSs feel unprepared. For example, McMurray and Sorrells (2009) report that first-generation students are more likely to judge their abilities as inferior, when compared to second generation college students. Similarly, PFGCSs report more perceived barriers to staying in school than their second generation peers (Gloria et. al, 2009). In a study of male Latino undergraduates, perceived barriers to staying in school was a moderately negative predictor of the psychological well-being of the students (Gloria et. al, 2009). Perceived barriers tend to be academic, social, or mental/emotional (i.e. stress, homesickness etc). Oftentimes demands from school and home lives are difficult for students to balance. For instance, Gibbons and Borders (2010) report that PFCGS experience lower familial support and report lower grade point averages than second generation students. This relationship holds true even when controlling for family income, academic preparation, and ethnicity, thus emphasizing the impact of first-generation status (Gibbons & Borders, 2010).

The pull factors mentioned above help explain additional implications of first-generation student status. Oftentimes academic preparedness and family demands negatively impact the academic achievement for this student population. Further, Majer (2009) reports that first-generation college students completed fewer credit hours and earned lower grades than students whose parents attended college. It was also reported that first-generation students work more hours per week than other students (Majer, 2009). It is likely that this relationship exists because time at work takes away from time donated to academics. Oftentimes, first-generation students have less financial support from their parents, thus working more hours than their peers. The financial and family dynamics for these students often decreases their academic achievement.

As previously mentioned, first-generation students are more likely to be from lower income families (Gibbons & Borders, 2010). The minimal financial support provided from parents also leads several first-generation students to attend two-year institutions. However, once enrolled in a two-year college, many students do not transfer into four-year institutions (Alicea-Planas, 2009). Similarly, first-generation students are less likely than second generation students to earn a four-year degree. Further, in a study of first-year undergraduates, first-generation students earned lower grades and were more likely to drop out of college, than other freshmen

students (McMurray & Sorrells, 2009). The low academic achievement of this population warrants additional resources which can facilitate their retention and success in higher education.

The demographic profile of first-generation college students is different than that of the entire college student population. Moreover, a disproportionately high number of first-generation students are racial/ethnic minorities (Gibbons & Borders, 2010). Much research has been conducted on these students and supports the notion that this student population needs additional support systems in institutions of higher education. For example, Gibbons and Borders (2010) found that Latino students have more needs than white first-generation students. Latinos face racial/ethnic discrimination, negative or absent educational role models, and lack of preparation for higher education. Also, college completion rates of African-American students lag behind that of white students (Crisp et al., 2009). This can be attributed to the various pull factors discussed above. Additionally, many first-generation students are from low socioeconomic status (SES) families (Gibbons & Borders, 2010). Financial demands are often a contributing factor to the low completion rates of the population. While first-generation status alone can be debilitating for college students, the literature suggests SES and race/ethnicity are likely to cause additional hindrances to student retention.

Academic Barriers

Most people in academia would agree that academic preparation is crucial for college success. College success can be measured in many ways, including retention and completion rates, and grade point average (GPA) (Cabrera, Burkum & La Naasa, 2005). Regardless of how it is measured, college success for an individual often depends on his/her pull factors (Crisp et al., 2009). Students' academic experiences in elementary and secondary educational institutions often affect their performance in higher education.

Unfortunately, too many elementary and secondary schools are failing our youth. As previously mentioned, a disproportionately high number of first-generation college students come from low SES backgrounds (Gibbons & Borders, 2010). Many of the schools which serve low SES students have limited resources and lack certified teachers and counselors (Cabrera et al., 2005). Without the proper guidance and scaffolding from qualified mentors, students are more likely to have low engagement and motivation in academic endeavors. Students' low expectations have

been reported to emerge in children as young as elementary school-age (Gibbons & Borders, 2010). Similarly, academic tracking becomes problematic for some students. Oftentimes, low SES, minority students are mistakenly placed in remedial classes (Crisp et al., 2009). Such tracking often leads to lower expectations, and therefore lower performance for many students. Low performance in middle and high school, in turn, leads to low expectations regarding higher education. Tracking may cause students to underestimate their ability and therefore not even strive to attend college, or once enrolled in college students may perceive themselves as inferior and unable to overcome academic challenges. The development of low expectations for many students begins in elementary school and follows them throughout their educational experience.

The issue of tracking becomes increasingly debilitating for students during the high school years. While most white students are enrolled in college-prep (CP) classes, racial/ethnic minorities are less likely to take such classes in high school (Gibbons & Borders, 2010). Further, one study found a statistically significant difference between the number of college-prep classes taken by whites and minorities. White students tend to take CP classes, while minorities are often tracked in remedial or standard classes (Crisp et al., 2009). Crisp et.al. (2009) also reported that Hispanic students are unlikely to have adequate K-12 academic preparation, and less than half of Hispanic students graduating from high school qualify for enrollment at a 4-year institution upon graduation. Also, from a structural perspective, many schools serving low SES students lack the resources to provide AP classes for students (Cabrera at al., 2005). Therefore, high performing students attending urban high schools may be tracked according to the school's resources, not the students' abilities. Tracking often facilitates academic achievement for white students while it provides barriers for minority students in high school and beyond.

The implications of being a first-generation student often provide additional academic barriers for this student population. The low teacher quality in many schools which serve low SES students in conjunction with tracking policies often impede academic growth for first-generation and minority students. The low expectations and lack of proper guidance in high school often result in students being unprepared for life as a college student.

Social Barriers

In addition to academic barriers, first-generation college students face several social barriers once matriculated into an institution of higher education. One social institution which can be both helpful and harmful for all students is the family unit. Unfortunately, for many first-generation students, their families provide obstacles to collegiate success, rather than help break barriers down. Further, because parents of these students did not attend college themselves, they often do not understand the necessary commitment for success in college. One study on Hispanic nursing students captures one students' struggle with familial support: "It's not that our families don't want us to succeed; it's that maybe they don't understand how to succeed..." (Alicea-Planas, 2009 p. 112). Although parents want what is best for their children, many parents of first-generation students do not understand the demands of higher education, or ways to help support their children. Similarly, parents of first-generation students are less involved in the students' school activities (Cabrera, 2005). Due to the lack of empathy, parents struggle to provide emotional and physical support for their students while they are in school (Gloria, Castellanos, Scull & Villegas, 2009). These factors make the college experience difficult for first-generation students because they cannot look to their parents for support, while second generation students often have parents, siblings, or even grandparents to provide insight and motivation during difficult situations in college.

For many first-generation students the difficulty of balancing home life with academic demands lies within the culture of their families. Furthermore, in the case of racial/ethnic minority first-generation students, their cultures may clash with the dominant values held in higher education. For example, higher education in the United States is a highly individualistic culture where student success is valued and students compete for academic honors and social standing (Owens, Lacey, Rawls & Holbert-Quince, 2010). On the other hand, Latinos/as for example, emphasize cooperative and intergenerational familial ties (Gloria et. al. 2009). Therefore, the cut throat environment in higher education may be intimidating to a student whose cultural values are rooted in collectivist traditions (Winkle-Wagner, 2009). For example, some Hispanic families may encourage their children to stay home and contribute to familial responsibilities, rather than pursuing an education. Some students who do pursue a higher education may experience internal struggles with cultural differences, and may not have family members to turn to for guidance and support. Also, some families place additional demands on their students, as they do not

understand the level of commitment necessary for collegiate success (Winkle-Wagner, 2009). For example, families may put pressure on a student to help support the family financially. Also, some students feel pressured to participate in family activities over spending time on school work (Torres, 2009). Unfortunately, many first-generation-students' families provide obligations and commitments beyond the scope of the student's education (Alicea-Planas, 2009). Due to the lack of a common understanding of higher education and few common cultural values, these students often feel forced to choose between their families and their academic endeavors. Similarly, the lack of knowledgeable parents often lead first-generation students to report low perceived parental involvement in their academic pursuits.

While the family unit often provides personal obligations for first-generation students, the institution of higher education also provides social barriers which can hinder academic and personal growth of this student population. As previously mentioned, cultural differences can cause tensions between a student's values and those of the college or university he/she attends. The individualistic nature of higher education in the United States can make some students feel intimidated, discriminated against, and not supported by faculty and fellow students (Alicea-Planas, 2009). Further, first-generation students report low perceived social support. For minority students, stereotypes may create perceived social barriers and even discrimination on behalf of their peers and faculty and staff (Gloria, 2009). Due to low perceived support, first-generation students report lacking a sense of belongingness in college (Owens et al., 2010). Many students fail to identify faculty and staff as mentors on campus, thus further alienating themselves from the campus community (Cabrera, 2005; Gloria et al., 2009). To be more specific, one study conducted at nine large public universities found that first-generation students are statistically significantly less likely to interact with faculty members. Further, a survey of over 58,000 undergraduate reports that FGCS's are less likely to assist faculty with research, communicate with faculty by email or in person, and interact with faculty during lecture class sessions than their peers whose parents did attend college (Kim & Sax, 2009). The low involvement with faculty and staff put first-generation students at a disadvantage, as many second generation students are likely to form such relationships and flourish from them (Kim & Sax, 2009). The cultural differences for some students and the low involvement with the campus

community for others provide barriers for first-generation students which many second generation students do not face.

Sometimes the cultural differences between the home and school create internal tensions for the students. Such tensions are often manifested in low academic performance for first-generation college students. Because first-generation college students have lower degree completion rates than their peers, it is important to evaluate the relationship between the home and school for these students (Cabrera, 2005). As previously mentioned, many families of first-generation college students do not understand the demands of college life and the dedication and focus necessary for success. Moreover, culture clashes often provide additional discrepancies between familial responsibilities and academic demands for students. Oftentimes, students feel forced to choose between time with their families and their school work (Torres 2009, Winkle-Wagner, 2009). This becomes a stressful decision for many students; do they sever or maintain ties with their families while pursuing a higher education? A qualitative study (Winkle-Wagner, 2009) conducted at a large, predominantly white, public institution interviewed 30 black women about their experiences in a predominantly white institution of higher education. Participants in the study described the culture differences between their homes and their university as producing a sense of homelessness. Women described feelings of alienation at the institution as well as feelings of separation from their families. The challenge for the participants was whether or not they should maintain relationships with their families. Some participants reported sustaining such relationships, while others severed familial ties because they were debilitating to the student's academic success. The study reveals the contradiction between families being a support network while also creating additional burdens for students. Many first-generation students have to make similar decisions regarding their relationships with their families while enrolled at an institution of higher education.

Mental/Emotional Barriers

The academic and social barriers discussed above create subsequent mental and emotional obstacles first-generation students must overcome. For many first-generation college students, it is difficult to balance the demands from family, school, and work (Alicea-Planas, 2009). Balancing several responsibilities can be stressful on students, as manifested in poor physical health and low academic achievement. Also, without knowledgeable, college educated parents,

many students feel overwhelmed and are more vulnerable to academic failure (Owens et al., 2010). Also, the disconnect between some students' home culture and that of higher education can create anxiety for first-generation students. These students often feel marginalized and separate from their educational institutions (Alicea-Planas, 2009). While these students feel marginalized and lonely at school, they are also likely to feel separated from their families and friends at home. Some students perceive a lack of encouragement from their parents, while others sense a distancing effect from loved ones as they pursue a higher education (Torres & Hernandez, 2009). The combination of non-supportive institutions in the students' personal and academic lives leads many students to report a sense of homelessness; they neither fit at home nor at school. Clearly, there are psychological implications of such feelings. If a student feels disconnected from his home and/or institution, or feels a great deal of stress, such feeling may interfere with academic goals. It is important for students to remain focused on their school work. However, various stressors for first-generation students may distract them from their academic goals.

The lack of social support from the family and the higher education institution interacts with the academic barriers discussed earlier to further hinder the psychological well-being of first-generation students. For example, these students often realize that they face additional barriers to success which most of their peers do not face (Gibbons & Borders, 2010). In one study of male Latinos, this perception of barriers to staying in school was found to be a negative predictor of psychological well-being (Gloria et al., 2009). Similarly, first-generation students are more likely than non-first-generation students to judge their abilities as inferior (McMurray & Sorrells, 2009). Another study reports that self-efficacy is significantly positively related to grade point average (GPA) (Winkle-Wagner, 2009). Therefore, when a student perceives barriers to success, thus developing a low academic self-efficacy, such perceptions of self are reflected in the student's academic performance, measured by GPA. Given the countless academic, social, and emotional challenges first-generation students face, they tend to develop lower positive outcome expectations than non first-generation students (Gibbons & Borders, 2010). That is, these students develop inferior goals and generally lower expectations of their college experiences, compared to their second-generation peers. It is possible that these students experience a self-fulfilling prophecy where their low expectations are manifested in their poor grades. In sum, the

academic and social obstacles first-generation college students endure provide grounds for additional mental and emotional barriers. The interaction of all challenges often results in low academic performance for this student population.

First-generation college students face barriers which non-first-generation students need not worry about. In addition to the typical academic demands of college, first-generation students are often underprepared for the intellectual challenges they face in higher education. Similarly, while all students struggle to find their place in their college community, first-generation students also have to balance different cultures and fulfill responsibilities from several institutions, including school, the family, and work. Many first-generation students also perceive low social support from peers and faculty in college, as well as from family and friends at home. These additional demands in conjunction with weak support systems and low academic preparedness often result in low G.P.A.s and low completion rates. Further, the retention rates of first-generation students are lower than that of other student populations, indicating that the academic, social, and mental challenges they face are sometimes too intimidating to overcome.

The Current Study

A review of the current literature suggests that much research on first-generation students looks at the population once they are enrolled in an institution of higher education (Alicea-Planas, 2009; Gloria et. al, 2009; McMurray & Sorrells, 2009). However, minimal research examines these students prior to matriculation. That is, prospective first-generation college students (PFGCSs) should be studied to help college faculty and staff better understand the needs of this unique student population. The purpose of the current research is to explore the needs and concerns of a sample of predominantly PFGCSs. By better understanding students' needs prior to their arrival on campus, colleges and universities can create programs aimed at alleviating academic, social, and emotional barriers for these students. Also, by understanding the concerns of this population as high school students, public, private, and charter high schools can address some anticipated challenges. By addressing potential barriers early, students would understand the imminent obstacles and possible tactics to defeat them. In addition, Gibbons and Borders (2010) conclude that intervention studies designed to help reduce barriers and increase social support would be helpful to PFGCSs. While it was not in the scope of the current study to

examine the long-term effects of the intervention (i.e. student retention), the goal was to outline for the students potential barriers and suggested tactics to overcome them.

This study was created to achieve three objectives in an effort to address the potential stressors and barriers first-generation college students face in higher education. The first goal was to develop an assessment to measure the college readiness of prospective first-generation college students. The inventory evaluates the students' attitudes and beliefs regarding three domains described above as potential barriers to success in college: academic, social, and mental/emotional.

The second goal of this study was to create an intervention program which addresses the academic, social, and mental/emotional barriers that exist in higher education. The intervention program was titled *Life After High School*, and the objective of the *Life After* sessions were to introduce students to the potential challenges they may face, and outline ways in which such obstacles can be managed by the students. One key factor in the study is that the *Life After* sessions were conducted by a college student. Acting as a mentor to the high school students, the instructor of the sessions wanted to have honest conversations about college life. The goal was to discuss challenges and appropriate ways to deal with them. The role of the college student is crucial in creating an environment where the high school students feel comfortable asking questions and trust the instructor's answers and feedback. The mentorship of the college student was hypothesized to ease the stressors related to the imminent transition the participants faced.

Lastly, the third goal of the current research was to measure the efficacy of the intervention program. This was done by administering the assessment measuring college readiness, created by the researcher. This assessment was used in a pre/post-test format to measure the change in participants' attitudes and beliefs regarding college. Quantitative and qualitative data was also collected to measure participants' opinions regarding the intervention program.

METHOD

Participants

The participants were 36 (m=15, 41.7%, f= 21, 58.3%) twelfth grade students from a charter school in the northeastern region of the United States. The majority of participants (86.7%) self

identified as a racial/ethnic minority or multi-cultural (Asian or Pacific Islander = 2.8%, Black or African American=8.9%, Hispanic=61.1%, Multi-cultural=13.9%). Also, 77.8% of participants (n=28) reported that their parents do not have a Bachelor's Degree. Meanwhile 52.7% (n=19) report their parents' highest level of school completed as middle school/junior high, some high school, high school, or trade school, thus, identifying as first-generation students. Under the definition of first-generation students as outlined by Gibbons and Borders (2010): a first-generation student's parents have no formal education beyond high school, these 19 students would be considered first-generation students. Further, of the 19 participants whose parents had no formal education beyond high school, 2 participants had siblings that graduated from an institution of higher education. Therefore, when employing Bryan and Simmons (2009) definition for first-generation status which requires the student to be the first person in the family to attend a college or university, 47.2% of participants are prospective first-generation college students. In addition, 13.9% of participants reported being born outside the United States, while 69.4% of participants reported that their parents were not born in the United States. Lastly, two participants did not participate in the post-test survey due to absences.

A convenience sample was used in this study as the researcher had professional connections with administrators at this particular school. High school seniors were chosen because they are expected to be thinking about their immanent transition into college, and therefore would be most receptive to the information relayed to them in the *Life After High School* sessions. The participating institution is an independent charter school serving over 150 public school students in grades 9-12. Students enroll at the school through an application and lottery system. All applicants must be residents of one of two local towns, both of which are significantly economically deprived. Further, in 2000, the median household income for one town was \$31,775, and \$22,628 for the second town. The median household income for the state is \$42,090 (Farber, 2007).

Materials

The materials for the intervention sessions came from a variety of sources. As previously mentioned, the pre-test and post-test were created by the researcher. Additional materials such as a film, a personality measure, and a wellness handout were incorporated into the *Life After High School* curriculum (See Appendices G & H).

Procedure

The first goal of this study was to create an assessment which measures the college readiness of high school seniors. To achieve this, the researcher examined the literature and outlined three areas where students report facing barriers once in college: academic, social, and mental/emotional. Using previous research, questions regarding each of the three constructs were created by the researcher. Due to several issues falling under the “social” construct, this issue was further divided into two sub-categories: social-family and social-academic. Therefore, the final college readiness survey consisted of 4 sub-scales and 16 items. The survey employed a 7-point Likert scale where 1=strongly disagree and 7= strongly agree. Items 2, 4, 6,7,12, and 15 were reverse coded. High composite scores indicate college readiness and low perceived barriers. The pre-test also included one page of items requesting demographic information for the participants (See Appendix A). This measure was not titled in an effort to reduce participants’ response biases.

The post-test was also created by the researcher (See appendix B). It consists of the same 16 Likert items as the pre-test and includes two additional Likert items regarding the effectiveness of the *Life After High School* sessions. The post-test also included three open-ended questions regarding the strengths and weaknesses of the sessions. The post test was administered to participants at the end of the intervention program.

Prior to hosting the *Life After High School sessions*, the researcher first met with the Head of School at the high school to discuss the goals for both parties in the current research project. The researcher learned about college planning that takes place at the school as well as student demographics and culture, and expectations of the institution. Then, the researcher met with the two teachers of Senior Seminar for the 2010-2011 academic year. The intervention sessions were held during Senior Seminar because it is a mandatory class for all seniors at the institution, thus, ensuring the largest sample size possible for the study. When meeting with the teachers of this class, a first draft of the *Life After High School* syllabus was presented and discussed. The two parties outlined goals of the *Life After High School* program and effective ways to make the material relevant to the participants. The researcher took the teachers’ feedback into consideration to create a revised syllabus, which was disseminated to the students during the researcher’s first visit to the school (See Appendix C).

Prior to the researcher's first visit to meet the participants at the high school, the teachers mentioned above administered the pre-test to the students. The teachers administered the pre-test under the assumption that the students would disclose more information to their teachers than they would to an unknown researcher. Also, the students answered the survey questions prior to being introduced to the research study, thus reducing the possibility of a response bias. At this time the teachers also distributed informed consent forms to the students (See appendix D).

To ensure confidentiality all participants in this study were assigned an identification number. The Senior Seminar teachers each had a list of participants and their ID numbers. The researcher did not have access to these lists, thus, all quantitative and qualitative data were collected anonymously. Also, for the protection of the participants, this study passed the Institutional Review Board's evaluation of human subjects research.

The researcher met with the participants six times throughout the course of this study. A brief description of each *Life After High School* session is listed below. Also, due to schedule changes and other unanticipated events, the curriculum of the *Life After High School* sessions experienced a few changes from the anticipated schedule. A revised syllabus that more accurately reflects the curriculum of the intervention program can be found in Appendix E.

September 23, 2010 – The researcher introduced herself and the current study. To avoid potentially influencing invoking participant bias, a broad outline of the study was presented, but the hypothesis was not shared with the participants. The students were told that the researcher, a college senior, was visiting to talk to them about their transition into college. The researcher reviewed the syllabus with the students, and they were encouraged to ask questions about the research study. Then, the class broke up into groups and answered the questions “What does college mean to you?” and “What do you need to succeed in college?” To end the session, each group presented to the class their perceptions of higher education.

October 21, 2010 – This session was used to discuss public education and the effects one's high school education has on their abilities in college. The students viewed a film created by *United We Learn* and discussed how economic resources affect education. The students then reflected on their educational experiences as charter school students and their opinions of their college readiness. The film was also used as an example of a research study, and the importance of

conducting research we discussed during the session. To help the students with their own Senior Seminar research projects, the instructor of *Life After* sessions discussed research techniques and text annotation (See Appendix F). The students had a homework assignment to find a research article for their projects and employ the techniques outlined in the text annotation handout.

November 18, 2010 – Due to college application deadlines, this session was used for the participants to complete their applications. Rather than following the syllabus, the researcher met with the teachers of Senior Seminar to discuss the program’s efficacy and to revisit goals.

January 6, 2011 – The participants came to Bryant University for “College for a Day.” During their visit, they heard from the President of the University, the Director of the Academic Center for Excellence, and a Reference Librarian. They also participated in a mock college class, instructed by a Bryant University Professor. Lastly, the students had a question and answer lunch-in with a Resident Assistant, and representatives from the Center for Student Involvement, Department of Public Safety, and the Multi-Cultural Center. (See Appendix G for the agenda for College for a Day”).

January 27, 2011 – The focus of this session was social interaction with peers and mentors. First, the students reflected on their experience at Bryant and shared with the researcher what they learned from the college visit. Then, the participants completed *True Colors* (See Appendix H). This is a personality inventory that classifies participants into color categories according to their personality traits. Students discussed their strengths and weaknesses, as outlined by the inventory. Then, they commented on how these strengths and weaknesses can facilitate and hinder their personal and academic growth in college.

February 17, 2011 – This session was focused on student wellness in college. The researcher outlined the importance of intellectual, social, and mental/emotional wellness, as discussed as themes of each previous session. The students received a wellness handout (See Appendix I) and discussed how ten different factors can influence their well-being in college. This session concluded with the administration of the post-test surveys. The researcher disseminated the surveys to participants, who wrote their participant ID number on the form and completed the post-test independently.

The third goal of this study was to measure the effectiveness of the intervention program outlined above. Quantitative and qualitative data were analyzed to determine the strengths and weaknesses of the program, and to outline implications for future research.

RESULTS

SPSS Statistical Analysis Software was used to analyze the quantitative data for the current study. The survey questions are organized below by sub-scales. Survey items are divided into four constructs: intellectual, mental/emotional, and social/academic, and social/family. He participants rated the following items using a 7-point Likert scale where 1=strongly disagree and 7= strongly agree. The pre and post-test means are also included in Table 1 below.

Table 1 – Pre-Test and Post-Test Means

Survey Items	Pre-Test Means	Post-Test Means
Intellectual Sub-scale		
I understand the importance of conducting research	5.38	5.62
My long term educational goal is to earn a Bachelor’s degree.	4.91	5.26
I know valuable study techniques which will help me reach my academic goals in college.	5.41	5.41
I do not know what to expect in a college course.	3.62	4.09
Mental/Emotional Sub-scale		
I know how to manage my time such that I have time for school, work, family, and friends.	5.00	4.56
I know how to maintain good personal health and wellness	6.03	5.71
I know my individual strengths and feel comfortable with who I am.	5.94	6.00
I can identify my weaknesses and ways to combat them.	5.71	5.79
Social-Academic Sub-scale		
I respect people who are different than me	6.50	6.47
I do not understand what my professors will expect of me when I become a college student.	3.74	4.12
I am intimidated to ask my teachers for help.	5.29	4.26
I am willing to learn new things about myself and others.	6.15	6.21
Social-Family Sub Scale		
My parents/family understands the (academic, personal, social) challenges I will face in college.	5.03	4.59
My parent(s) would be able to help me more in school if they went to college	3.12	2.71
I am worried about the financial burden that higher	2.53	2.26

education will put on my family.		
I have many family responsibilities that other students do not have.	3.83	3.97
The <i>Life After High School</i> Sessions helped me better understand what college will be like.	n/a	5.62
The <i>Life After High School</i> Sessions taught me how to deal with problems I might encounter in college.	n/a	5.53

The first objective of the current study was to develop an instrument which measures the college readiness of high school seniors. The instrument consisted of 16 items, where participants used a 7-point Likert Scale to rank the degree to which they agreed with the item (1= Strongly Disagree, 7= Strongly Agree). The post-test included two additional items regarding the efficacy of the *Life After* sessions. These items were not included in the pre/post test analysis.

In order to evaluate the quality of this measurement, a reliability analysis was run on each of the four subscales. The reliability for each scale was low, suggesting the need for further development of the survey. Each of the four constructs were measured by four items; the intellectual subscale ($\alpha = .47$), the mental/emotional subscale ($\alpha = .58$), the social-family subscale ($\alpha = .18$), and the social-academic subscale ($\alpha = .28$).

While the second goal of this study was to create an intervention program, the third goal was to evaluate the efficacy of this program. This was done using quantitative and qualitative data from the pre and post-tests. A paired samples t-test was run on each of the 16 items to examine participants' change in attitudes over the course of the six month intervention program. There were significant findings for one of the 16 items: "I am intimidated to ask my teachers for help," Pre-test results ($M= 5.29, SD= 1.95$) differed significantly from post-test results ($M= 4.26, SD= 2.22$), $t(33) = 2.75, p = .01$. All other survey items reported no significant change from pre-test attitudes to post-test attitudes.

Further item analyses reveal interesting patterns for some of the items on the survey. For example, two items on the social-family subscale indicate that students do not view their families as potential barriers to their success in college: "I am worried about the financial burden that higher education will put on my family," ($M= 2.40, SD= 1.56$) and "I have many family

responsibilities that other students do not have,” ($M= 3.90$, $SD = 1.76$). These results indicate attitudes of the participants that differ from previous research conducted on similar populations.

Additional results in the post-test analysis reveal that the participants viewed the *Life After High School* sessions as effective and worth-while. Further, 80.5% of participants rated the following questions as a 5 (somewhat agree) or higher: “The *Life After High School* sessions helped me better expect what college will be like.” Similarly, 77.8% of participants rated the following item as a 5 or higher, “The *Life After High School* sessions taught me how to deal with problems I might encounter in college.” Lastly, participants were also asked whether or not they would recommend the *Life After High School* program to another student. Thirty students (83.3%) responded that they would recommend the program, and 4 students (11.1%) said they would recommend the program with some changes (2 participants, 5.6% did not participate in the post-test). This quantitative data suggests that despite the non-significant results of the survey created for this study, the intervention program was successful in helping high school seniors understand the demands of college life and how to handle come obstacles they may face during their transition into this new lifestyle.

Lastly, the post-test also included open-ended response questions regarding this intervention program. Participants were asked about the strengths and weaknesses of the program. Most students reported the visit to the researcher’s campus for “College for A Day” as the best part of the program. Qualitative data highlights the efficacy of the *Life After* sessions. Comments from students include: “I liked the discussions we had about college. I learned what to expect and a little about what it will be like,” and “I really liked how informative it was. I’ve learned a lot from this program. I feel more comfortable about going to college.” These and other comments suggest that this intervention program was beneficial to the participants.

DISCUSSION

The results reported above indicate that challenges exist when creating intervention programs for high school students, and additional challenges exist why trying to measure a program’s effectiveness. While the reliability of the college readiness measure created here was low, this does not necessarily indicate weaknesses in the intervention program, suggested by non-significant results; rather it suggests weaknesses in the measure itself.

While there was significant change between pre and post-test attitudes for one item, it is likely other factors, other than the intervention sessions, contributed to this change, considering the lack of significant changes throughout the measure. The one item that shows significant change was “I am intimidated to ask my teachers for help.” This is a weakness in the survey because the pre-test was administered at the beginning of the participants’ school year while the post-test was administered six months later. It is likely that within that time, students became more comfortable interacting with their teachers. This one item which displays significant results highlights the low reliability of the measure created to evaluate students’ college preparedness.

In addition to this item, there were other items on the survey that were flawed. For example, many items including, “I do not know what to expect in a college course,” and “I have many family responsibilities that other students do not have,” are too broad, and can be interpreted differently by different participants. Also, due to the time constraints, some topics that are included on the survey were not addressed in the intervention, thus, we would not expect pre- and post-test changes for these items. For example, time management was on the original syllabus, but was not covered in the intervention program. Therefore, no significant changes for that survey item were expected. The construction and administration of the college readiness measure posed inherent flaws in the data collection for this study.

Despite the flaws in the measure created by the researcher, and therefore the low reliability of the quantitative results, some qualitative data suggests the intervention program was effective. Many students reported the program as effective in helping them understand what college will be like and introducing them to coping methods and support systems available to them on college campuses. In an informal interview, I asked a student what is favorite part of his trip to Bryant was. He said “The visit to ACE (Academic Center for Excellence)... Everyone tells us we have to be independent in college. It is good to know that there are support systems for us. We just have to seek it out ourselves.” This quote captures the objective of the visit to Bryant University. This session was focused on social institutions within colleges and universities and ways various departments can help students with their transition into higher education. While there is not an explicit item on the survey developed here to measure this session’s efficacy, the compelling qualitative feedback suggests students were receptive to the ideas presented. Additional qualitative data, mentioned previously, further suggest that the intervention program was

effective in helping students understand what to expect in college, as well as ways to overcome potential barriers to success.

The qualitative data also suggest that the participants were most receptive to activities pertaining to the social construct. As previously mentioned, the students' favorite part of the program was the visit to Bryant University. Also, many students enjoyed the *True Colors* activity, as displayed through a long, interactive class discussion. Conversely, the students were less engaged in the intellectual construct activities, and expressed greater interest in the more interactive assignments. Due to the many opportunities for student participation in the social-family and social-academic activities, the social construct was most effectively addressed in this intervention program.

While feedback from the participants was generally positive, there are some factors which may highlight challenges of creating an effective intervention program. For example, it is likely that as high school seniors, the participants did not anticipate many of the potential challenges discussed in the *Life After* sessions. Much of the research that was used to create the intervention program was about first-generation college students once they were enrolled in and attending an institution of higher education. Perhaps the students in the current study viewed the potential problems as irrelevant to their own lives because they do not have the foresight to imagine such obstacles.

While high school seniors may not anticipate many of the challenges that they will confront in higher education, having such issues presented to them by a current college student may help them imagine potential obstacles. Although no data were collected to measure the effectiveness of a college student as the instructor of the *Life After High School* sessions, it is possible that this mentor created an honest, and believable image of college. Hearing about college life, the pros and cons, from a current student may be more effective for high school students than hearing the same information from a middle-aged adult, for example. It is suggested that future intervention programs implement this model, using a college student as the instructor, and measure its effectiveness.

This study emphasizes the difficulty of addressing the needs of first-generation college students. Beyond the challenges of creating effective programming to alleviate stress regarding college,

there are many other factors that influence students' preparation for higher education. Further, as noted earlier, this program was divided into three main constructs: academic, mental/emotional, and social: each of these factors influence a student's ability to succeed in school. Moreover, the social construct was divided into social family and social academic, to represent influences from the home on education and academic achievement. The interaction of students' various facets of life is an important consideration when examining college readiness in first-generation college students.

College readiness in first-generation college students is a multifaceted issue. Due to the limited scope of the current study, there were a few important factors that were not addressed in this intervention. For example, the researcher did not discuss financial barriers with the students. Given that first-generation students are disproportionately from low-income families, this is an important factor that should be discussed with this population (Cabrera et al., 2005). For example, Crisp et al. (2009) report that for Hispanic students, the availability of adequate financial resources is considered one of the top five factors relating to persistence and retention. There are many financial barriers for this population, and such issues should be addressed prior to enrolling in an institution of higher education. Also, the literature outlines additional barriers for immigrant students and students who are children of immigrants (Conway, 2010). Additional cultural and language barriers for this student population and should be addressed in further intervention programs. Due to limited resources in the current study, some relevant factors that can affect students' academic success were not addressed in this intervention program.

The results reported above indicate the challenges of creating an effective intervention program for prospective first-generation college students. However, the qualitative data suggest that the *Life After High School* sessions did help the participants better understand college life. The compelling qualitative data supports implementation of similar intervention programs, while outlining necessary changes.

LIMITATIONS

While a modified version of the *Life After* sessions may be effective in reducing the stressors related to the transition into college for first-generation students, it is important to outline the limitations of the current study. A small sample size and a unique student population, among other factors, may limit the generalizeability of this study. The issues presented in this research are complex, and not within the scope of an undergraduate research study to address fully. By understanding the limitations present here, we can better understand how to address the unique needs of first-generation college students during their transition into higher education.

The small, distinctive sample used in the current study limits the generalizeability of the findings discussed above. To begin, the small sample size (n=36) is not representative of an entire population. Specifically, the sample is not representative of the population of high school seniors. Also, the sample is not necessarily representative of the first-generation college student population in the United States. Another important characteristic of this sample is that the participants are students at a charter school. A charter school by definition is different from American public high schools, so we cannot conclude that these participants' reactions to this intervention would be replicated at other high schools. Also, this particular charter school has a strong focus on college prep coursework for its students. The teachers and staff at this school are highly qualified and motivated to help their students succeed. Therefore, this sample is different from many first-generation students who attend high schools with uncertified teachers and mentors (Cabrera et al., 2005). The distinctive characteristics of this small sample suggest that findings presented here may not be generalizable to all first-generation student populations.

The structure of the current study inherently created additional limitations. For example, this study was conducted by an undergraduate student, within a particular time frame. Therefore, deadlines interfered with the efficacy of the program. Moreover, as mentioned previously, not all topics outlined in the original syllabus were covered in the *Life After High School* sessions. However, due to time constrictions, the researcher could not host additional sessions. Similarly, time constraints resulted in only six total sessions, over a period of six months. It is possible that the time between sessions or the few meetings with the researcher reduced the efficacy of the program.

Also, the pre and post-test surveys pose limitations which may explain the lack of significant findings in this study. For example, the surveys were created by the researcher, and administered without conducting a pilot study. Without a pilot study, the researcher was unable to eliminate any survey items that did not measure what was intended. Also, the post-test implemented here contained the same quantitative items as the pre-test, with two additional questions regarding the efficacy of the program. Some of the issues presented in the survey were not addressed in the *Life After High School* sessions. Therefore, no significant change was expected between pre and post test data. However, upon closer examination, some such items could be eliminated and replaced with questions to specifically address activities conducted in the sessions. Lastly, as with any self-report data collection method, the participants' mood, environment and other factors can influence test-taking behavior. With a small sample size and only two assessments, this data collection model may not effectively capture participants' attitudes and behaviors. To combat this issues, it is suggested that formative assessments be implemented in later intervention programs to measure the efficacy of each individual activity or session.

As previously mentioned, it was not within the scope of this project to adequately address many issues faced by first-generation college students. Perhaps most importantly, the researcher was not able to follow up with participants once enrolled in an institution of higher education and learn about their experiences regarding their transition from high school. This step is crucial to the research process because it would indicate whether or not the intervention sessions had a long-term impact on participants. Also, the ability to track the participants' grades and retention throughout college would further indicate whether or not the program is ultimately successful. Without longitudinal data, the current study faces limitations regarding its long-term efficacy.

SUGGESTIONS FOR FUTURE RESEARCH

The current study outlines the importance of providing first-generation college students with a support system and information regarding college prior to their transition into higher education. Further research is needed to better address the stressors this unique population faces while considering the pursuit of a college degree. Also, it is suggested that similar program be implemented in high schools to help alleviate the stressors related to this transition. A successful

replication of the current study would include more sessions offered more frequently, and over a longer period

There are also many data collection techniques that may provide more compelling results for future research. For instance, each session should be evaluated by participants to better understand their needs and interests. A successful replication would also include collection of longitudinal data. Longitudinal data is important to understanding the long-term effects of the program. It also provides grounds for additional research regarding the retention of first-generation college students who participate in interventions in high school. Also, the means by which data are collected should be changed. Due to the myriad variables underlying college readiness, it is suggested to dismiss the pre-post-test model. Rather, future research should collect data after each session, as well as at the end of the intervention program. Data collected here should directly measure the students' perceptions of the program's efficacy. By improving data collection, we can better understand students' perceptions of college prep intervention programs.

One compelling aspect of the *Life After High School* sessions is that they were conducted by a college student. This is a unique approach to the traditional mentorship of teachers and guidance counselors. Similarly, first-generation college students in particular do not have siblings or parents to turn to for support when applying to and thinking about college. By having a college student available to the students to answer questions and present an honest replication of college life, PFGCS can better understand what to expect in an institution of higher education. Also, the identification of a mentor is one key college experience that is associated with student development in an outside the classroom (Winkle-Wagner, 2009). Therefore, it is suggested that similar intervention programs be conducted by college students. This promotes interaction and mentorship for the PFGCS and allows them to feel more connected with the intervention program.

APPENDICES

Strategies for Success in College Among First-generation College Students
Senior Capstone Project for Lindsey Weber

Appendix A: Pre-test survey:

You have been chosen to participate in a research project for a Bryant University student. I am interested in first-generation college students and their hopes and fears regarding college. The purpose of this survey is to outline your family's educational history as well as your future educational goals. Please answer the following questions to the best of your ability.

Gender: Male Female **Race/Ethnicity:** Circle all that apply.
American Indian or Alaskan Native
Asian or Pacific Islander
Black or African American
Hispanic
White
Other _____

Were you born in the United States of America? YES NO

Were your parent(s) born in the United States of America? YES NO

What is the highest level of school your mother completed? Middle school/Jr. High
Some high school
High School
Trade School
Some College
College (Bachelor's Degree)
Unknown

What is the highest level of school your father completed? Middle school/ Jr. High
Some high school
High School
Trade School
Some College
College (Bachelor's Degree)
Unknown

Have any of your siblings attended an institution of higher education? YES NO

If yes, did your sibling(s) graduate from the institution? YES NO

How do you plan on paying for your education? _____

Does your family support your goals of attending college? Please explain. _____

Strategies for Success in College Among First-generation College Students
Senior Capstone Project for Lindsey Weber

Rate the following statements as they pertain to you.	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I know valuable study techniques which will help me reach my academic goals in college.	1	2	3	4	5	6	7
I am worried about the financial burden that higher education will put on my family.	1	2	3	4	5	6	7
I know how to maintain good personal health and wellness.	1	2	3	4	5	6	7
My parent(s) would be able to help me more in school if they went to college	1	2	3	4	5	6	7
I can identify my weaknesses and ways to combat them.	1	2	3	4	5	6	7
I am intimidated to ask my teachers for help.	1	2	3	4	5	6	7
I do not know what to expect in a college course.	1	2	3	4	5	6	7
I am willing to learn new things about myself and others.	1	2	3	4	5	6	7
My long term educational goal is to earn a Bachelor's degree.	1	2	3	4	5	6	7
My parents/family understands the (academic, personal, social) challenges I will face in college.	1	2	3	4	5	6	7
I understand the importance of conducting research.	1	2	3	4	5	6	7
I have many family responsibilities that other students do not have.	1	2	3	4	5	6	7

Strategies for Success in College Among First-generation College Students
Senior Capstone Project for Lindsey Weber

Rate the following statements as they pertain to you.	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I know my individual strengths and feel comfortable with who I am.	1	2	3	4	5	6	7
I respect people who are different than me.	1	2	3	4	5	6	7
I do not understand what my professors will expect of me when I become a college student.	1	2	3	4	5	6	7
I know how to manage my time such that I have time for school, work, family, and friends.	1	2	3	4	5	6	7

Please list any additional concerns you have about college.

Thank you for participating in this survey. All of your responses will be held in confidence.

Strategies for Success in College Among First-generation College Students
Senior Capstone Project for Lindsey Weber

Appendix B: Post-test Survey

Rate the following statements as they pertain to you.	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I know valuable study techniques which will help me reach my academic goals in college.	1	2	3	4	5	6	7
I am worried about the financial burden that higher education will put on my family.	1	2	3	4	5	6	7
I know how to maintain good personal health and wellness.	1	2	3	4	5	6	7
My parent(s) would be able to help me more in school if they went to college	1	2	3	4	5	6	7
I can identify my weaknesses and ways to combat them.	1	2	3	4	5	6	7
I am intimidated to ask my teachers for help.	1	2	3	4	5	6	7
I do not know what to expect in a college course.	1	2	3	4	5	6	7
I am willing to learn new things about myself and others.	1	2	3	4	5	6	7
My long term educational goal is to earn a Bachelor's degree.	1	2	3	4	5	6	7
My parents/family understands the (academic, personal, social) challenges I will face in college.	1	2	3	4	5	6	7
I understand the importance of conducting research.	1	2	3	4	5	6	7
I have many family responsibilities that other students do not have.	1	2	3	4	5	6	7

Strategies for Success in College Among First-generation College Students
Senior Capstone Project for Lindsey Weber

Rate the following statements as they pertain to you.	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
I know my individual strengths and feel comfortable with who I am.	1	2	3	4	5	6	7
I respect people who are different than me.	1	2	3	4	5	6	7
I do not understand what my professors will expect of me when I become a college student.	1	2	3	4	5	6	7
I know how to manage my time such that I have time for school, work, family, and friends.	1	2	3	4	5	6	7
The <i>Life After High School</i> Sessions helped me better expect what college like will be like.	1	2	3	4	5	6	7
The <i>Life After High School</i> Sessions taught me how to deal with problems I might encounter in college.	1	2	3	4	5	6	7

What were the strengths of the *Life After High School* Sessions? What did you like about the program? (Think about lectures, discussions, the video, the visit to Bryant etc).

What were the weaknesses of the *Life After High School* Sessions? What could be improved in the program?

Would you recommend this program to another student? Why or why not?

Appendix C: Life After High School Syllabus

Life After High School: Strategies for Success in College

Lindsey Weber

Syllabus

Contact Information: lweber@bryant.edu

Description: *Life After High School: Strategies for Success in College* is a research project created to identify and address concerns first-generation college students may have regarding the transition and enrollment into an institution of higher education. The goals of the sessions are to discuss prominent challenges first-generation students face in college. Students are expected to participate in class discussions as well as engage in self-reflection.

Objectives: This seminar is organized into three dimensions of wellness: intellectual, social, and mental/emotional. Each time we meet we will focus on one of these dimensions and outline techniques which will facilitate your personal growth in the respective dimension.

1. Intellectual:

- Focus on academic habits, and learn the strengths and weaknesses of your current study techniques.
- Discuss and put into practice *active* learning techniques.
- Identify and understand the importance of research.

2. Social:

- Learn about your personality characteristics and the ways in which you interact with others.
- Identify ways in which your personality will both inhibit and facilitate your personal growth in college.
- Understand the importance of social support/social networks.

- Explore the relationship you have with your family and the implications this relationship will have on your college experience.
3. Mental/Emotional
- Explore your personal “thinking style” and its implications in an educational setting.
 - Learn practices for a healthy lifestyle, including stress management and physical health.

September 23, 2010

Intellectual Focus

Discussion Questions: What does college mean to you? What do you think you need to do to succeed in college? What is well-being? Define your academic self-concept.

HW: Interview at least two people (family member, friend, teacher etc.) regarding your study habits, including your strengths and weaknesses. Take notes during the interview and write a reflection about the responses you received. Do you agree/disagree with the interviewees? How would you describe your study habits? Do you think you need to change your study techniques when you get to college?

October 21, 2010

Intellectual Focus

Activity: View *The Education They Deserve* :

<http://www.unitedwelearnil.org/watch-the-film/full-version/>

Discussion Questions: Reflect on the educational system portrayed in the film. What was surprising? Did Blackstone prepare you for college?

HW: Find one written source for your senior research project. The data source can be a journal article, a chapter in a book, or any other written source permitted by for Senior Seminar instructors. Using the text annotation handout as a guideline, actively take notes on one this data source. Copy your notes into your journal.

November 18, 2010

Social Focus

Activity: True Colors

HW: Reflect on the true colors activity. Do you think your “color” was an accurate description of your personality? Why or why not? Based on this activity and additional self reflection, outline ways in which your personality will enable your personal development in high school and beyond. Also, discuss ways in which your personality may become a barrier for your success. For example, if you are shy, will you have a difficult time approaching a professor during office hours for help?

January 6, 2010

Social Focus

Welcome to Bryant University!

Activity: Tour Bryant University and learn what the Center for Student Involvement has to offer students.

Discussion questions: What is the importance of social networks/support systems: peers, faculty, family, campus activities?

HW: Read Torres article and discuss her struggle and the ways she found personal and academic success in college. Do you foresee similar challenges when you attend college? Please explain the challenges (personal, social, academic etc.) you expect to face.

January 27, 2011

Mental/Emotional Focus

Discussion Questions: What did you think of the Torres article? What is the difference between short-term and long-term goals? What is good time management? How do you think you will need to manage your time in college? What will be your priorities?

Activity: Case studies. Get into discussion groups and discuss your case study. Why did that student succeed or fail? Keep in mind goal setting, time management, and other “tips for success.”

HW: Write your own case study, using yourself as the main character. Will you be working? If so, how many hours per week will you work? What are your short-term and/or long-term goals? What do you want to get involved in? Be creative!

February 17, 2011

Mental/Emotional Focus

Discussion Questions: How many hours of sleep do you get each night? What is wellness? How do students eat healthy in college? How do you manage your stress?

Wellness Handout

Conclusion, survey, Thank You!

Appendix D: Consent Form

Life After High School” Consent Form

Your child has been chosen to participate in a research study conducted by a Bryant University student. I am collecting research about high school seniors who are working toward attending an institution of higher education. Specifically, I am interested in the views of first-generation college students. I want to learn about your child’s expectations, hopes, and fears regarding college. Students who decide to participate in this study will be asked to report several aspects of their academic and social lives.

Furthermore, I will visit your child’s Senior Seminar classroom once each month for the next six months to discuss useful tools for college and beyond. Such topics include time management, goal setting, and forming healthy social relationships. In order to measure the success of my program, I will conduct additional research in the form of two pencil and paper surveys. While your child can participate in my program without participating in the research, his/her inclusion in the research can help create programs for future first-generation college students.

There is minimal risk involved in this research project. I will ask participants for information regarding family history and future goals. If your child does not feel comfortable honestly reporting this information, he/she is able to drop out of the study at any point without penalty.

To ensure anonymity, this consent form, along with any other research materials, will be stored in a secure location, where only the researcher will have access. No written or verbal statement your child makes at any point during the study will be shared with others without his/her consent.

If you want to know more about this research project, please contact Lindsey Weber (lweber@bryant.edu), student researcher or Dr. Sandra Enos (senos@bryant.edu), Bryant University professor. You may request a copy of this consent form.

Sincerely,

Lindsey Weber

Consent:

By signing this consent form, I confirm that I have read and understood the information above and have had the opportunity to ask questions. I understand that my child’s participation is voluntary and that he/she is free to withdraw at any time. I understand that I may request a copy of this consent form. I give voluntary consent for my child, _____ to participate in this study.

(Print student’s name)

Parent’s Signature _____ Date _____

Student’s Signature _____ Date _____

Appendix E: Life After High School Syllabus, Revised

Life After High School: Strategies for Success in College

Lindsey Weber

Syllabus - Revised

Contact Information: lweber@bryant.edu

Description: *Life After High School: Strategies for Success in College* is a research project created to identify and address concerns first-generation college students may have regarding the transition and enrollment into an institution of higher education. The goals of the sessions are to discuss prominent challenges first-generation students face in college. Students are expected to participate in class discussions as well as engage in self-reflection.

Objectives: This seminar is organized into three dimensions of wellness: intellectual, social, and mental/emotional. Each time we meet we will focus on one of these dimensions and outline techniques which will facilitate your personal growth in the respective dimension.

3. Intellectual:

- Focus on academic habits, and learn the strengths and weaknesses of your current study techniques.
- Discuss and put into practice *active* learning techniques.
- Identify and understand the importance of research.

4. Social:

- Learn about your personality characteristics and the ways in which you interact with others.
- Identify ways in which your personality will both inhibit and facilitate your personal growth in college.
- Understand the importance of social support/social networks.
- Explore the relationship you have with your family and the implications this relationship will have on your college experience.

3. Mental/Emotional

- Explore your personal “thinking style” and its implications in an educational setting.
- Learn practices for a healthy lifestyle, including stress management and physical health.

September 23, 2010

Intellectual Focus

Discussion Questions: What does college mean to you? What do you think you need to do to succeed in college? What is well-being? Define your academic self-concept.

HW: Interview at least two people (family member, friend, teacher etc.) regarding your study habits, including your strengths and weaknesses. Take notes during the interview and write a reflection about the responses you received. Do you agree/disagree with the interviewees? How would you describe your study habits? Do you think you need to change your study techniques when you get to college?

October 21, 2010

Intellectual Focus

Activity: View *The Education They Deserve* :

<http://www.unitedwelearnil.org/watch-the-film/full-version/>

Discussion Questions: Reflect on the educational system portrayed in the film. What was surprising? Did Blackstone prepare you for college?

HW: Find one written source for your senior research project. The data source can be a journal article, a chapter in a book, or any other written source permitted by for Senior Seminar instructors. Using the text annotation handout as a guideline, actively take notes on one this data source. Copy your notes into your journal.

November 18, 2010

Due to approaching college application deadlines, the students completed their applications while the researcher met with Senior Seminar teachers. The efficacy and progress of the program thus far was discussed. The researcher explained the upcoming *True Colors* activity and discussed ways to increase student engagement in *Life After High School* sessions.

January 6, 2010

Social Focus

Welcome to Bryant University!

Activity: Message from President Ronald Machtley and a mock college class, instructed by Dr. Sandra Enos.

Discussion Questions: What is the importance of social networks/support systems: peers, faculty, family, campus activities?

January 27, 2011

Mental/Emotional Focus

Activity: True Colors Personality Inventory

Discussion Questions: Reflect on the true colors activity. Do you think your “color” was an accurate description of your personality? Why or why not? Based on this activity and additional self reflection, outline ways in which your personality will enable your personal development in high school and beyond. Also, discuss ways in which your personality may become a barrier for your success. For example, if you are shy, will you have a difficult time approaching a professor during office hours for help?

February 17, 2011

Mental/Emotional Focus

Review Wellness handout

Activity: In small groups, discuss how ten different factors, listed on the wellness handout, can affect your academic performance. Each group will think out at least one way their assigned factor (i.e. food selection) can positively and negatively affect academic performance. Each group will share their ideas with the class.

Discussion Questions: How many hours of sleep do you get each night? What is wellness? How do students eat healthy in college? How do you manage your stress?

Conclusion, survey, Thank You!

Appendix F: Text Annotation Handout

Text Annotation: An Introduction

Annotating text involves writing analytical, critical and/or summative notes in response to a written work. This activity typically requires writing comments, notes, and questions in the margins, essentially establishing a written conversation between reader and text.

Why bother?

1. Good readers react.

Literature forges connections between the fictional characters and the experiences of readers. Indeed, meaning is made as readers view the sequence of words on the page, filling in the blanks, and making pictures in our minds that represent the characters' actions.

Text annotation is a good way for readers to react to literary works "within" the work itself. The act of writing a comment or question may help readers think through a complex idea. If readers think of text annotation as an exploratory exercise, as an interaction with the text or a way to situate ourselves around or within it, then this activity becomes much more than just "notes."

For students, text annotation is a great prelude to class discussion. When the professor asks the class what they think about a character's actions or an author's thesis, the student who has annotated the text is not only likely to have a response, but is also able to quickly identify the section of the text that prompted the response.

2. People forget.

If you're anything like the rest of us, you don't memorize everything that you read. For this reason, text annotation also provides a method of recording important elements of a literary work. Such notes enable students to return to the text at a later date and more easily discover useful examples in preparation for an exam or writing a paper.

3. Highlighting isn't very helpful.

Let's face it. Once you've highlighted a chapter in a novel or textbook, all of the highlighted information appears equally important. There is nothing to distinguish the significance of certain highlighted information from other highlighted information. In fact, when you look back at that chapter a week or two later, you don't remember why you highlighted what you did! So then what happens? Yup, you've got to re-read the highlighted portions, and probably the un-highlighted sections around them, in order to figure out what you were thinking. With a pen in hand, you can identify important elements of a text while at the same time be able to identify why you've singled out that word, sentence, or "chunk."

When should I annotate?

Here we'll focus solely on the student as reader. Students will read literary works in the context of the class in which the works have been assigned. They should decide, then, to comment upon, note, or question, at least for the most part, those sections that relate to the course theme and/or class discussions.

The following is a list of suggestions regarding what an annotation might involve:

- a. identifying a major theme of the work
- b. questioning the morality of a character's thoughts and/or actions
- c. identifying the central action of the work
- d. noting the organizational pattern(s) exhibited in the work
- e. identifying the author's intended purpose
- f. making connections across works
- g. examining differences across works
- h. identifying with a character
- i. asking a question you can't yet answer
- j. stating the significance of a particular action
- k. noting an event that you think is important
- l. identifying a statement that doesn't seem to fit

Appendix G: Agenda for Life After High School sessions, hosted at Bryant University

Welcome to Bryant University

Life After High School Session

Agenda for January 6, 2011

9:30 – 9:40 *Life After Session* with Lindsey in classroom 267 in the Unistructure

- Discuss the goals for your visit to Bryant and learn about the social and academic support options available to students on college campuses.

9:40 – 9:50 Break

- Anyone who did not fill out the survey will do so now

9:50 – 10:40 Mock college class with Dr. Sandra Enos in classroom 267

Break up into groups for tours:

Brian's class = Group 1

Stacy's class = Group 2

10:45 – 11:05 Tour I – Group 1 visits ACE – Speaker: Dr. Laurie Hazard

Group 2 visits Library – Speaker: Laura Kohl

11:10 – 11:30 Tour II – Group 1 visits Library – Speaker: Laura Kohl

Group 2 visits ACE – Speaker: Dr. Laurie Hazard

11:30 – 12:30 Panel Discussion and Lunch in Papito, located in the Bryant Center

Panelists: Connie Cabello, Center for Student Involvement

Shontay Delaloe King, Intercultural Center

Islindy Merius, student representative, Women's Center

John Rainone, Department of Public Safety

Appendix H: True Colors Activity



**UNDERSTANDING
YOURSELF
AND OTHERS**

INFORMATION TAKEN FROM *TRUE COLORS* BY DON LOWRY
BASED ON *PLEASE UNDERSTAND ME* BY DR. DAVID KEIRSEY

TRUE COLORS WORD SORT

Describe Yourself: In the boxes below are groups of word clusters printed horizontally in rows. Look at all the sets of words in the first box (A, B, C, D). Read the words and decide which of the four sets is most like you. Give that set a "4" (most like you). Then rank order the next three sets of words from 3-1 in descending preference. Continue this process with the remaining four boxes. Each box should have a 1, 2, 3, and 4.

Row 1

A _____ Active Opportunistic Spontaneous	B _____ Parental Traditional Responsible	C _____ Authentic Harmonious Compassionate	D _____ Versatile Inventive Competent
---	---	---	--

Row 2

E _____ Curious Conceptual Knowledgeable	F _____ Unique Empathetic Communicative	G _____ Practical Sensible Dependable	H _____ Competitive Impetuous Impactful
---	--	--	--

Row 3

I _____ Loyal Conservative Organized	J _____ Devoted Warm Poetic	K _____ Realistic Open-minded Adventuresome	L _____ Theoretical Seeking Ingenious
---	--------------------------------------	--	--

Row 4

M _____ Concerned Procedural Cooperative	N _____ Daring Impulsive Fun	O _____ Tender Inspirational Dramatic	P _____ Determined Complex Composed
---	---------------------------------------	--	--

Row 5

Q _____ Philosophical Principled Rational	R _____ Vivacious Affectionate Sympathetic	S _____ Exciting Courageous Skillful	T _____ Orderly Conventional Caring
--	---	---	--

SCORING SHEET

Add the numbers associated with the following letters:

$$A + H + K + N + S = \underline{\hspace{2cm}}$$

Color: Orange

$$C + F + J + O + R = \underline{\hspace{2cm}}$$

Color: Blue

$$B + G + I + M + T = \underline{\hspace{2cm}}$$

Color: Gold

$$D + E + L + P + Q = \underline{\hspace{2cm}}$$

Color: Green

BLUE

Value HARMONY above all else
 Good at reading people, understanding human dynamics
 Sensitive to others
 Appreciate and know how others feel
 Emotionally based decision making
 Time is circular
 Perceptive, “people pleaser”, a real team player
 Use poetry, music, quotations to express affection in romance and friendships
 Sympathetic, empathetic, compassionate
 Think about the possibilities in people

Centered on people, relationships, interaction

I need to feel unique and authentic

Enthusiastic...Sympathetic...Personal

I look for meaning and significance in life

Warm...Communicative...Compassionate

I need to contribute, to encourage, and to care

Idealistic...Spiritual...Sincere

I value integrity and unity in relationships

Peaceful...Flexible...Imaginative

I am a natural romantic, a poet, a nurturer

At work/school...

I have a strong desire to influence others so they may have more significant lives.

I often work in the arts, communications, education, and the helping professions.

I am adept at motivating and interacting with others.

In love...

I seek harmonious relationships.

I am a true romantic and believe in perfect love that lasts forever.

I bring drama, warmth, and empathy to relationships.

I enjoy the symbols of romance such as flowers, candlelight, and music, and I cherish the small gestures of love.

In childhood...

I was extremely imaginative and found it difficult to fit into the structure of school life.

I reacted with great sensitivity to discordance or rejection and sought recognition.

I responded to encouragement rather than competition.

GOLD

Value responsibility and sense of DUTY above all else
Will follow through at all costs, dependable, true
Good at organizing vague, random thoughts and putting things into action
Detail oriented, predictable
Focus on the “here and now”
Serious, duty-oriented, aware of what one is “supposed to do”
Gather information from their senses
Steadfast, stable, “salt of the earth”
Practical and realistic
Like the Boy Scouts’ motto: Be prepared!
A deep commitment to the standards of our society
Heritage, history, family are important values

A high priority to belong to social units

I need to follow the rule and respect authority	Loyal... Dependable... Prepared
I have a strong sense of what is right and wrong in life	Thorough... Sensible... Punctual
I need to be useful and to belong	Faithful... Stable... Organized
I value home, family, and tradition	Caring... Concerned... Concrete
I am a natural preserver, a parent, a helper	

At work/school...

I provide stability and can maintain organization.

My ability to handle details and to work hard make me the backbone of many organizations.

I believe that work comes before play, even if I must work overtime to complete the job.

In love...

I am serious and tend to have traditional, conservative views of both love and marriage.

I want a mate who can work along with me, building a secure, predictable life together.

I demonstrate love and affection through the practical things I do for my loved ones.

In childhood...

I wanted to follow the rules and regulations of the school.

I understood and respected authority and was comfortable with academic routine.

I was the easiest of all types of children to adapt to the educational system.

GREEN

Strong urge to be **COMPETENT**
 Good at solving problems, figuring things out, wondering all the time “What if...?”
 Ask frequently “Why?”
 Theoretical, puzzlers, need to know the reasons behind something
 Objective, quantitative
 Value cause and effect (if A then B)
 Help us figure out a dozen possibilities
 Most self-critical of the types
 Badgers others about mistakes with resolve to improve
 Respects abilities, skills, and ingenuity
 Is hooked on storing up wisdom
 Individualistic, can do work well independently

Can be vulnerable to “all work and no play”

I seek knowledge and understanding

Analytical...Global...Conceptual

I live life by my own standards

Cool...Calm...Collected

I need explanations and answers

Inventive...Logical...Perfectionistic

I value intelligence, insight, fairness, and justice

Abstract...Hypothetical...Investigative

At work/school...

I am conceptual and am an independent thinker.

For me, work is play.

I am drawn to constant challenge in careers, and like to develop models, explore ideas, or build systems to satisfy my need to deal with the innovative.

Once I have perfected an idea, I prefer to move on, leaving the project to be maintained and supported by others.

In love...

I prefer to let my head rule my heart.

I dislike repetition, so it is difficult for me to continually express feelings. I believe that once feelings are stated, they are obvious to a partner.

I am uneasy when my emotions control me.

I want to establish a relationship, leave it to maintain itself, and turn my energies back to my career.

In childhood...

I appear to be older than my years and focused on my greatest interests, achieving in subjects that were mentally stimulating.

I was impatient with drill routine, questioned authority, and found it necessary to respect teachers before I could learn from them.

ORANGE

Good at adding spice to any situation
The best of all of us at living in the moment and using their physical senses to
Understand what is going on in any given situation
Future oriented
Gather information from their intuition
Exuberant and generous in gift-giving
May have short attention span
Especially interested in ACTION
Respond to tactile, tangible activities
Optimistic, bold, eager
At time, can be a bit of a “show off”
Our best performers, athletes, and actors

I act in a moments notice

Witty...Charming...Spontaneous

I consider life as a game, here and now

Impulsive...Generous...Impactful

I need fun, variety, stimulation, and excitement

Optimistic...Eager...Bold

I value integrity and unity in relationships

Physical...Immediate...Fraternal

I am a troubleshooter, a performer, a competitor

At work/school...

I am bored and restless with jobs that are routine and structured.

I am satisfied in careers that allow me independence and freedom, while utilizing my physical coordination and my love of tools.

I view any kind of tool and an extension of self.

I am a natural performer.

In love...

I seek a relationship with shared activities and interests.

With my mate, I like to explore new ways to energize the relationship.

As a lover, I need to be bold and I thrive on physical contact.

I enjoy giving extravagant gifts that bring pleasure to my loved one.

In childhood...

Of all types of children, I had the most difficult time fitting into academic routine.

I learned by doing and experiencing, rather than by listening and reading.

I need physical involvement in the learning process and am motivated by my own natural competitive nature and sense of fun.

Appendix I: Wellness Handout

Heath, Wellness, and College Students

There are five main areas of wellness, they are:

1. Physical
2. Social
3. Spiritual
4. Intellectual
5. Mental/Emotional

O: What is the difference between health and wellness?

A: Health – Choices we make on a daily basis. Examples:

- Getting out of bed, or sleeping in.
- Having breakfast or skipping it.
- Exercising or not exercising.
- Allowing someone or something to get to you and dwelling on it, or deal with a situation effectively and appropriately.
- Choosing to engage in risky behaviors or making responsible decisions.

Wellness – How the above choices (and more) impact us over time. Where do you fall in the wellness continuum?

How do you think the following areas impact academic performance?

Food Selection

“Energy Drinks”

Physical Activity

Morals/Values

Stress

Roommates

Sleep

Family

Alcohol

Friends/Significant other

In times of stress: TAKE CARE OF THE BASICS

- Eat regular meals (especially breakfast)
- Make exercise part of your daily routine (at least 30 minutes).
- Avoid alcohol, caffeine, and sugar
- Get enough sleep
- Don't keep feelings and frustrations in. Talk to a trusted friend.

From: Foundations for Learning Materials, Bryant University
Jennifer DiPrete

REFERENCES

- Alices-Planas, Jessica. (2009). Hispanic Nursing Students' Journey to Success: A Metasynthesis. *Journal of Nursing Education*, 48 (9), 504-513.
- Bryan, Elizabeth., Simmons, Leigh Ann. (2009). Family Involvement: Impacts on Post-secondary Educational Success for First-Generation Appalachian College Students. *Journal of College Student Development*, 50(4), 391-406.
- Cabrera, Alberto F., Burkum, Kurt R., La Nasa, Steven M. (2005). Pathway to a Four-Year Degree. In A. Seidman (Ed.), *College Student Retention: Formula for Student Success* (pp. 155-214). Westport, CT: Praeger Publishers.
- Conway, Katherine (2010). Educational Aspirations in an Urban Community College: Differences Between Immigrant and Native Student Groups. *Community College Review* 37(3), 209-242.
- Crisp, Gloria., Nora, Amaury., Taggart, Amanda. (2009). Student Characteristics, Pre-College, College, and Factors as Predictors of Majoring in and Earning a STEM Degree: An Analysis of Students Attending a Hispanic Serving Institution. *American Educational Research Journal*, 46 (4), 924-942.
- Farber, Elaine (2007). Central Falls and Pawtucket Data in Your Backyard. 2007 Rhode Island Kics Count Factbook. Presented 11/26/2007. Retrieved 3/1/2011.
- Gibbons, Melinda M., Borders, DiAnne L. (2010). Prospective First-Generation College Students: A Social-Cognitive Perspective. *The Career Development Quarterly*, 58(3), 194-209.
- Gloria, Alberta., Castellanos, Jannett., Scull, Nicholas., Villegas, Ffancisco. (2009). Psychological Coping and Well-Being of Male Latino Undergraduates: Sobreviviendo la universidad. *Hispanic Journal of Behavioral Sciences*, 31, 317-339.
- Kim, Young K., Sax, Linda J. (2009). Student-Faculty Interaction in Research Universities: Differences by Student Gender, Race, Social Class, and First-Generation Status. *Research in Higher Education*, 50 (5) 437-459.
- Majer, John. (2009). Self-Efficacy and Academic Success Among Ethnically Diverse First-Generation Community College Students. *Journal of Diversity in Higher Education*, 2 (4), 243-250.
- McMurray, Andrew J., Sorrells, Darrin. (2009). Bridging the Gap: Reaching First-Generation Students in the Classroom. *Journal of Instructional Psychology*, 36(3), 210-214.
- Owens, Delia., Lacey Krim., Rawls, Glinda., Holbert-Quince, JoAnne. (2010). First-Generation African American Mal College Students: Implications for Career Counselors. *The Career Development Quarterly* 58(6), 291-299.

Torres, M. (2009). From the Bricks to the Hall. *Harvard Educational Review*. 79 (4), 594-600, 785.

Torres, Vasti., Hernandez, Ebelia. (2009). Influence of an Identified Advisor/Mentor on Urban Latino Students' College Experience. *Journal of College Student Retention Research, Theory & Practice*, 11 (1), 141-160.

U.S. Department of Education (2009). Projections of Education Statistics to 2018. (NCES Publication No. NCES 2009-062). Washington DC: Institute of Education Studies.

Winkle-Wagner, Rachelle. (2009). The Perpetual Homelessness of College Experiences: Tensions between Home and Campus for African American Women. *The Review of Higher Education*, 33 (1) 1-36.