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POSTSECONDARY EDUCATION EXPLORATION AND DECISION MAKING: PUBLIC HIGH SCHOOL COUNSELOR IDENTIFICATION OF KEY TOPICS FOR TRADITIONAL HIGH SCHOOL STUDENTS AND THEIR PARENTS

A Thesis Presented to the
Faculty of the College of Education
University of Houston

In Partial Fulfillment
of the Requirements for the Degree

Master of Education

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Abstract

K-12 educators cite problems with preparing traditional high school students and their parents for postsecondary education exploration and decision making. These problems include inadequate college resources and materials, inequitable college advising by counselors and teachers, and inequitable college preparatory curricula (National High School Summit, 2004). Overwhelmed counselors struggle with getting information disseminated (NACAC, 2007). There has been a helter-skelter approach to nonacademic preparation programs on both the K-12 and postsecondary side of education, with no comprehensive or quality performance standards to guide them (U.S. Department of Education, 2006). The researcher suggests one solution: a systematic curricular approach. This study surveyed counselors (N=62) from several public school districts in the south asking them: if a semester length elective course on the postsecondary education exploration and decision making process was available, would it be important to them, and what nonacademic topics should be included? Results were significantly positive.

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I. INTRODUCTION

In a direct quotation from the Preamble of, *A Test of Leadership; Charting the Future of U.S. Higher Education* (intro ¶ 2, 2006), the commission appointed by the Secretary of Education, Margaret Spellings states:

> We acknowledge that not everyone needs to go to college. But, everyone needs a postsecondary education. Indeed, we have seen ample evidence that some form of postsecondary instruction is increasingly vital to an individual's economic security. Yet, too many Americans aren't getting the education they need – and that they deserve.

For the purpose of this thesis, postsecondary education will refer to all higher education pursued after high school, which includes technical colleges, 2-year associate degree colleges, and 4-year baccalaureate colleges and universities.

The American High School Student

Research has shown that American high school students want to continue on to higher education. According to the Stanford Institute of Higher Education Research – The Bridge Project (2003), eighty-eight percent of all students surveyed intend to pursue some form of postsecondary education, and these aspirations cut across racial and ethnic lines (Venezia, Kirst, & Antonio, 2003). In a study of undergraduate students from diverse racial backgrounds, researchers Pope and Fermin (as cited in MacAllum, Glover, Queen & Riggs, 2007) explored different motivations to go to college and found that overall, the top five factors influencing college attendance were as follows:

1. Increased possibility of achieving a personal goal upon completion;

2. Earning a degree as a personal goal;
3. Possibility of getting a better job;
4. Possibility of making more money; and
5. Parents' encouragement to attend.

Parents also have postsecondary educational dreams for their children; more so than ever before. The United States Census Bureau revealed that 86% of parents want their children to pursue some form of higher education (U.S. Census Bureau, 2003). Wanting a postsecondary education, however, is not enough in the current economy. These children need a higher education if they are to compete in today's global marketplace. Eager students may begin their postsecondary education, but according to the Department of Education's Institute of Education Sciences, only 58% of full time, first time degree-seeking students finished their education within six years of enrolling at a postsecondary institution (National Center for Educational Statistics, 2003). While there are a number of reasons why students do not achieve their postsecondary education dreams, this thesis will explore one issue: the lack of non-academic preparation necessary for high school students to make informed decisions about postsecondary options.

Hypothesis

As will be seen in the literature review, a lack of preparation for transition to postsecondary education is problematic for students, their parents, and educators, as are not having clear, national curriculum standards for that preparation. There does not yet seem to be a universal answer to the problem, although policy and procedures on both sides of the fence (K-12 and postsecondary education) are trying to bridge gaps, and

intentions by schools and counselors are certainly well meaning. In the meantime, many graduating high school students are underprepared to make the life-altering choices related to their higher education.

The researcher wanted to know if a semester-length, elective course for public high school students on postsecondary education transition, exploration, and decision making could be one appropriate solution. Counselors were surveyed to determine what topics they identified as being important for the development of a course for high school students. They were further asked that if such a class did exist, would it be a necessary tool for both students and parents, and would it support counselors in already existing programs.

Theoretical Implications

The researcher predicted that most topics presented in the survey would have a mean between *Important* and *Very Important.* This prediction is based on an extensive review of the issues facing students pursuing higher education; issues such as, being underprepared for the transition both academically and non-academically, the high counselor-to-student ratio in most public secondary schools, and the problems facing policymakers because of a lack of a unified solution. The researcher further predicted that a systematic curricular approach to the problem in the form of a semester length class would be supported by the surveyed audience. If results were as expected, then the investigator would proceed with the initial development of a course.

II. LITERATURE REVIEW

The Problem

The U.S. Department of Education authorized a research committee to look into the current national dilemma facing students who want to transition to higher learning. At this time, there is not a coordinated, solid solution (on either the K-12 or postsecondary side of education) for helping students reach their full, higher education potential (National High School Summit, 2004). Rather, there has been a helter-skelter approach to transition services, with no comprehensive or quality performance standards to guide many of the programs out there (U.S. Department of Education, 2006). Problems include, but are not limited to, a lack of clear and dependable information translated to students and their families about the cost and quality of postsecondary institutions, as well as requirements for admittance into those institutions (U.S. Department of Education, 2006).

K-12 educators cite a number of problems with the preparation system including inadequate college resources and materials, inequitable college advising by counselors and teachers, inequitable college preparatory curricula, and a general lack of teacher knowledge of college preparation issues (National High School Summit, 2004). One serious barrier to preparation seems to be in the area of high school college counseling. The National Association for College Admission Counseling (2008) has set gold standards for counseling students on the college process, as well as recommendations on the information counselors should make available to students and parents on

postsecondary options. College counseling is to be made available to all public secondary students.

Many well-funded private high schools have college admission counselors on staff whose sole job it is to help students with the college choice and transition process. Most public high school counselors however, do not have this luxury, and therefore are unable to meet even the minimum standards for college counseling (McDonough, P., 2006). As a result of inadequate funding of most public high schools, and the resulting high student-to-counselor ratios, the ability of middle school and high school counselors to perform this important role has been deeply hindered or even made impossible (McDonough, P. Korn, J., & Yamaski, E., 1997). In some school districts, such as in California, the student to counselor ratio is as much as 600:1 (NACAC, 2008). This is a huge impediment to college preparation and transition, and to communicating vital information to the masses. As professionals, high school guidance counselors want to help students with college counseling, but must focus instead on administrative duties such as state testing, disciplinary, and special needs issues (McDonough, P., 2006).

The Communication Gap

A review of literature on postsecondary education access, exploration, and decision making eventually points back to a recurring theme. How do secondary educators get high school students to college, and how do postsecondary educators keep them there for the duration of their degree completion? One serious problem exists between how the K-12 system and the 13-16 postsecondary system communicate the necessary information students and their families need in order to make college entry

successful (Venezia, et al., 2003). Information that is vitally important, such as admission standards and processes, financial aid, curriculum differences, and home-to-college transition issues, is not being adequately transmitted to the people that matter most – those seeking to further their education after high school (McDonough, P. 2006). Neither public high school counselors nor postsecondary institutions have found an adequate way to accomplish the monumental task. This gap in communication not only affects college access; it also affects how well students transition into postsecondary education life, and whether or not to complete a degree program. A student, who does not fully understand how good decisions made prior to entering college can affect life, both academically and non-academically, will be a student who has the potential for failure once there.

Policies and Programs

Over the past several decades, policymakers have worked hard to develop numerous policies and programs with the goal of increasing college enrollment (Perna, Rowan-Kenyon, Bell, Thomas, & Li, 2008) and for bridging the communication gaps. Policy and programs come from various sources and address different issues. Some of these policies and programs are designed to deal exclusively with student issues, while others are intended to be passed down from government to school to student (Perna, et al., 2008). Some address college access, while others tackle problems having to do with academic readiness and retention. The policies and the programs are numerous (Venezia, et al., 2003). Yet, despite a dramatic increase of higher education enrollments over the past three decades (National Center for Education Statistics, 2004), persisting gaps in

higher education participation suggest that existing policies and programs are not accomplishing their underlying goals (Perna, et al., 2008).

The Bridge Project Report (2003) points out that the states themselves have created unnecessary and detrimental policy barriers between the K-12 and postsecondary systems concerning what students, parents, and K-12 educators need to know and be able to do to enter and succeed in college (Venezia, et al., 2003). These state imposed barriers lead to disconnections between the secondary and postsecondary systems. The barriers cited here are from the final report of The Bridge Project (Venezia, et al., 2003) and include the following:

- Multiple and confusing assessments – High schools are unaware of postsecondary admission and placement requirements. Postsecondary admission officials are equally unaware of K-12 standards and assessments, and are unwilling to challenge politically charged state policy on secondary exams.
- Disconnected curricula – What is required for high school graduation, may not meet requirements for college entrance. In addition, community college has differing requirements for graduation versus transfer requirements to a four year university.
- Lack of longitudinal K-16 data – Most states do not track students' needs as they transition from one educational system to the next, nor do they evaluate policy reforms.

- Few K-16 accountability mechanisms – For example, K-12 education is accountable for closing the achievement gap between the races; postsecondary has no such accountability.
- Insufficient K-16 governance mechanisms – In traditional state education systems, no one is held accountable for K-16 reform, and as such these systems often act independently without regard for each other's reforms and needs.

There does not appear to be coordinated effort for assimilating and dissimilating postsecondary education information en masse. With these disconnects come misunderstanding, confusion, and frustration about academic and nonacademic college readiness requirements, not just for students attending public high school, but for those working in the educational system, as well.

The Academic Readiness Problem

The reasons that graduating seniors either do not make it to college or drop out once they are there, have been frequently addressed by researchers in various studies and publications on college access, retention, and attrition. There is, of course, the academic dilemma. While student academic preparedness is not the focus of this investigation, the researcher would be remiss in not addressing the high school academic issues as a part of the entire postsecondary education equation.

Students often mistakenly believe that because they graduate from high school they are prepared to meet admission criteria and then if admitted, the challenges of college level classes. Even students with excellent grades may not have a strong

foundation for admission to the college of their choice or for successful college course work. High school curriculum standards and college curriculum standards vary greatly (Venezia, et al., 2003). College admission criteria vary from institution to institution and according to college selectivity as well (National Association for College Admission Counseling, 2008).

According to the U.S. Department of Education, National Center for Education Statistics, a substantial proportion of U.S. high school students avoid the rigorous coursework in high school that they need to be successful in college (Fox, Connolly, & Snyder, 2005). The rationale behind why students side-step these classes differ, from personal reason to the more complex, such as a lack of sound advisement. Most traditional public high school students are not only under-prepared academically for postsecondary education; they are also not getting the necessary nonacademic preparation to help them in the college choice process.

The Nonacademic Factors

Longitudinal research confirms that the best preparation for college is academic coursework, but nonacademic factors can influence the academic performance of students (American College Testing, 2007) and influence reasons for not being accepted or for not applying in the first place. According to a study by ACT (2007) nonacademic factors can be classified into three groups:

- Individual psychosocial factors, such as motivation and self regulation. These factors can affect student self-discipline, commitment to school work, academic self-confidence, and emotional locus of control.

- Family factors, such as parental attitude towards education, socioeconomic issues, and geographical stability.
- Career planning that identifies a good fit between students' interests and postsecondary work.

There is additional information that students need to think about prior to making a decision to pursue postsecondary information. *Table 1* outlines the myriad of nonacademic topics that should be addressed while still in high school. The list is extensive, but certainly not exhaustive.

The Hossler and Gallagher Model of College Choice

The well established Hossler and Gallagher three-stage model of college choice examines the nonacademic factors that account for one's predisposition towards college, the search for information about college, and the college enrollment decision (MacAllum, et al., 2007). The model focuses solely on the process the student goes through, leading up to making the final decision to attend college, as well as what factors influence her or him on the road to getting there (Hossler, Schmit, & Vesper, 1999, as cited in MacAllum, et al., 2007). According to Hossler's three-stage model, a student's inclination towards a postsecondary education can begin as early as preschool, and is shaped by the attitudes of immediate and extended family, school, culture and community. This first stage is known as predisposition. The predisposed student will continue on to stage two, the search process, seeking information to be used in the third stage, the college decision process (Hossler, et al., 1999).

Interestingly, according to a report from the National Postsecondary Education Cooperative (2007), the literature suggests that for traditional, middle-income students, the decision to attend college and the choice of college are best conceptualized as a process, rather than an event. Low-income and first-generation students, on the other hand, tend to choose a postsecondary institution at the same time they decide to attend college. This lack of exploration and thoughtful decision making can certainly complicate the postsecondary transition process, as well as affect retention at the chosen campus (Freeman, Hall, & Bresciani, 2007).

Even though there appears to be differences in postsecondary student decision making as a result of socioeconomic status, research has shown that Hossler's three-stage model holds true; students are influenced about college early on in life by a variety of individuals in a multitude of ways (Hossler, et al., 1999). Parents play the strongest supportive role in the search and decision making process regardless of socioeconomic status (MacAllum, et al., 2007), yet they are often ill equipped to provide advice to their children, especially if they have never attended college themselves (Tierney, W.G., Hogedorn, L.S. 2007).

Table 1 *Important nonacademic topics*

College admissions process	College acceptance process	College research	College costs	Achievement tests
Institution Application	Deposits	Acceptance Requirements	Tuition	SAT
Common Application	Orientation	Placement Exams	Financial Aid	SAT II – Subject Tests
State Application	Registration	Remedial Programs	FAFSA/CSS Profile	ACT
Fees	Matriculation	Demographics	Scholarships	AP Examinations
Essays	Roommates	Quality of Education	Loans	Clep Examinations
Resumes/Portfolios	Housing	Retention rates	Budgetary Concerns	College Placement Exams
Interviews/Auditions	Meal plans	Graduation rates	Books and Supplies	
Counselor Recommendations		Campus Services	Food and Housing Cost	
Teacher Recommendation		Student/Teacher Ratio		
Transcripts		Career Services		
Housing Deposits				
Career interest	Choosing a college major	College visits		
Based on Student Motivation	Based on Student Interest	Travel		
Economic Feasibility	Requirements of College	Scheduling the Visit		
Job placement	Eligibility	Setting Appointments		

College Preparation Programs

According to the Center for Higher Education Policy Analysis at the University of Southern California (Tierney, et al., 2007), college preparation programs typically have common challenges that have been identified. These include, but are not limited to:

- Programs are geared towards short term solutions, with a substantial number of programs not beginning until the 11th grade, and often occurring only in the summer months. These programs are aimed at low-income students, disregarding the needs of all students making postsecondary education decisions.

- Few programs have coordinated relationships with the schools that students attend and the postsecondary schools that students will eventually attend. Even when the programs are located at the school or college, they are not always integrated into the overall institution.

- Families – namely parents – are not incorporated into the postsecondary education preparation learning environment.

According to researchers, there are thousands of college transition programs estimated to be in place in the United States (Gandara, P., 2001), yet studies suggest that only a small portion of students who could benefit from these services actually receive them (National High School Summit, 2004), or even know they exist. In fact, the National High School Summit has suggested that not only should all K-12 students have access to postsecondary education preparation, but performance standards must be

established so that all such programs are held accountable for consistency (2004). The recurrent themes of poor quality, poor communication, and a lack of overall student services echo throughout the literature on postsecondary education preparation. The above challenges demonstrate a strong need for college preparation programs that are geared towards younger students, that they be aimed toward families of all income levels, and that there is a coordinated approach that is integrated into the overall institution.

III. METHODOLOGY

Participants

Participants in this survey were public high school counselors from two large, suburban public school districts directly outside of the Houston metropolitan area. Counselor age, gender, and length of tenure in job position were not identified. Counselors from these districts were representative of other counselors throughout Texas in that education level, training, and teacher certification are requirements of the position. Public high school counselors were chosen as the sample group because by job description, they are routinely responsible for helping students and their families in the postsecondary exploration and decision-making process. Participation in the survey was strictly voluntary.

Site Selection

Counselor school districts were identified and chosen based on demographics, so that participants would have broad exposure to a range of students and families, ethnicity, educational levels, and socio-economic backgrounds. *Table 2* reflects the published makeup of each district, as of the date of writing this report.

The researcher was granted approval to conduct survey research by the University of Houston's Committees for the Protection of Human Subjects on March 2, 2010. Shorty after this date, participant approval was endorsed by each public school district's Coordinator of Research and Program Evaluation. All individuals choosing to participate in the survey were informed of their individual and protected rights as human subjects.

Participation was strictly voluntary, and subjects were given the opportunity to be included in a "prize give-away" as further incentive to contribute to the study.

Table 2

District Demographics

	District One	District Two
	Staff Statistics	
Counselor – Junior High	36	48
Counselor – High School	45	80
Teacher – Junior High	840	1695
Teacher – High School	1088	2530
	Student Profile	
Total Students in District	53,762	100,603
White	50.8%	37.0%
African American	9.6%	15.7%
Hispanic	29.7%	38.0%
Asian/Pacific Islander	9.7%	9.0%
Native American	0.2%	0.3%
Low-Income	25.0%	37.2%
At Risk	39.0%	N/A

Survey Instrument

The survey was designed to measure the opinion of high school counselors on various topics relating to postsecondary education exploration and decision-making by

public high school students and their parents. Topics for the survey instrument used in this study were pulled from *Table 1* The researcher used a professional internet survey design tool known as *Survey Monkey*. Design options were provided as part of the professional package. Pages and questions were numbered over the entire survey, and each page displayed the survey title and page title. The survey language was English. A progress bar was displayed at the top of each survey page, indicating the percentage of the survey that was completed.

The survey consisted of 13 questions and was designed to be completed in seven minutes. Eleven of the thirteen questions were to be answered using a four-point Likert Scale (Very Important, Important, Less Important, and Not Important). Questions 1, 2, 3, 4, 7 & 8 had five sub-topics that were to be rated by the four-point Likert Scale. Questions 5, 6 & 9 had four sub-topics that were to be rated by the four-point Likert Scale. Each sub-topic question was presented in randomized order each time the survey was taken. Questions 10 & 11 had no sub-topics, and were rated by the same four-point Likert scale. Questions 9, 11 & 12 had an optional *Comment* section, and *skip-logic* was used to allow participants to move forward in the survey without leaving comments. Question 13 was completely optional and allowed participants to include an email address for inclusion in the prize giveaway. The survey was piloted prior to the official launch, and was presented to the thesis committee for final approval. The survey can be found in *Appendix A*.

Procedures

The survey purpose was fully explained to initial counselor samples via email, which provided the survey link and asked for voluntary support. The researcher introduced herself as a student working on a graduate thesis project in the College of Education at the University of Houston. Counselors were asked to identify the key non-academic topics that they believe students and their parents need to know prior to making postsecondary education decisions. They were further informed that their input would be used to assist in the development of a semester-length elective course for public high school students with the purpose of addressing both the content necessary for making successful decisions, as well as the self management and self awareness processes that lead up to those decisions. In addition, counselors were told that a course of this nature would be intended to support them in their role as college advisor to both students and their families.

District One counselors were contacted personally by the researcher via district email on week one. Reminders were sent to all those who had not yet responded at the beginning of week two, three, and four of the survey. Twenty-three counselors had contributed by the survey closure date at the end of week four.

District Two counselors were invited to participate by their research coordinator, as district policy forbids outside researchers to contact district employees via email or phone. The researcher was allowed to survey counselors within this district in exchange for giving the completed raw data to the district for future use. The survey link and coordinator request for participation in data collection was sent via district email at the

beginning of week one. The body of the email was identical to the one sent at week one to District One counselors. The survey questionnaire was made available to counselors for three weeks. This same email was sent as a reminder several days before the end of week three, when the survey was set to close. Thirty-nine counselors had contributed by the survey closure date.

Data Management

Survey Monkey handled all data management, as well as randomization of the questions and validity issues with survey construction.

IV. RESULTS

An important first step in instructional design is to determine if a need for instruction exists. Walter Dick and Lou Carey, leaders in the systematic approach to instructional design state that, "the logic of a needs assessment can be summarized as a simple equation: *desire status – actual status = need*" (2005). It is obvious from the literature review that the desired status for students and families making postsecondary educational decisions has not yet been fully reached, and that further solutions to a national, "actual status" problem are necessary. The researcher wanted to determine if a semester length course on the postsecondary education exploration and decision making process could be one possible solution. With this in mind, it was necessary to determine what topics counselors believed would be important to include in this course. The counselor survey polled participants on a variety of topics, and asked for their candid comments on need.

Item Analysis

Simple descriptive statistics were used to determine the overall mean importance level of each topic presented to participants on survey questions 1-11, with minimum/maximum scores, and standard deviation being reported. Participant sample on survey questions 1-9 was N = 62. Participant sample was N = 57 on survey question 10 & 11. Likert scores were calculated as follows: 4 = Very Important; 3 = Important; 2 = Less Important; 1 = Not Important. These results are presented in *Appendix B* and only include the survey questions that included the Likert Scale measurement. The mean outcome of

each question exhibited a very positive pattern of results, and showed that: overall each topic presented to participants was rated between "Important" and "Very Important", with the smallest mean being a 3.27 on question 2e: How important is it that students understand the following topics regarding the PSE admissions process – Interviews/Auditions. Histograms showing importance level according to percentage breakdown of each question are presented in *Appendix C*.

Cronbach's Alpha was used as a measure of reliability of survey internal consistency. The α score was .955 (N= 41).

Factor Analysis

Once the above measures were established and reviewed, it was then necessary to determine if there was an interrelationship between topic variables. If variables indeed factored, then specific factor themes could be determined. The eventual design of an elective course on postsecondary education decision making was the main intention of this research. If themes emerged, then lessons would be designed with this in mind. Factor analysis was therefore chosen, using PASW Statistics 18.

The sample size, Chi-Square, and significance level were evaluated before running the analysis to determine if factoring was appropriate. Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) = .666, which is, according to Kaiser's (1974) criteria considered a mediocre to fair sample (in Pett, M., Lackey, N., & Sullivan, J., 2003). Bartlett's Test of Sphericity returned an approximate Chi-Square value of 2012.290 with df = 820. The one-tailed critical value of z if $\alpha = .05$ is +887.73. Significance level at $p < 0.000$ was well above the defined level ($p < .05$).

The researcher was therefore able to reject the null hypothesis and conclude that there were underlying relationships within the variables, and that sample size by Bartlett's Test was adequate enough to move forward.

Dimension reduction was performed on questions 1-11, to detect structure in the relationship between the 41 variables. Principal Component Analysis was the method of extraction, as it is typically the most common approach when conducting a basic exploratory factor analysis (Pett, M. et al., 2003). Eigenvalues were > 1.0 on ten components and are presented in *Table 3*. A Scree Test confirmed 10 factors.

Table 3

Total Variance Explained

	Initial Eigenvalues			Rotated sums of squared loadings		
Factor	Total	% of variance	Cumulative %	Total	% of variance	Cumulative %
1	15.353	37.447	37.447	5.535	13.501	13.501
2	2.854	6.962	44.409	3.722	9.077	22.578
3	2.523	6.153	50.561	3.697	9.017	31.595
4	2.341	5.709	56.270	3.491	8.515	40.110
5	2.033	4.958	61.228	3.466	8.454	48.563
6	1.681	4.101	65.329	3.111	7.587	56.151
7	1.441	3.515	68.844	3.040	7.415	63.566
8	1.226	2.990	71.834	2.030	4.952	68.517
9	1.129	2.755	74.588	1.790	4.367	72.884
10	1.041	2.540	77.128	1.740	4.244	77.128
11	.888	2.166	79.295			

Varimax was the rotation strategy chosen to maximize variance, with Kaiser Normalization. Small coefficients with an absolute value below .40 were suppressed. The option to exclude cases pairwise was chosen, as three participants did not answer questions 9-11.

Multiple Component Values across Factors

Upon review of the Rotated Component Matrix, it was noted that the same items loaded significantly (> 0.40) on multiple factors. Researchers vary in their opinions on the use of items that load this way in exploratory factor analysis. Although it is considered appropriate by some to place an item where it fits best conceptually (Pett, M. et al., 2003), others are of the opinion that multiple loadings do not uniquely measure a single construct (C.L. Horn, personal communication, November 2, 2010). A more conservative approach was therefore taken, and values substantially loading on more than one factor were removed from all associated factors. Factors 6, 8, 9, and 10 were then discarded as not enough components loaded to comfortably identify what they were measuring (less than 3 components). Remaining factors 1-5 and 7 were viable. The original Rotated Component Matrix (with all loadings > 0.40) and survey questionnaire (in order of SPSS data) are presented in Appendix D. Appendix E reflects the remaining factors, factor classification, and their loading value.

Internal Consistency of Factors

The coefficient alphas for each factor set are reflected in *Table 4*.

Table 4

Internal Consistency of Factors

Factor	N of Items	Cronbach's Alpha
1	5	.870
2	3	.842
3	3	.745
4	4	.847
5	3	.759
7	3	.686

Descriptive Statistics by Factor

Descriptive statistics were run on the individual factors to determine range, mean, and standard deviation, as an additional level of inspection. Measures are presented in *Table 5.*

Table 5

Factor Descriptive Statistics

Factor	Minimum	Maximum	Mean	SD
		N = 62		
1	10.00	20.00	17.8065	2.40108
2	9.00	12.00	11.4032	1.04740
3	7.00	12.00	11.4032	1.23453
4	10.00	16.00	14.4032	1.75050
5	6.00	12.00	10.4516	1.51146
		N = 57		
7	8.00	12.00	11.3158	1.03782

Factor Classification

It was apparent that themes were emerging from the remaining factors. Taking the factor descriptive statistics, the researcher was able to determine the overall mean important level to each participant for each factor. Factor 1 was named "Exploring PSE Options" because the items related to utilizing the college and career planning system (available to students for the purpose of exploration), exploring career choice when thinking about a college major, and visiting campuses. The parent components (campus visits and transition issues from home to campus) follow in line with the exploratory nature of the factor. The range for important levels on this factor was minimum = 10 and maximum = 20. The mean importance level was 17.8 with a standard deviation of 2.4. Counselors determined that exploring PSE options are important to very important for students and parents.

Factor 2 was named "The Admissions Process" because items were related to student requirements for admissions to campus of choice, program of choice, and the actual mechanics of the process itself (i.e. the application). The range for importance level was minimum = 9 and maximum = 12. The mean importance level was 11.4 with a standard deviation of 1.04. Counselors determined that understanding the admission process is very important to students.

Factor 3 was named "Self Management" and addressed student self regulation of time management, study skills, and learning style. The range was minimum = 7 and maximum = 12. The mean importance level was 11.4 with a standard deviation of 1.23.

The Counselors reported that it is very important for students to address self management issues prior to making PSE decisions.

Factor 4 was named “Financial topics” because the majority of items were financial in nature. These items tackled tuition costs, housing and food costs, and family budgetary concerns. The range for importance level was minimum = 10 and maximum = 16. The mean importance level was 14.4 with a standard deviation of 1.75. Counselors stated that it is important to very important that students understand financial topics prior to making PSE decisions.

Factor 4 was named “Understanding PSE Requirements” because items addressed quality of programs, the acceptance processes to get into a program, and courses required once accepted. The range for importance level was minimum = 6 and maximum = 12. The mean importance level was 10.45 with a standard deviation of 1.5. The participants said that it was important to very important for students to understand PSE requirements while still in high school.

Factor 5 was named “Self Awareness” as variables dealt with individual interests, understanding individual academic strengths and weaknesses, and communicating with parents during the PSE exploration and decision making process. The range for importance level was minimum = 8 and maximum = 12. The mean importance level was 11.3 with a standard deviation of 1.03. Counselors rated student self awareness while still in high school as very important.

Counselor Comments

Counselor comments about the topics presented and about a course addressing PSE exploration and decision making in general were very relevant to the overall study, as nowhere was it apparent from extensive literature review that counselors had been polled. Comments will not be presented in the Results Chapter but will be addressed in detail in the Discussion Chapter of the thesis report. Comments can be reviewed in their entirety in *Appendix F, G*, and *H*.

V. DISCUSSION

This chapter will discuss the implications of results presented in Chapter 4. First the findings of the main analysis will be discussed in reference to previous literature. Counselor comments will also be examined. Next, the factor analysis will be reviewed, and implications of the study will be discussed. Finally, limitations of the study will be reviewed, and suggestions will be made for future research in this area.

Main Findings

It is interesting to note that in an exhaustive review of literature for this study, the problems of postsecondary education access are revisited time and time again; yet nowhere was it evident that counselors had been polled to find out their opinion of how to address the problems. Counselors are on the front line of postsecondary preparation, the ones seemingly held most responsible for it on the K-12 side, and the ones struggling the most with how to effectively deliver the information to a large population of students and families (NACAC 2008), all while dealing with their own overwhelming work load. This study focused on one possible solution: the creation of an elective semester-length course for public high school students on postsecondary education transition, exploration, and decision making.

The main findings of this study include a statistically significant positive results pattern and showed that each of the 41 topic presented to participants in the survey had a mean between “Important” and “Very Important”. The lowest mean of 3.27 (N=62) was

on question 2e: “How important is it that students understand the following topics regarding the PSE admissions process – Interviews/auditions”. The highest mean of 3.85 (N=62) was reported on questions:

- 2b: “How important is it that students understand the following topics regarding the PSE admissions process – Admissions requirements for the campus of choice?”
- 7c: “How important is it that student’s address the following issues prior to PSE – Study skills?”
- 8a: “How important is it that parents understand the following topics – Financial aid process?”.

The highest mean of 3.86 (N=57) was on question 10: “How important is it that parents and students communicate during the PSE exploration and decision making process?” Counselors felt strongly that communication was very necessary. This supports prior research on the subject of parental involvement and support being an important part of the PSE preparatory and choice process (MacAllum, et al., 2007).

Although the overall means for each question were considered high, the standard deviations varied, registering as high as 0.74 and as low as 0.35. The highest standard deviations were on questions where several of the participants answered that a topic was either “Not Important” or “Less Important” (range between 1.00 and 4.00, and 2.00 and 4.00). A higher deviation was not unexpected in these instances.

Questions 9, 11, and 12 asked participants to offer candid comments on specific subject matter, as a means of providing deeper insight into their responses. Question 11

of the survey was of particular importance, as it answers the research question directly. Counselors were asked: “If an elective course such as this was available, would it be important to their current counseling program?” The research question was positively supported by the results, with 67% stating it would be very important, and 32% stating it would be important. Counselor comments addressed issues such as a lack of time to properly advise students, the need for students and their families to adequately explore their options, and the need for a curriculum to effectively guide students in a systematic way. Several comments are included here; all comments for question 11 are included in *Appendix F*.

- “Since counselors do not always have time to help students adequately explore the PSE process, an elective course would be valuable;”
- “It could save counselors valuable time to serve students in other ways”
- “If our students were able to take such a course, it would help them to be more prepared and do a better job of making these important decisions. Counselors would be able to help students further develop their career and college plans to meet their goals because students have determined their goals;”
- “We have a course like this, but I think it needs a “makeover” in order to address PSE more thoroughly;”
- “It would be wonderful to have a curriculum and ‘book’ or ‘workbook’ already developed so we don’t have to reinvent it. There is so much information to give students, but no time or systematic way of going about it. Our schools need options for underachievers and less intelligent students who are not going to a 4-yr college;”

- "There is not enough time in a counselors' day to do an exceptional job in preparing for PSE. We are bogged down in scheduling, testing, and other system support;"
- "As long as they get credit for it."

In question 9, counselors were asked how important it would be to parents that their child has access to an elective course on PSE choices. Approximately 57% of counselors polled stated that parents would consider it very important, with 36% indicating that they would consider it important. Most comments supported the importance of a course like this existing, especially with a component for parents, more specifically those who have no experience with postsecondary education. All comments can be reviewed in *Appendix G*. Some comments are listed here:

- "I believe parents want their students to make the best choices for themselves and the more help they (have) in this area, the more prepared they will be;"
- "A lot of students I work with are 1st generation to go to college. The parents don't really know how to assist them;"
- "Parents always comment that they wish their child had known this or that prior to H.S. graduation;"
- "Most parents I talk to like their student taking college prep. Focusing on what was just mentioned here (in the survey) will be very helpful. Having students do mock applications and looking where they qualify to go would be very helpful for students who do not realize what completion [sic] there is for some schools."

These comments support prior research in the area of parental support during the search and decision making process (MacAllum, et al., 2007) and the fact that many parents, regardless of socioeconomic status, are ill equipped to provide help to their children, especially if they have never attended college themselves (Tierney, et al. 2007).

Grade point average was a point brought up in more than one comment on the above-mentioned subject:

- "Many parents are not educated on the college entrance requirements and would love for their students to have something like this. However, you would need to make it a class that would not hurt the student GPA or students will not sign up for it;"
- "As long as it does not hurt their GPA for taking."

One counselor made a very strong point addressing workload:

> If the high school counselor is required to provide information on these topics, I believe there should be a specific counselor or perhaps a small team on each campus who receive thorough training and updates. I feel that the realm of the high school counselor is primarily germane to topics that exist in high school, yet certainly should facilitate students and their families to resources and checklists to help guide and encourage post high school education in some area. If the student and parent have less invested in the idea of post high school education than does the counselor, then the counselor serves no one, merely adds another task to an already full plate. Clear expectations and proper preparation on a cohesive district-wide level

> are necessary if such an effort is to be expected as a regular duty of any high school counselor.

This comment certainly harkens back to the literature review on the need for a consistent and methodical approach to PSE preparation (National High School Summit, 2004) that does not overtax an already burdened counselor population (NACAC, 2008). Additionally, efforts by counselors must be matched by parents and students who are willing to be thoroughly engaged in the process of search and decision making. The researcher believes that a course of this nature should not be taught by counselors, but rather have counselors in the role of overseer, with background support available as needed. Furthermore, there must be a component embedded in the course that exists to unite student and parent in communication.

Question 12 asked counselors to suggest topics that might have been inadvertently overlooked by the researcher. Twenty participants responded that survey topics had been addressed adequately. Thirty-two participants suggested additional information be included. Many of the suggested topics had actually been presented in the survey. Those not mentioned included: SAT/ACT preparation, test taking strategies/skills, money management, having better ways to communicate with parents and students via social networks such as FaceBook, Twitter, blogging, etc., and PSE options for students with children, raising siblings, and/or caring for an elderly surrogate parent/guardian. One timely comment stated the following:

> I'm not sure I would add anything. I'm just happy someone is addressing this – a separate course to address these topics would be AMAZING. These topics are

> EXTREMELY important for students with parents/guardians who do not have any PSE exposure. It's often frightening for them, so they're less likely to ask about the "unsureties [sic]."

Another counselor suggested the following: "It might be beneficial to explore the reasons why those important topics are not being addressed in schools."

All comments for question 12 can be reviewed in *Appendix H.*

Factor Analysis

The importance of eliciting counselor opinion on proposed solutions to the problems existing in postsecondary education preparation cannot be underscored enough. The survey instrument used in this study can possibly be used as a way of strengthening the body of research done previously in this area. It is important to determine if fine-tuning the survey instrument would improve its effectiveness. Therefore, an analysis of the structure of the instrument was necessary to establish that interrelationships existed between the 41 variables.

Cronbach's alpha had already been conducted to determine the survey's internal reliability and was considered at a very acceptable level. Bartlett's Test of Sphericity concluded that interrelationships did exist at a significant level, and that the sample size was adequate. The survey was a new instrument, designed exclusively for this study. It was important to determine how many factors explained the interrelationships, and exploratory factor analysis was chosen to examine the dimensions. Eigenvalues >1.00 identified 10 factors, which were confirmed through Scree testing. After suppressing

values below .40 and after the removal of all double and triple loading values, variables in 6 factors were identified as having correlation. They were “Exploring PSE Options,” “The Admissions Process,” “Self Management,” “Financial Topics,” “Understanding PSE Requirements,” and “Self Awareness”.

Cronbach’s alpha was conducted on each factor to determine if each factor was measuring a true construct (*Table 5*). All alphas were considered significant at approximately .700 or higher suggesting a relatively strong level of internal consistency.

Factor Classification

The descriptive statistics that were performed at a factor level showed that counselors believed that each factor subject was between “Important” and “Very Important”. This is significant, because these are topics that are not being presented adequately to students or parents in current PSE exploration and decision making programs (McDonough, P. 2006, Perna, et al., 2008, Tierney, et al., 2007).

The Relationship of Results to Prior and Future Research

The results of the study have theoretical implications for understanding prior research in the area of public high school counselor availability during the PSE preparation process. Results supported the idea that counselors are not able to meet obligations imposed on them in this area due to time constraints, administration duties, case load, funding, and discipline issues (National High School Summit, 2004; McDonough, P., 2006; McDonough, P. Korn, J., & Yamaski, E., 1997). In fact, most are unable to meet the gold standards set up by their own governing body (NACAC, 2008).

The survey further supported that it is not just the academic readiness issue that must be addressed by policy makers and educators , but that nonacademic topics related to postsecondary exploration and decision making are also important to the overall process of postsecondary preparation (ACT, 2007; Freeman, Hall, & Bresciani, 2007). Survey participants indicated that high school students should, as part of the preparation for college readiness, explore their individual interests as they relate to college major and career options, and that they should further identify their personality strengths and weaknesses and academic areas of strength and weakness. Students should also address time management skills, study skills, learning style, academic self confidence, and issues related to transitioning from home to campus. Students must also understand topics related to postsecondary education admissions standards and placement exams, courses required for PSE graduation, the quality of specific PSE programs and the career opportunities that arise from those programs.

Parents must also understand and be drawn into the process, as parental support is vital during this life-altering time of choice (Hossler, et al., 1999; Tierney, et al., 2007). This was clearly indicated by survey participants. Counselors strongly indicated that parents and students alike must understand not just the admission and application procedures, but the financial topics associated with PSE, topics like the Free Application for Student Aid (FAFSA), tuition costs, housing and food costs, and how to search for scholarships. It was pointed out that parents and students must communicate with one another during the process, and make an effort to visit potential campuses together.

Future research is needed in the area of nonacademic PSE preparation, especially in pursuing a unified solution which involves counselor input and encompasses better

ways to bridge the gap in communication between the K-12 and PSE systems. Counselors can be a vital source of information in policy and program reform not just on the K-12 side, but in helping postsecondary educators understand how the lack of nonacademic preparation impacts incoming students as they make the transition from home to campus life.

Implications of Findings

It can be concluded from the literature review that much research has been directed at the importance of PSE preparatory intervention for those students (and their parents) from lower socioeconomic brackets and those families with no first-hand experience in education post high school (Tierney, et al., 2007). While it is true that this population is at a higher risk for either not pursuing PSE or for dropping out once there, research has not adequately studied students and families from across all socioeconomic classes to determine their needs in this area. A lack of parental experience in guiding their children through PSE preparation does not just affect those from a lower socioeconomic background. Regardless of gender, race, class, or parental education, public high school students and their families are not receiving adequate nonacademic PSE services, which all students need and which are necessary for successful transition from home to campus life (Tierney, et al., 2007).

Counselors understand what topics students and their parents need to know in order to be best prepared for making postsecondary education choices. The point of this study was to survey counselors in an effort to determine the importance level of those topics. It can further be concluded that counselors do not yet have an effective, unified

method of delivery that seems to be working, even though educational policy makers and educators are working to find solutions. While the problem of college access, preparation, and attrition is being taken seriously, no one has yet to sincerely involve high school counselors (who are at the grass root level) in discussions about how the problem might be more effectively addressed at the high school level. When polled, counselors strongly indicated that a standardized course would be a viable option. A survey of additional counselors from other areas of the United States, in other socioeconomic areas could be useful to future research in this area.

Limitations in Sampling Size and Survey Instrumentation

There were several issues that caused primary limitations in the investigation. One limitation had to do with sample size. Kaiser-Meyer-Olkin measure of sampling adequacy (at .666) was considered a mediocre to fair sample size (Kaiser, 1974; in Pett, et al. 2003) for exploratory factor analysis. However, the Bartlett's Test of Sphericity indicated an adequate sample size. In addition, according to additional research conducted by MacCallum (1999), there is no absolute threshold for a minimum sample size in exploratory factor analysis and factor recovery improves as sample size increases (in Winter, J.C.F., Dodou, D., & Wieringa, P.A., 2009). This would need to be confirmed by additional survey of multiple small sample bases, with similar research results. It would be more sensible to secure a higher sample size in subsequent research, but this is not always possible with busy, public high school counselors. It is suggested that more than several school districts be included in subsequent polling.

Additional concern comes from sampling bias. Bias occurs when only available counselors agreed to participate in the survey. A higher sample size would help to alleviate this. Generalizability of the sample size was of some concern, in that participants were from a southern U.S. culture. Results might be different coming from a midwestern or eastern area of the United States. It is unclear how area culture could play a role in counselor opinion.

There were instrument limitations. Surveys are self-reporting by nature, and it cannot be determined if counselors were completely honest in their appraisal of the topics presented. Additional participants would need to be surveyed in an effort to get a more accurate measure of this limitation. Cronbach's alpha, at .955 indicated strong reliability of the survey instrument, but there would need to be further scrutiny with repeated use for validity and reliability to be more conclusive. In addition, the researcher suggests that all open comment questions be mandatory for participants. This will insure that sample size remains the same throughout the entire survey. Participants simply have to add a simple, one word comment (such as, "Finished,") in order to move forward to the next question. The option to skip these open comment questions was available in the first study.

VI. CONCLUSIONS

Based on the preceding discussion of the results, several conclusions can be drawn from this study. First, it appeared that this study achieved its primary goal of determining if the design and implementation of an elective semester-length course on postsecondary education transition, exploration, and decision making would support counselors in effectively delivering the information to a large population of students and families. An overwhelming majority of the sampled population agreed that a program such as this would be important to them, as long as it was managed correctly and did not add to their already overburdened workload.

It can also be concluded that there are a number of nonacademic topics related to the postsecondary education exploration and decision making process that are very important to student success. These topics must be addressed by students, and in some instances their parents, if these same students are to be prepared for the postsecondary academic road ahead of them.

This study also supported the idea that parents are a necessary part of successful transition and that communication between student and parent is vital during the high school exploratory and decision making process towards higher education.

It is hoped that by the development of a standardized course which addresses the nonacademic topics of PSE, that counselors will be able to better manage the process, students will be able to extensively explore themselves and their options in a collaborative classroom, and parents and students will have a better opportunity for

gathering important information, making better decisions, and for communicating with one another in a mutually supportive environment.

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APPENDIX A

ACTUAL SURVEY

Counselor Survey - Postsecondary Education Exploration and

1. Survey Purpose

A semester-long elective course is being developed for public high school students related to how choices and decisions can best be made for postsecondary education.

This course will allow students to explore their postsecondary education options, as well as understand the mechanics of the admission and financial aid process.

Counselor input is vital to the proper development of this course. Please identify topics that should be included, as well as rate the importance of those topics.

The acronym PSE will be used throughout the survey to mean postsecondary education. (Postsecondary education refers to technical school, community college, and 4 year college/university.)

The survey has 12 questions and should take approximately 7 to 10 minutes of your time.

Please include your email address at the end of the survey, if you wish to participate in the drawing for the
Apple® iPod touch® - 8GB MP3 Player (3rd Generation).

Thank you in advance for your participation.

Counselor Survey - Postsecondary Education Exploration and

2. Topics Relating to Students Considering Postsecondary Education

These questions concern students considering PSE.

1. How important is it that students explore the following topics while in high school?

	Very Important	Important	Less Important	Not Important
Individual interests	◯	◯	◯	◯
Individual personality strengths and weaknesses	◯	◯	◯	◯
College majors based on individual interests	◯	◯	◯	◯
Career options	◯	◯	◯	◯
Individual academic strengths and weaknesses	◯	◯	◯	◯

2. How important is it that students understand the following topics regarding the PSE admissions process?

	Very important	Important	Less Important	Not Important
Core subject placement exams (Math, English)	◯	◯	◯	◯
Interviews/Auditions	◯	◯	◯	◯
Resumes/Portfolios	◯	◯	◯	◯
Admission requirements for the campus of choice	◯	◯	◯	◯
Admission applications (Common, State, etc.)	◯	◯	◯	◯

3. How important is it that students understand the following financial topics prior to PSE?

	Very Important	Important	Less Important	Not Important
Tuition costs	◯	◯	◯	◯
Housing and food costs	◯	◯	◯	◯
FAFSA/CSS-Profile	◯	◯	◯	◯
Family budgetary concerns	◯	◯	◯	◯
Scholarship processes	◯	◯	◯	◯

Counselor Survey - Postsecondary Education Exploration and

4. How important is it that students understand the following topics when exploring a college major?

	Very important	Important	Less Important	Not Important
Courses required for PSE graduation	◯	◯	◯	◯
Quality of college programs	◯	◯	◯	◯
Career choices after graduation	◯	◯	◯	◯
Requirements for admission into programs	◯	◯	◯	◯
How personal interests influence choice	◯	◯	◯	◯

5. How important is it that students understand the mechanics of the following topics while still in high school?

	Very Important	Important	Less Important	Not Important
PSE acceptance processes	◯	◯	◯	◯
Financial aid processes	◯	◯	◯	◯
PSE admissions/application processes	◯	◯	◯	◯
PSE exploration processes	◯	◯	◯	◯

6. How important is it that students do the following prior to making PSE decisions?

	Very Important	Important	Less Important	Not Important
Explore PSE costs	◯	◯	◯	◯
Utilize your high school's College & Career Planning System	◯	◯	◯	◯
Explore PSE choices	◯	◯	◯	◯
Visit potential campuses	◯	◯	◯	◯

Counselor Survey - Postsecondary Education Exploration and

7. How important is it that students address the following issues prior to PSE?

	Very Important	Important	Less Important	Not Important
Learning style	◯	◯	◯	◯
Time management skills	◯	◯	◯	◯
Transition issues from home to campus	◯	◯	◯	◯
Academic self confidence	◯	◯	◯	◯
Study skills	◯	◯	◯	◯

APPENDIX B

COUNSELOR SURVEY STATISTICS

Table 6

Counselor Survey: Descriptive Statistics

Question	Min	Max	Mean	SD	Question	Min	Max	Mean	SD
		N = 62					N = 62		
1a	2.00	4.00	3.6613	.51034	5a	2.00	4.00	3.4839	.59346
1b	3.00	4.00	3.8065	.39830	5b	3.00	4.00	3.7742	.42153
1c	3.00	4.00	3.7097	.45762	5c	2.00	4.00	3.5645	.56164
1d	2.00	4.00	3.6129	.61016	5d	3.00	4.00	3.7581	.43175
1e	2.00	4.00	3.8226	.42588					
2a	2.00	4.00	3.7778	.49004	6a	1.00	4.00	3.4355	.69237
2b	3.00	4.00	3.8548	.35514	6b	2.00	4.00	3.6290	.55023
2c	2.00	4.00	3.6129	.52338	6c	2.00	4.00	3.6613	.51034
2d	2.00	4.00	3.5806	.52941	6d	2.00	4.00	3.5645	.56164
2e	1.00	4.00	3.2742	.72811					
3a	2.00	4.00	3.7903	.44857	7a	2.00	4.00	3.5000	.64655
3b	2.00	4.00	3.7903	.44857	7b	2.00	4.00	3.8065	.43753
3c	2.00	4.00	3.6935	.49881	7c	2.00	4.00	3.8548	.39864
3d	2.00	4.00	3.5484	.59168	7d	3.00	4.00	3.6613	.47713
3e	3.00	4.00	3.6452	.48237	7e	2.00	4.00	3.4677	.64574
4a	2.00	4.00	3.5323	.59279	8a	3.00	4.00	3.8548	.35514
4b	2.00	4.00	3.5645	.53165	8b	2.00	4.00	3.7097	.52439
4c	3.00	4.00	3.7742	.42153	8c	2.00	4.00	3.6774	.53636

4d	2.00	4.00	3.5161	.53537	8d	2.00	4.00	3.5806	.58809
4e	2.00	4.00	3.3548	.67985	8e	2.00	4.00	3.5968	.58561
					9	1.00	4.00	3.4516	.73946
						N = 57			
					10	3.00	4.00	3.8596	.35044
					11	2.00	4.00	3.6491	.51725

APPENDIX C

HISTOGRAMS OF SURVEY QUESTIONS

Figure 1 – Question 1

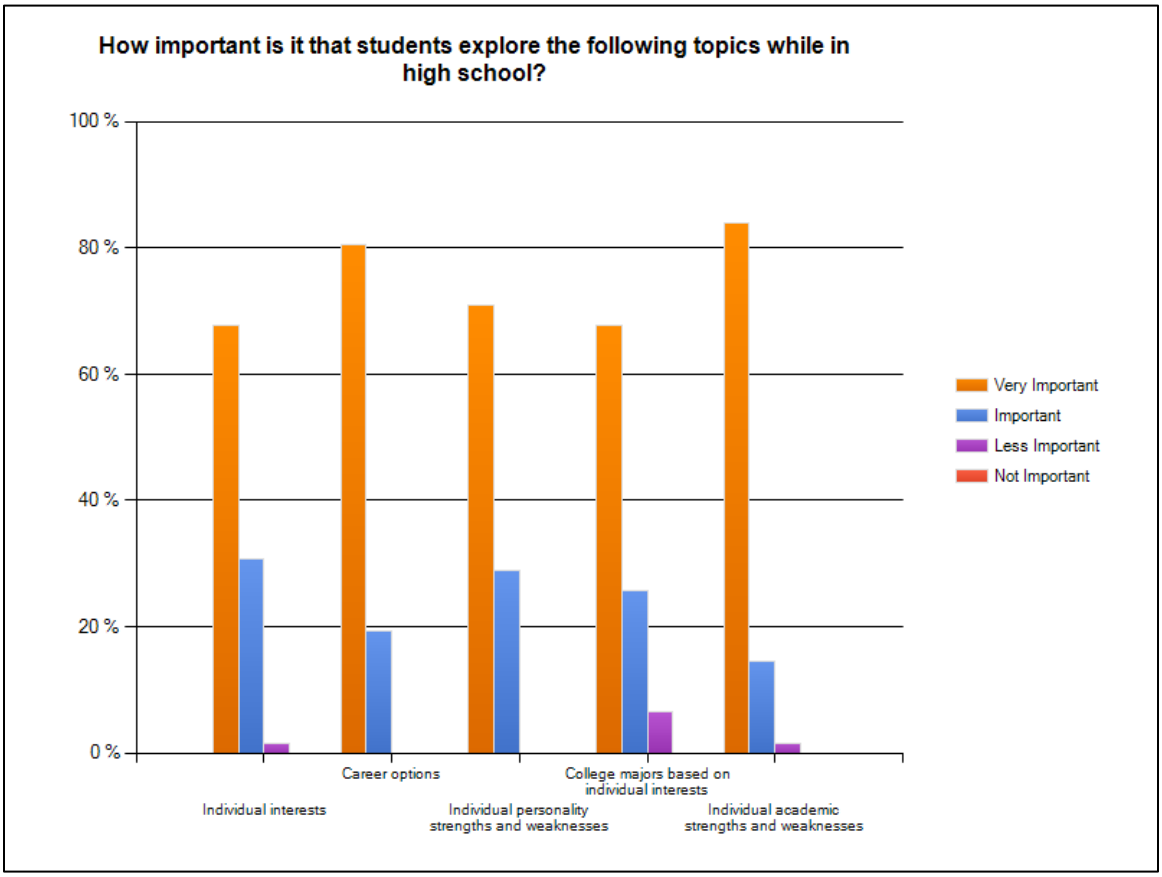


Figure 2 – Question 2

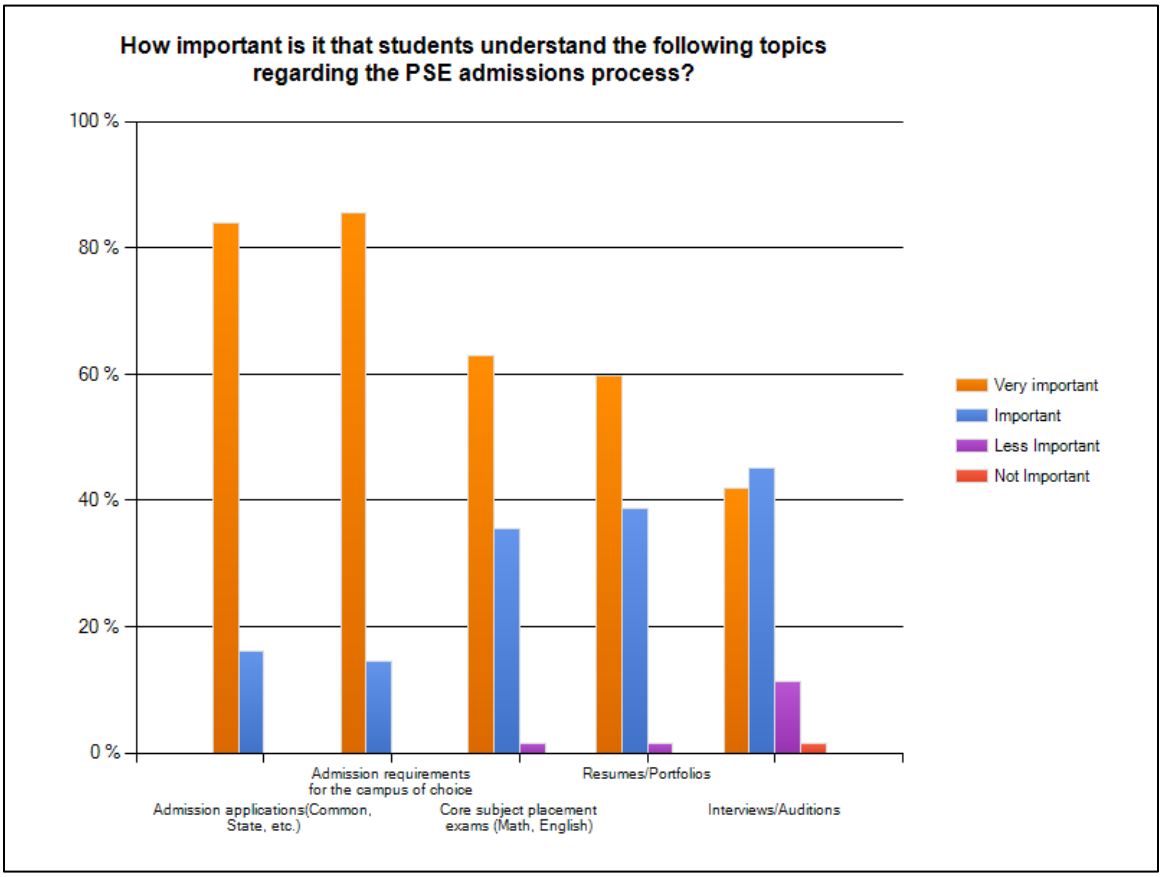


Figure 3 – Question 3

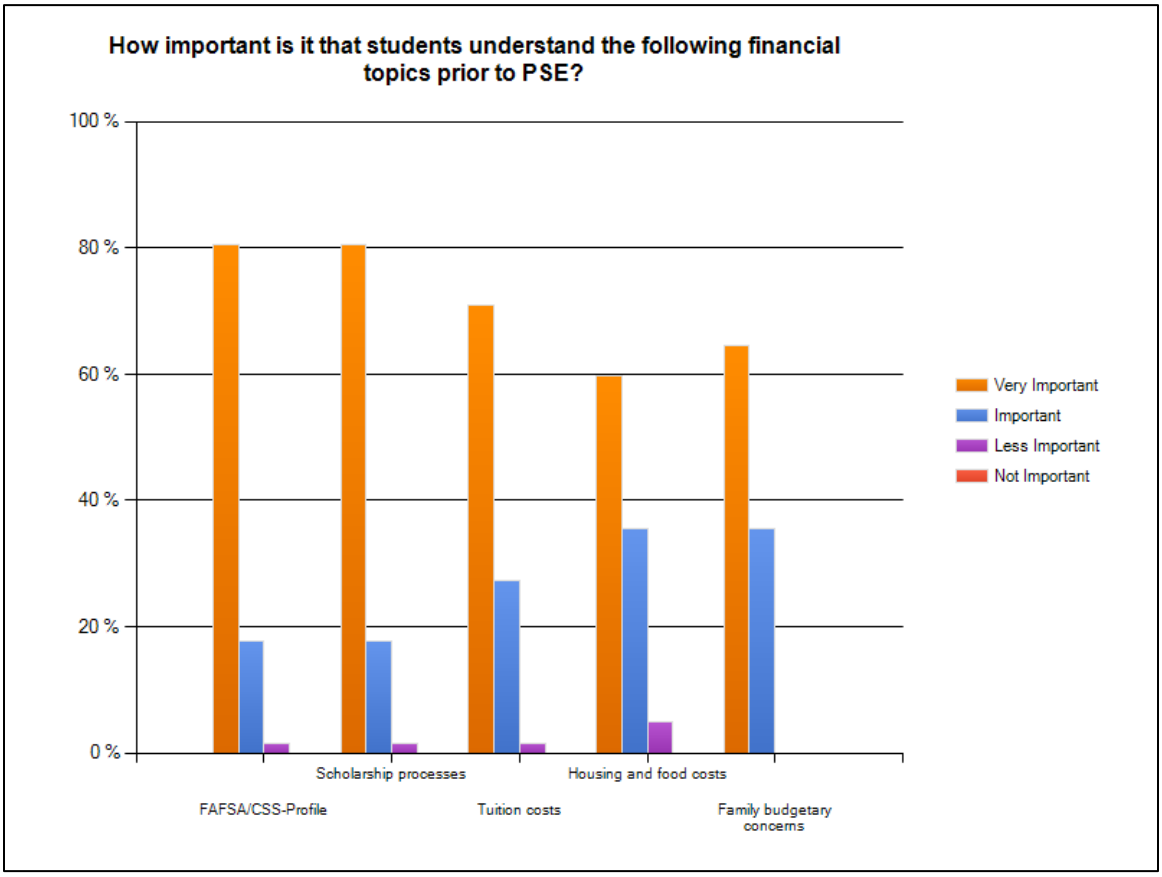
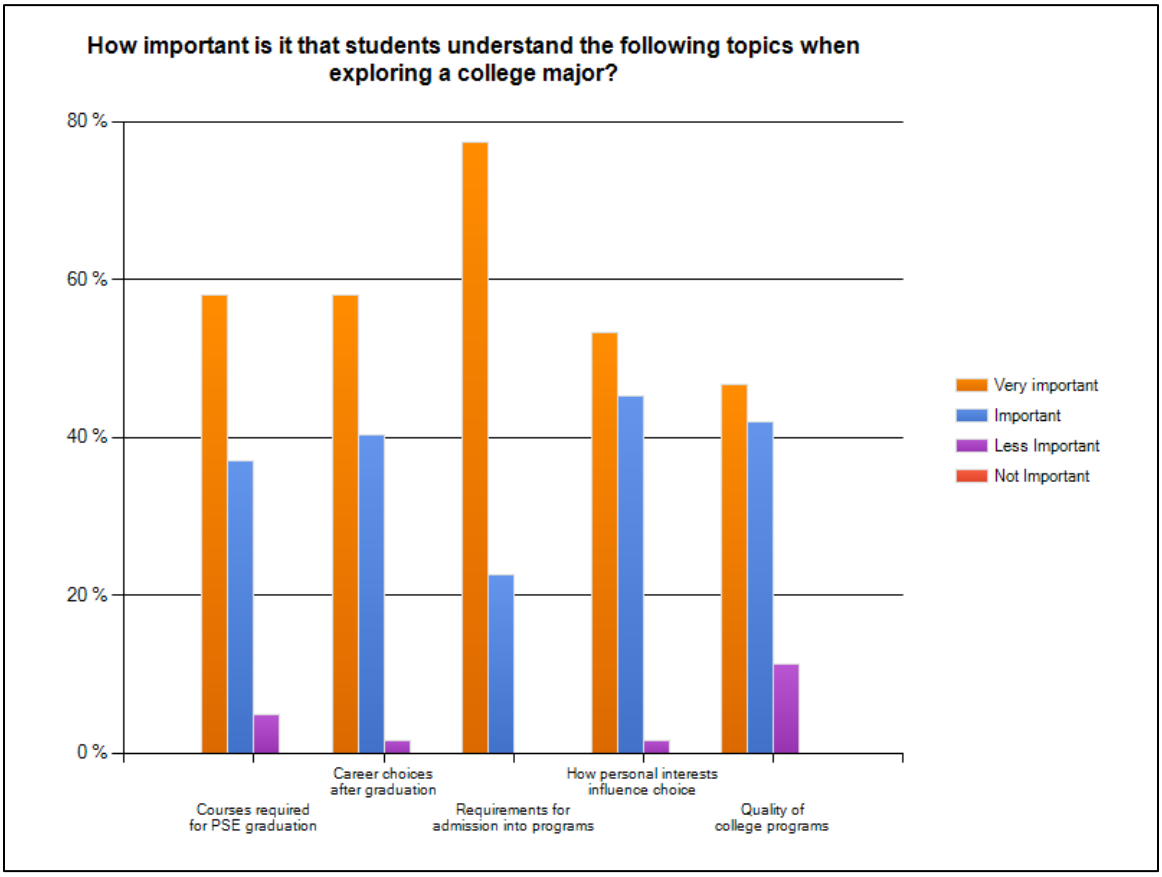


Figure 4 – Question 4



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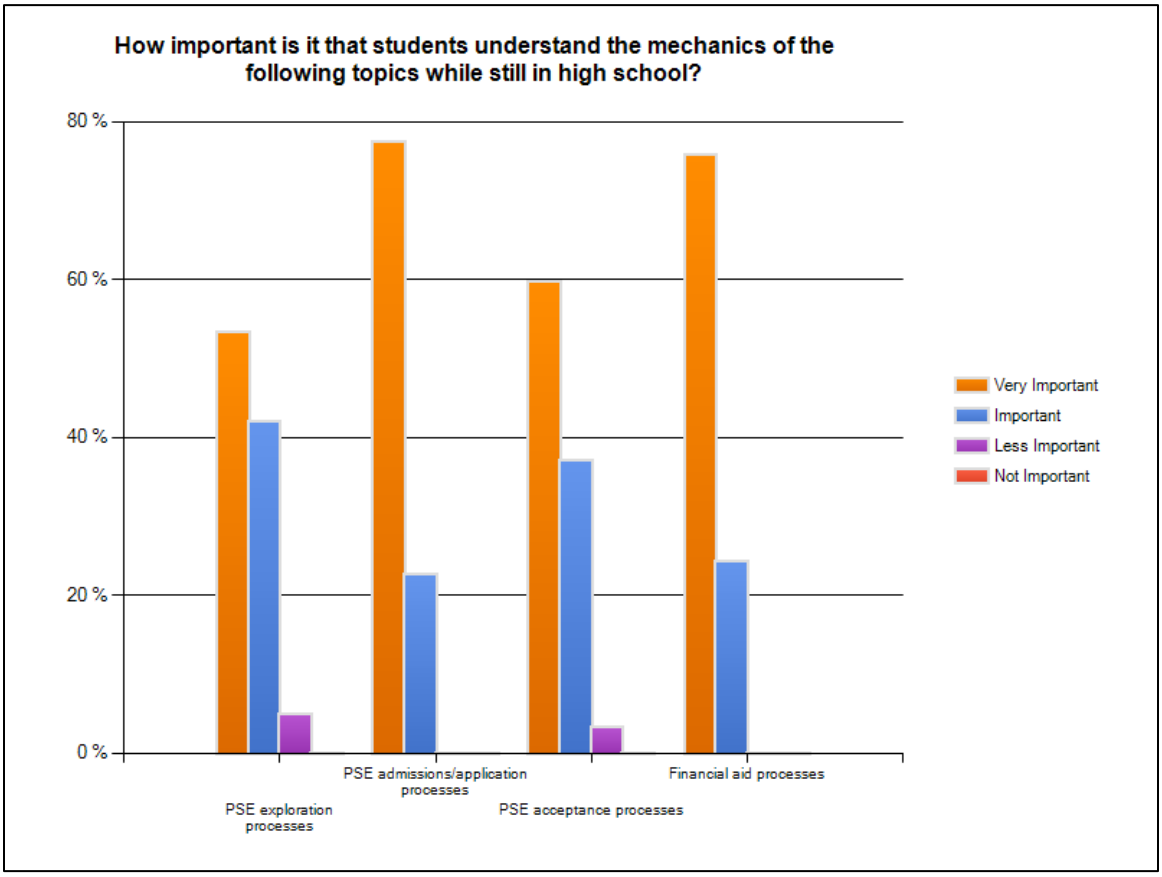

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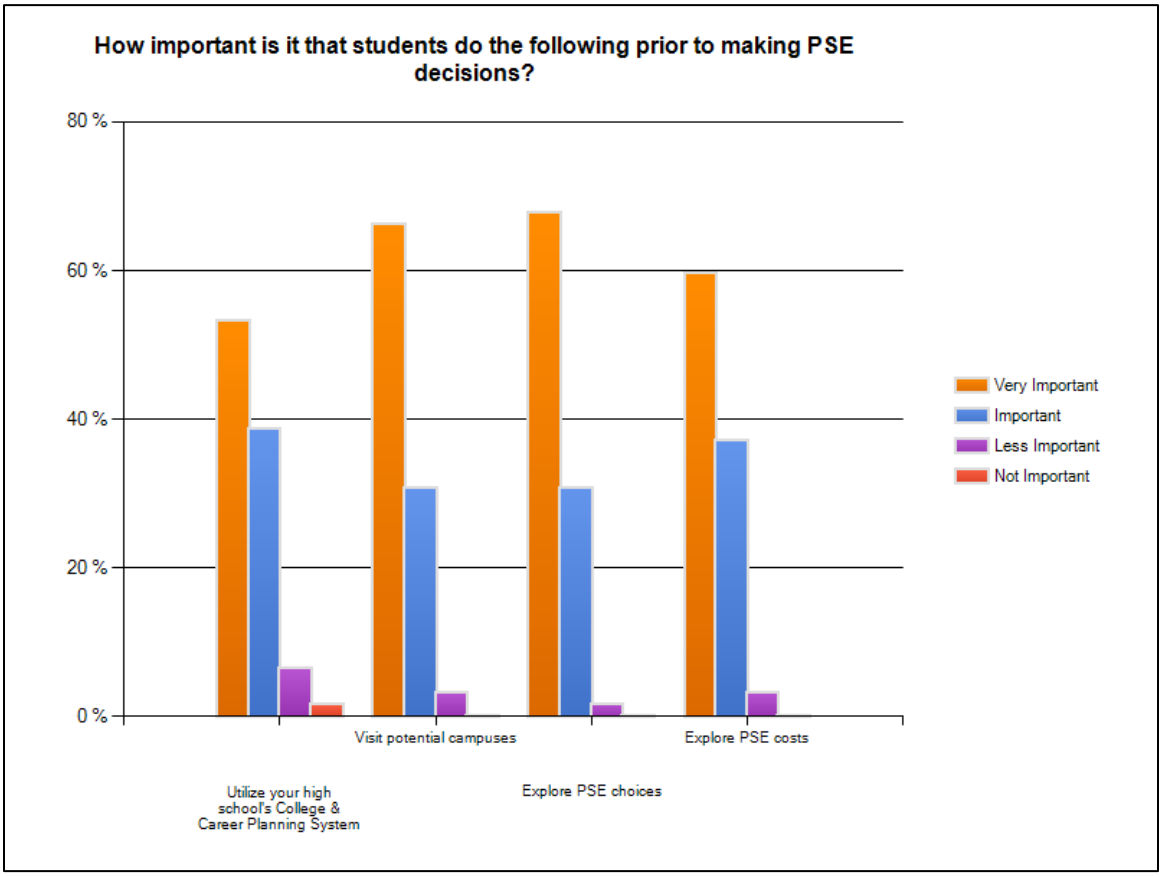
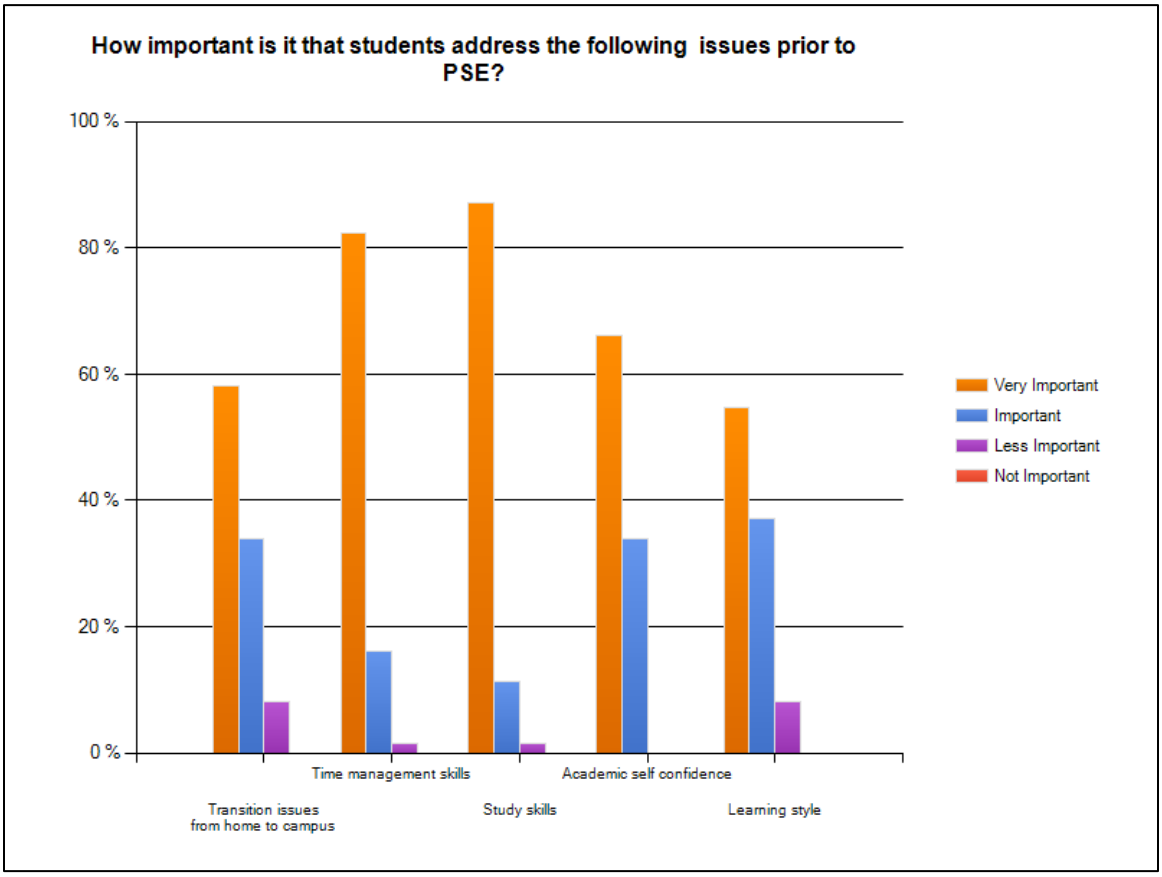


Figure 7 – Question 7



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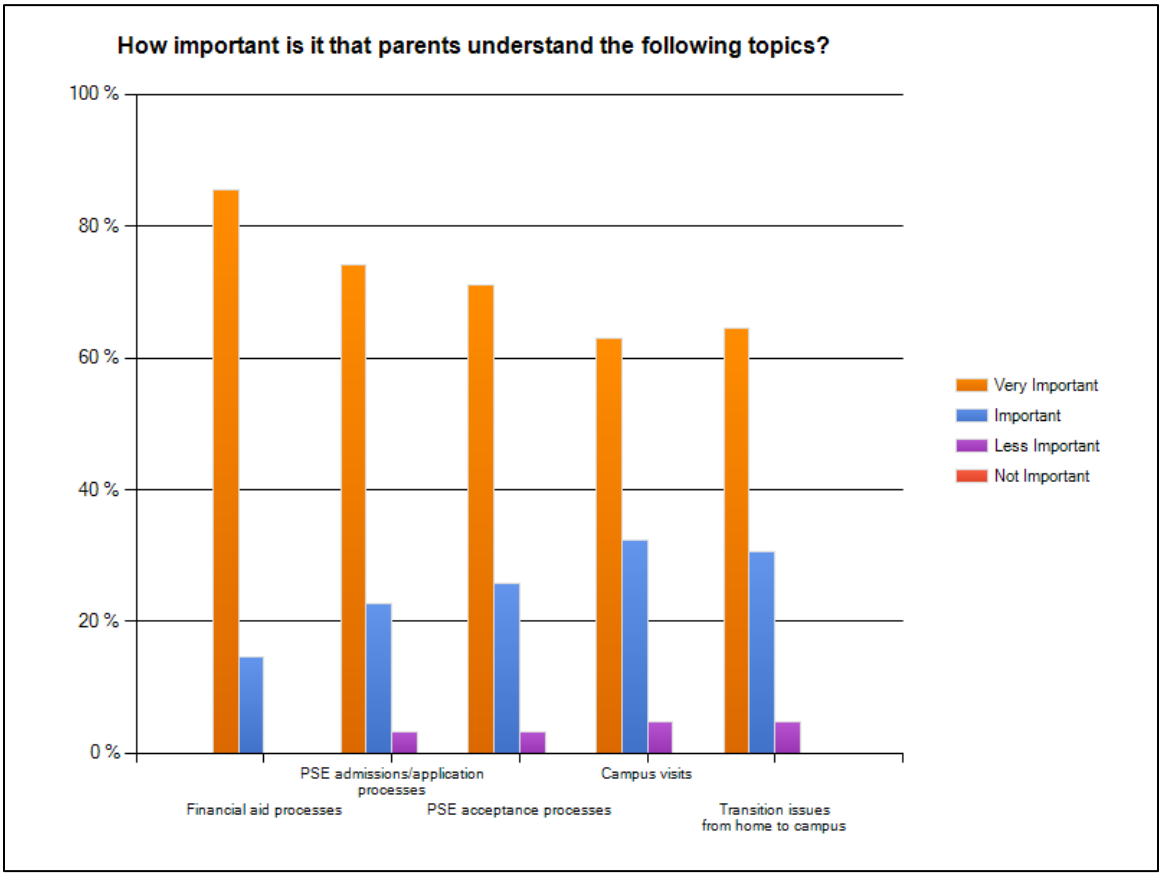


Figure 9 – Question 9

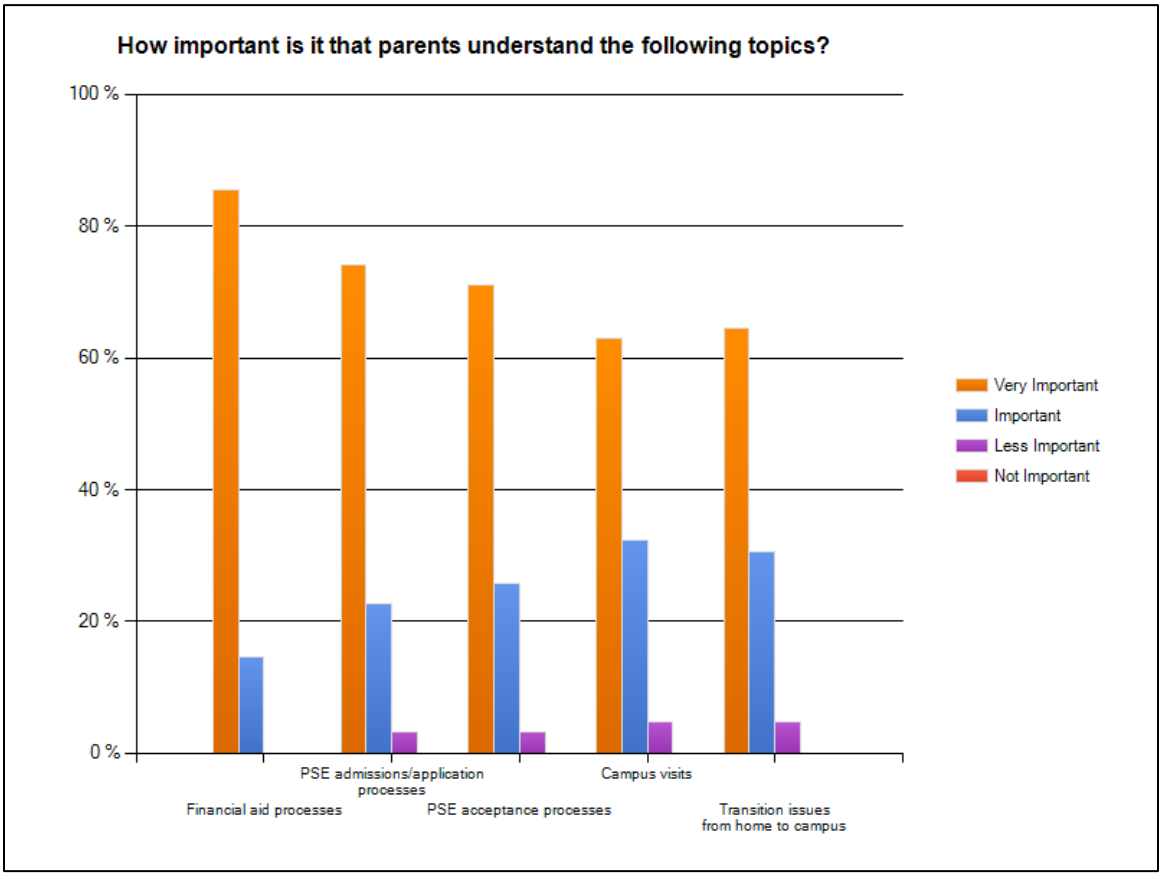


Figure 10 – Question 10

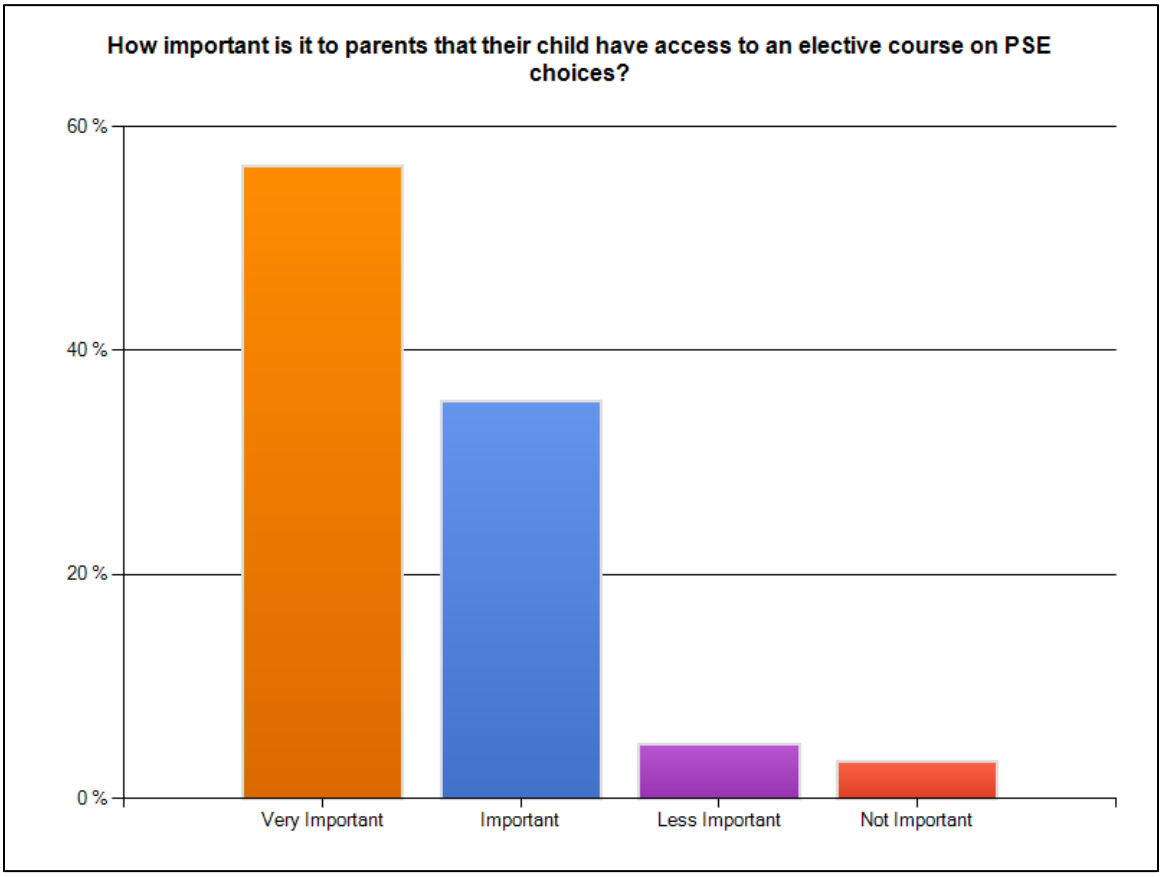


Figure 11 – Question 11

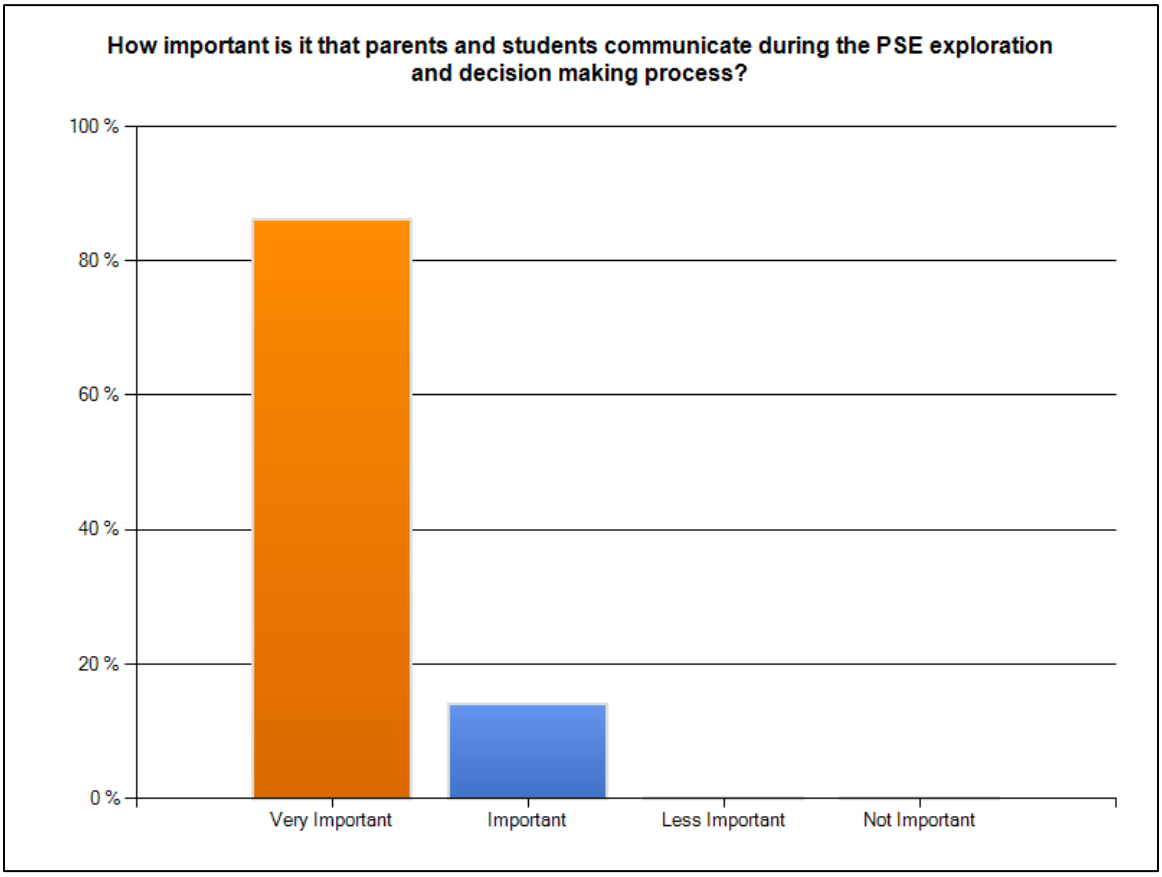
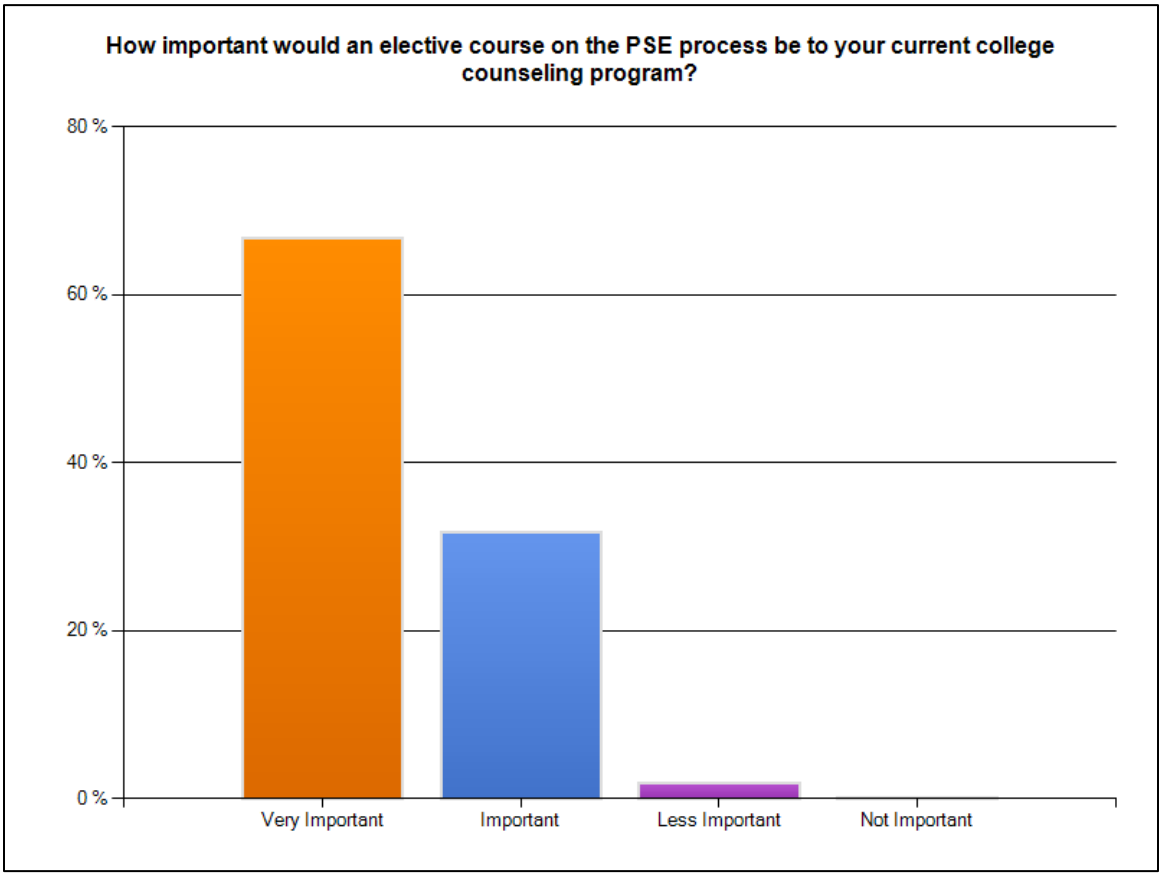


Figure 12 – Question 12



APPENDIX D

ROTATED COMPONENT MATRIX &

SURVEY QUESTIONNAIRE IN ORDER OF SPSS DATA

	Component									
	1	2	3	4	5	6	7	8	9	10
Q1a recoded							.565			
Q1b recoded								.823		
Q1c recoded							.689	.440		
Q1d recoded								.410		
Q1e Recoded							.795			
Q2a recoded		.695	.419							
Q2b recoded		.672								
Q2c recoded	.420	.485								
Q2d recoded									.842	
Q2e recoded			.412						.492	
Q3a recoded						.769				
Q3b recoded					.407	.617				
Q3c recoded				.793						
Q3d recoded				.726						
Q3e recoded				.738						
Q4a Recoded					.770					
Q4b recoded	.507									
Q4c recoded		.637								
Q4d recoded				.400						
Q4e recoded					.447					
Q5a recoded	.508				.418					
Q5b recoded		.635								

Q5c recoded					.714				
Q5d recoded		.466			.404				
Q6a recoded	.713								
Q6b recoded	.838								
Q6c recoded	.533				.464				
Q6d recoded	.457			.527					
Q7a reccoded	.514		.507						
Q7b recoded			.830						
Q7c recoded			.751						
Q7d recoded		.417	.487						
Q7e recoded			.708						
Q8a recoded						.676			
Q8b recoded					.454	.543			
Q8c recoded	.494				.521	.425			
Q8d recoded	.801								
Q8e recoded	.645								
Q9 recoded	.411								.469
Q10 recoded							.663		
Q11 recoded									.878

APPENDIX E

FACTOR CLASSIFICATION WITH LOADINGS

Table 7

Factor Classification with Loadings

Questions	Factor Loadings
Factor 1: exploring PSE options	
4b: Students understand the following topics when exploring a college major – career choice after graduation	.507
6a: Students do the following prior to making PSE decisions – utilize high school college and career planning system	.713
6b: Students do the following prior to making PSE decisions - visit potential campuses	.838
8d: Parents understand - campus visits	.801
8e: Parents understand – transition issues from home to campus	.645
Factor 2: the admissions process	
2b: Students understand the following topics regarding PSE admissions process-admission requirements; campus of choice	.672
4c: Students understand the following topics when exploring a college major - requirements for admission into programs	.637
5b: Students understand the mechanics of the following topics while still in high school – admission/application process	.635
Factor 3: self management	

7b: Students address the following issues prior to PSE – time management skills	.830
7c: Students address the following issues prior to PSE – study skills	.751
7e: Students address the following issues prior to PSE – learning style	.708
Factor 4: financial topics	
3c: Students understand the following financial topics prior to PSE - tuition costs	.793
3d: Students understand the following financial topics prior to PSE - housing and food costs	.726
3e: Students understand the following financial topics prior to PSE - family budgetary concerns	.738
4d: Students understand the following topics when exploring a college major – how personal interests influence choice	.400
Factor 5: understanding PSE requirements	
4a: Students understand the following topics when exploring a college major – courses required for PSE graduation	.770
4e: Students understand the following topics when exploring a college major – quality of college program	.447
5c: Students understand the mechanics of the following topics while still in high school – PSE acceptance processes	.714

Factor 7: self awareness	
1a: Students explore the following topics while in high school - individual interests	.565
1e: Students explore the following topics while in high school – individual academic strengths and weaknesses	.795
10: Parents and students communicate during the PSE exploration and decision making process	.663

APPENDIX F

QUESTION 11: COUNSELOR COMMENTS

Question 11: how important would an elective course on the PSE process be to your current college counseling program

	Counselor comments
1	We offer senior nights, senior PARENT nights, after-school workshops, etc.....but I think a class that meets daily would be an excellent idea to allow the students to FOCUS on PSE and also give them knowledge and confidence about PSE.
2	It would be wonderful to have a curriculum and 'book' or 'workbook' already developed so we don't have to invent it. There is so much information to give students, but no time or systematic way of going about it. Our school needs options for underachievers and less intelligent students who are not going to a 4-yr collge.
3	We have tried to get student to take a class that will prepare them for the college experience and all of its components, but for local credit only. And with the state raising the number of credits needed, there is little room for an nonaccredited class.
4	90% of our students will attend a 4 year college
5	Something offered in the summer before senior year would be ideal.
6	no comment
7	As long as they get credit for it.
8	There is not enough time in a counselors' day to do an exceptional job in preparing for PSE. We are bogged down in the scheduling, testing, and other systems support.
9	It would help with the timing of information to the student. Some parents call up in the 9th grade ready to apply to college and scholarships because they are told

	to start early... what does that mean? It would really help establish a guideline.
10	Since many of our students would be 1st generation to attend college, a course like this could help them with the process since it wouldn't be assuming that they already know how to transition from high school to college.
11	I think a "senior seminar" type of course would be able to fill in the gaps. We provide our students an abundance of information that sometimes our students are not ready for or don't know how to apply to their situation until it is relevant to them.
12	Could help identify and isolate a group of students for us to do more guidance with
13	Since counselors do not always have time to help students adequately explore the PSE process, an elective course would be valuable.
14	We have a course like this, but I think it needs a "makeover" in order to address the PSE more thouroughly [sic].
15	It could save the counselors valuable time to serve students in other ways.
16	If our students were able to take such a course, it would help them be more prepared and do a better job of making these important decisions. Counselors would be able to help students further develop their career and college plans to meet their goals because students will have determined their goals.

APPENDIX G

QUESTION 9: COUNSELOR COMMENTS

Question 9: how important is it to parents that their child have access to an elective course on PSE choices?

	Counselor comments
1	I believe parents want their students to make the best choices for themselves and the more help they in the area, the more prepared they will be.
2	Many parents are not educated on the college entrance requirements and would love for their students to have something like this. However, you would need to make it a class that would not hurt the students GPA or the students will not sign up for it.
3	Not all students need this assistance
4	As long as the course does not hurt their GPA for taking
5	If the high school counselor is required to provide information on these topics, I believe that there should be a specific counselor or perhaps a small team on each campus who receive thorough training and updates. I feel that the realm of the high school counselor is primarily germane to topics that exist in high school, yet certainly should facilitate students and families to resources and checklists to help guide and encourage post high school education in some area. If the student and parent have less invested in the idea of post high school education than does the counselor, then the counselor serves no one, merely adds another task to an already full plate. Clear expectations and proper preparation on a cohesive district-wide level are necessary if such an effort is to be expected as a regular duty of any high school counselor.
6	A lot of the students I work with are 1st generation to go to college. The parents don't really know how to assist them.
7	Also important that this course explores all the appropriate "vocabulary" for PSE ie: hours, credits, degree (all levels)
8	Most parents I talk to like their student taking college prep. Focusing on what was just

	mentioned here will be very helpful. Having the students do mock applications and looking at where they qualify to go would be very helpful for students who do not realize what completion there is for some schools.
9	All of these are important. Counselors should be providing more of these types of services to our students instead of all the paperwork, scheduling, and ARDS.
10	Should be a required course
11	Not all students should attend a 4 year college
12	Students need to all understand the importance of college entrance exams and what the scores mean in terms of acceptance along with their GPA's. That is very difficult for students to understand...they meet the GPA criteria but fail to meet the testing criteria.
13	Parents always comment that they wish their child had known this or that prior to H.S. graduation.

APPENDIX H

QUESTION 12: COUNSELOR COMMENTS

Question 12: What topics would you add that have not been addressed in this survey

	Counselor comments
1	??
2	volunteerism, SAT/ACT prep, summer orientation [sic] programs
3	Motivation, budgeting for real life, other options besides a four year college... real (honest) information [sic] about service opportunities for training and career. Pre-requisits [sic] for majors that could be taken at a community college so that expenses are less for students with lower grades and limited funds.
4	College entrance exams and the Texas Success Initiative
5	Test taking strategies/skills
6	Options in addition to college-apprenticeships, vocational-technical programs
7	Stress of high school grades put on students by parents. Parents are so worried that their child will not get into a 'good college'. they don't realize that there are over 3,000+ colleges in the US alone, not to mention international education opportunities
8	none
9	THE TOPICS WERE FINE.
10	Having more ways to communicate with our parents and students, facebook [sic], twitter, blog etc.
11	How would one obtain scholarhip [sic] information? What is the diff. between grants, work study and types of loans?
12	Out of state costs vs. private school costs
13	survey is completed
14	It might be beneficial to explore the reason why those important topics are not being addressed in schools.

15	none
16	All are relevant topics. Something about money management and scholarship search should be included also.
17	How important is it for students to start PSE?
18	none
19	Overall post graduation plans b/c not all students are going to college and their [sic] should be something available for those students who are not going to college or not going directly to college after high school.
20	None
21	A topic that addresses student's strengths and weaknesses
22	A huge need is for students who could attend Lone Star and get what they need in welding, auto tech etc etc without paying an arm and a leg like they do when they go to some alternate schools. Poor kids are put deep in debt for what they could have gotten at Lone Star much cheaper.
23	seems adequate
24	All topics were addressed.
25	None.
26	It was addressed, but providing as much information as possible in regards to financial aid so all students can see there is a chance for college.
27	Post secondary safety, peer pressure, roommates, sex, drugs, alcohol. positive choices.
28	not sure
29	I believe that the areas of stress management, relationships and goal setting are all very important and can assist students in their transition to college.
30	All have been addressed.

31	I am wondering if in-house field trips regarding presentations on these topics should be mandatory for students in grades and 10. Another level of dissemination could be utilized for upper classmen so that by the time the student is actually applying for entrance to post high school educational programs and institutions, they are well equipped to self-navigate based upon their own knowledge and interests.
32	I'm not sure I'd add anything. I'm just happy someone is addressing this -- a separate course to address these topics would be AMAZING. These topics are EXTREMELY important for students with parents/guardians who do not have any PSE exposure. It's often frightening to them, so they're less likely to ask about the "unsureties [sic]."
33	It would be good if students could understand that the school they choose does not necessarily have to be the most "popular" or "prestigious" school. Choosing the right school can mean choosing the school that is the best fit for the student.
34	Using the resources you have to find and achieve what you need; What to do/where to go when you don't know the answer to one of your questions or need help in PSE; Goal setting and planning
35	Steps to filling out a FAFSA. Benefits [sic] of Community collge [sic] and technical school programs. Personal responsibility when it come to learning the process.
36	THEA requirements and Placement testing and exemptions Recommended vs. Minimun [sic] Diploma in relation to college admissions and Texas Grant
37	gateway programs available for admittance into the larger universities
38	Community colleges vs. 4 year schools and starting off at a community college and transitioning to a 4 year school

39	Timelines. essay writing tips
40	none
41	Social issues such how drugs, alcohol, sex can influence PSE plans.
42	Career Interest Surveys and what they tell us about who we are and what we want.
43	Transition for middle school to high school for the transition to college