GRADUATION RATE AND ENGAGEMENT OF STUDENTS COMPLETING AED 295B AT THE UNIVERSITY OF ARIZONA

by

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Abstract

Half of students who begin their higher education careers do not end up graduating within 150% of the time allotted for their degree programs. Numerous theories exist in an attempt to explain this reality and offer help to employ retention strategies to increase graduation rates. The University of Arizona offers a course that utilizes many retention strategies offered in these theories. This study sought to explore the effectiveness of these strategies and the graduation rates of students taking this course.

The study found the course to effectively connect students to the institution, faculty, and engagement activities. In addition, students who completed the course had higher graduation rates than The University of Arizona average for both 150% and 100% completion times. The results of this study show the course is successful in employing retention strategies and increasing graduation rates of students on The University of Arizona campus.
Chapter I: Introduction

Since the 1960s, only half of the students who attended a four-year university graduated within six years (Leifer & Huber, 1977; Tinto, 2012). Even though enrollment rates have more than doubled, graduation rates have stayed almost exactly the same (Tinto, 2012). Numerous studies (Astin, 1997; Bean & Eaton, 2000; Cope, 1978; Pantages & Creedon, 1978; Spady, 1970; Tinto, 1975; Tinto, 1993) have tried to discover the reasons behind student attrition but few looked into why students stay at a university until graduation (Astin, 1997; Bean & Eaton, 2000; Lenning, Sauer, & Beal, 1980; Tinto, 1993). According to Astin (1997), Bean & Eaton (2000), Lenning, Sauer, and Beal (1980), and Tinto (1993), both sides of the equation were important.

The first national study of student retention was completed in 1938 by McNeely. This study discovered sixty percent of people enrolled in college would not graduate, but it did not look into an explanation for this number. After this study, numerous researchers attempted to find the common denominator of student attrition (Astin, 1997; Bean & Eaton, 2000; Cope, 1978; Lenning, Sauer, & Beal, 1980; Pantages & Creedon, 1978; Spady, 1970; Tinto, 1975; Tinto, 1993). The results show that attrition is the product of a multitude of student-related factors. However, it was not until the 1970s that researchers began to look at actual institutions as a reason for student attrition (Beal & Noel, 1979; Tinto, 1975).
Problem Statement

Over 90% of universities across the nation have retention programs in place in an attempt to reduce student attrition and increase graduation rates (Barefoot, 2002). These programs typically range from freshmen seminar courses to increased academic and financial advising for students. According to Tinto (1973) and Lenning, Sauer, and Beal (1980), more factors need to be altered in order to effectively increase student retention and therefore increase student graduation rates. Specifically, Lenning, Sauer, and Beal (1980) stated three factors were key contributors to attrition and retention: student characteristics (student demographics), environmental characteristics (college environment), and interaction (between students and institutions).

The interaction between students and their institution of enrollment was defined by Lenning, Sauer, and Beal as fit (1980). In this regard, the most important component to student retention was finding a good fit, or good connection between student and institution. Aspects contributing to this relationship were student-faculty interactions, personal connection to the institution, familiarity with what to expect in a college environment, and sense of belonging (Beal & Noel, 1980; Lenning, Sauer, & Beal, 1980; Rivlin, Frazer, & Stern, 1965; Ryle, 1971). Tinto’s revised theory from 1993 stated the four most important components for student retention were academic performance, faculty/staff interactions, extracurricular activities, and peer group interactions. All of these components can be found in a classroom setting and strongly influence student retention (Tinto, 1993).
In 1998, the Department of Agricultural Education at The University of Arizona started a course now known as The Heritage and Traditions of The University of Arizona (AED 295B). This course began as AED 297C due to its roots in the Agricultural Education department. After one year, the course was switched to UNVR 295A for two years in an attempt to welcome students from any department. Finally, the course switched back into the Agricultural Education department in 2009 and became known as AED 295B as it remains today (J. Knight, personal communication, December 10, 2013).

The main objective of the course was to connect students to the campus by way of teaching them about various traditions, history, and the heritage of the University (J. Knight, personal communication, December 10, 2013). This was accomplished through the five pillars of the course: University Administration (what resources are used to run a university), Campus Environment (the look and feel of the campus and its surroundings), Academics (professors from world renowned academic programs), Student Life (student government and student organizations), and Athletics (the most well-known sector of most universities) (Knight, 2014). Through personal contact via the course instructor as well as other important figures on campus (University President, other faculty members, athletics representatives) a well-rounded connection to The University of Arizona campus as a whole was the main purpose of the course.

The Heritage and Traditions course appeared to provide many of the aspects contributing to the student-institution relationship; a crucial component to Lenning, Sauer, and Beal’s theory of retention, also supported by the theories of Astin (1997), Bean & Eaton (2000), and Tinto (1993). Knowing if the course provided these components was valuable for the continuation of the course as well as helping the
instructor alter the learning experience and student-institution connection, if needed. The problem was the direct effects of the course’s ability to connect students to their institution and/or a faculty member (based upon student reports of connection) were unknown. In addition, the effect AED 295B had on graduation rates at The University of Arizona was unknown. This study sought to determine the connection to faculty members and the institution provided by AED 295B as well as compare the graduation rate of students from the course to the average University of Arizona graduation rate.

**Purpose and Objectives**

The purpose of the study was to explore the association between the faculty connection, institution connection, and engagement activities utilized and discussed in Agricultural Education 295B (AED 295B) and the graduation rates of former students from the course. In addition, the study sought to compare the graduation rates of AED 295B students to the average graduation rates of The University of Arizona. The following research objectives guided the study:

1. Describe the graduation rates of former AED 295B students.
2. Compare the graduation rates of AED 295B students and The University of Arizona average.
3. Describe the faculty connection provided by AED 295B.
4. Describe the relationship between faculty connection and the graduation rates of AED 295B students.
5. Describe the institution connection provided by AED 295B.
   a. Describe the institution connection before completion of AED 295B.
   b. Describe the institution connection after completion of AED 295B.
c. Describe the relationship between institution connection before and after completing AED 295B.

6. Describe the relationship between institution connection and the graduation rates of AED 295B students.

7. Describe the overall effectiveness of AED 295B.

8. Describe the engagement of students completing AED 295B.
   a. Describe the engagement of students before completion of AED 295B.
   b. Describe the engagement of students after completion of AED 295B.
   c. Describe the relationship between student engagement before and after completing AED 295B.

9. Describe the relationship between student engagement and the graduation rates of AED 295B students.

Significance of Study

As the study of student retention becomes vaster, researchers confirm the increased importance of the interaction between the student and his/her college institution. As the depth of this importance increases, so does the need for research as to its effectiveness. The University of Arizona offers a course geared toward the connection aspect of student retention models. This course began as a way to teach students about the vast features and roles of The University and grew to incorporate five pillars: University Administration (what resources are used to run a university), Campus Environment (the look and feel of the campus and its surroundings), Academics (professors from world renowned academic programs), Student Life (student government and student organizations), and Athletics (the most well-known sector of most universities).
These pillars fit within numerous theories on student retention including Lenning, Sauer, and Beal’s three-pronged approach of the student, institution, and the student-institution connection (1980); Tinto’s idea that academic performance, faculty/staff interactions, extracurricular activities, and peer group interactions were the four keys to student retention (1993); Astin’s theory that involvement and connection to campus lead to retention (1997); and Bean and Eaton who combine five social and behavioral theories to determine social integration and the interaction between a student and his/her institution were crucial components of student retention (2000). This study had roots in all four of these retention theories due to their strong connection with the pillars and the purpose of the AED 295B course. The goal of the study was to discover whether or not this course positively impacted its students by way of retention through graduation rates. This information was vital to determine the benefits and usefulness of the course and its future on The University of Arizona campus. It also served to find any deficiencies within the course and areas that need modification or embellishment. With this information, a better course could be created which in turn would lead to a higher graduation rate, the ultimate purpose of the study.

Definition of Terms

Fit

Lenning, Sauer, and Beal (1980) defined fit as the interaction between students and their institution of enrollment. Good fit was a positive interaction and was positively correlated with student retention.
Faculty Connection

The faculty connection provided by AED 295B was defined by student reports about their overall interactions with the course instructor (1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree), the approach frequency used by the instructor compared to other University of Arizona courses (1=Much Less Than Usual, 2=Less Than Usual, 3=About as Much as Usual, 4=More Than Usual, 5=Much More Than Usual), and the effectiveness of the rapport-building strategies used during the course (1=Very Ineffective, 2=Ineffective, 3=Neither Ineffective nor Effective, 4=Effective, 5=Very Effective).

Institution Connection

The institution connection provided by AED 295B was defined by the reported fit students experienced with The University of Arizona (1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree).

Student Retention

Student retention was defined by the Integrated Postsecondary Education Data System (IPEDS), the primary source of United States retention information, as “the percentage of […] students from the previous fall who either re-enrolled or successfully completed their program by the current fall.” In this regard, the opposite of retention was attrition or the student dropout rate.
Graduation Rate

For the purpose of this study, graduation rate was defined as students who were able to graduate from a college or university within 150% of the time allotted for their degree program, typically found to be six years (IPEDS, 2013). In this study, graduation rates were considered to be the measurement of student retention.

Limitations of the Study

The study was limited by retention records at The University of Arizona and across the nation. Universities and colleges have record of when students leave their institution, but have not always diligently recorded the reasoning behind student departure. Any student leaving an institution is factored into attrition. In some cases, a student can transfer to a different institution or “stop out,” meaning they only leave the institution for a given amount of time and potentially return. In both of these cases, a student could have completed a degree at a later time or at a different location, but they were still factored into student attrition because of their original departure from a college or university campus and vague attrition records. In this regard, The University of Arizona’s recorded graduation rate does not include students who stop out or transfer but do graduate at some point. These students negatively effect the retention rate of The University of Arizona because they appear to have not graduated.

The data contained within this study were not generalizable due to its specific connection to AED 295B and The University of Arizona traditions. This study did not seek to explore whether comparable intuitions evoked similar results.

The graduation rates of students from AED 295B were compared to the overall graduation rates of The University of Arizona. Students from AED 295B were also
factored into the overall University graduation rates, thus skewing the exact percentage as a comparison. In addition, students in AED 295B may not demographically represent The University of Arizona average.

In the 2009-2010 academic year, The University of Arizona changed its e-mail provider to a system that allowed students to keep their University e-mail address after graduation. Although students in the study were allowed to keep their e-mail address, they were not required to check it or forward it to an e-mail they check regularly.

Basic Assumptions

For the purpose of this study, it was assumed that graduation rates accurately resembled students who left a college or university and never completed a degree. Stop outs or transfer students were not separated from the available graduation rates of The University of Arizona. In addition, the faculty and institution connection reported by the subjects of the study were assumed to be factors in their retention. Furthermore, those who reported being a senior or fifth year senior when they completed AED 295B were not asked involvement or engagement questions as it was assumed they did not have enough time after the course to fully implement engagement strategies.
Chapter II: Review of Literature

**Purpose and Objectives**

The purpose of the study was to explore the association between the faculty connection, institution connection, and engagement activities utilized and discussed in Agricultural Education 295B (AED 295B) and the graduation rates of former students from the course. In addition, the study sought to compare the graduation rates of AED 295B students to the average graduation rates of The University of Arizona. The following research objectives guided the study:

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Theoretical Foundation

The first theoretical model of student retention was found through the work of Spady (1970). The model was based on Durkheim’s explanation of the social nature of suicide (1951). Durkheim stated a lack of integration into society or one’s surroundings was a significant factor in the breaking of social ties which eventually lead to suicide. Spady took this theory and related it to the collegiate institution stating “a lack of consistent, intimate interaction” was the cause of most students’ attrition (though this comparison was less finalized and attrition tends to ebb and flow) (1970, p. 15). Spady believed normative congruence, or student goals and interests as well as their interaction with the college environment, had great influence on student grade performance, intellectual development, and friendship support which ultimately guided students toward retention decisions (Spady, 1970).

In 1975, Tinto further adopted this principle believing the key to successful retention was three-pronged: separation, transition, and incorporation. If students were able to separate themselves from their culture or background to open the door to new surroundings and support systems in college, they would be able to effectively transition
to the college atmosphere and incorporate themselves within the institution (Tinto, 1975). Later, Tinto revised his theory to include a separation between social and academic integrations and stated:

Individual departure from institutions can be viewed as arising out of a longitudinal process of interactions between an individual [...] and other members of the academic and social systems of the institution. The individual’s experience in those systems, as indicated by his/her intellectual (academic) and social (personal) integration, continually modifies his or her intentions and commitments. Positive experiences—that is, integrative ones—reinforce persistence through their impact upon heightened intentions and commitments both to the goal of college completion and to the institution in which the person finds himself/herself. Negative or malintegrative experiences serve to weaken intentions and commitments, especially commitment to the institution, and thereby enhance the likelihood of leaving. (Tinto, 1993, p. 113)

This revision reincorporated the idea of integration as developed by Spady and commented on the continuously impressionable aspects of positive and negative experiences for students. As negative experiences outweigh the positive, it becomes increasingly more difficult for a student to stay on a particular campus. Tinto’s 1993 theory also postulated academic performance, faculty/staff interactions, extracurricular activities, and peer group interactions as the four most important components to student retention. Although Tinto’s study does not directly include the institution itself as a factor of retention, it was stated that student-faculty interactions were the face of the overall student-institution relationship.

Similarly, Lenning, Sauer, and Beal (1980) defined three major components to student retention in higher education: student characteristics, institutional characteristics, and the interaction between both. Lenning, Sauer, and Beal stated, “The college environment is now considered a major factor in the retention or attrition of students” (1980, p. 18). A subset of the institutional component of retention included student involvement which further included extracurricular activities and student-faculty
relationships, similar to Tinto (1993). Lenning, Sauer, and Beal incorporated this component partially due to previous findings from Pantages and Creedon (1978) and Cope (1978) who concluded student institutional satisfaction and retention were largely reliant upon positive relationships with professors. This was further emphasized through Lenning, Sauer, and Beal’s addition of the student-institution interaction as the most important aspect of student retention. In their theory, Lenning, Sauer, and Beal described this concept with the terms fit and lack of fit (1980). Fit was defined as the meaningful contact between a student and his or her faculty members in addition to the institution offering various opportunities for the student to be engaged. Lack of fit was the absence of such relationships and opportunities. The retention of students was most dependent upon fit between a student and the institution he/she attends.

The most current theory on student retention stems from research by Bean and Eaton (2000). They combined the self-efficacy theory, coping-behavior theory, attitude-behavior theory, organizational turnover theory, and social integration and alienation theory to create an overall model involving individual characteristics and background variables. Among these items, Bean and Eaton stated the importance of social integration (engagement activities) into college as well as how students interact with the institution as a whole (student-institution interaction) as factors in student retention.

Furthermore, Astin (1984) defined student retention as “The degree of direct involvement of students in the academic and social life of their institutions” (as cited in Voigt & Hundrieser, 2008). Later, he simplified all previously known components of student retention into the need for involvement and connection on campus (1997). Connection to campus was obtained through academic involvement, student-faculty
involvement, and peer involvement (Astin, 1997). Astin (1999b) also stated that interaction with faculty was the most important factor in student retention (Kuh, 2001; Lenning, Sauer, & Beal, 1980; Tinto, 1993; Wilmer, 2009). Kuh took these findings and reported on student-faculty interactions throughout the 1990s (2001). Kuh’s report stated student-faculty interactions were largely effective because they “motivate[d] students to devote more effort and energy toward educationally purposeful activities which result[s] in student retention” (Wilmer, 2009, p. 2). For the purpose of this study, the researcher focused on the student-faculty connection component of Astin’s theory (as the face of the student-institution connection) coupled with extracurricular involvement, specifically to find if AED 295B on The University of Arizona campus was enough to evoke the necessary connection (via faculty, institutional, and engagement means) needed to increase student retention through graduation rates.

Faculty Roles in Retention

Student retention requires faculty participation (Baldrige, Kemerer, & Green, 1982). The student-faculty interaction was considered the most influential component of involvement in regard to student satisfaction with the college experience (Astin, 1977, 1999b; Cope, 1978; Pantages & Creedon, 1978). Furthermore, Astin (1977) concluded that a positive interaction with faculty members led to increased satisfaction with all other components of a student’s institutional experience, establishing this relationship as the foundation to successful involvement techniques.

Spady (1971) mentioned that a meaningful student-faculty relationship was the key to a student’s academic integration which was one of Astin’s three components of student retention (1997). The most important factor of retention across institutional types
(four-year public and private institutions, two-year community colleges) was a caring attitude of faculty and staff (Beal & Noel, 1980; Voigt & Hundrieser, 2008). This caring attitude was also said to be the most potent retention force on a campus, especially when it was combined with positive face-to-face experiences between students and faculty members (Noel, Levitz, & Saluri, 1985).

Faculty members are challenged to make the educational system effective and relevant to help retain students (Flannery, J., Asbury, C., Clark, C., Eubanks, D., Kercheval, B., Lasak, J., . . . Sutton, C., 1973). Through personal approaches (Rowell, 1974) and caring attitudes, faculty members have the ability to encourage positive student-faculty interactions. Through frequent and quality interactions of this nature both inside and, especially, outside of the classroom, student retention rates increase (Terenzini & Pascarella, 1980).

Positive connections with faculty are crucial to student retention rates and are also more effective the earlier they are implemented (Rendon, 1995). As the quality and frequency of student-faculty interactions increase, retention rates increase (Astin, 1977; Astin, 1993; Tinto, 1987). In addition, decreased retention rates can be related to the absence of or limited opportunities for students to interact with their faculty (Panos & Astin, 1968).

**Institutional Roles in Retention**

In addition to beneficial student-faculty interactions, the institution was also responsible for creating student buy-in. Retention and attrition have already been established as the result of an interaction between an individual and an institution (Cope
Students were shown to stay at universities when they feel a sense of belonging (or fit) with their institution (Beal & Noel, 1980; Lenning, Sauer, & Beal, 1980; Cope & Hannah, 1975). In order to establish this student-institution fit, personal connection to the university must be ascertained (Nutt, 2003). Over 90% of today’s universities have established some sort of freshmen seminar class in an attempt to connect students to their campus from day one (Barefoot, 2002). These classes were designed to help reestablish students into university life to avoid creating failures or encouraging withdrawal (Ryle, 1971). Most students were found to lack the tools necessary to successfully transition into college or they do not know what to expect in a college environment, making them more likely to drop out (Rivlin, Frazer, & Stern, 1965). If properly designed, freshmen seminar classes have an opportunity to provide the necessary tools and connections to retain students.

This personal connection to campus has been studied for over 50 years. In 1959, Thistlethwaite found the college environment to be a crucial factor in determining student motivation to continue with their education. Schoonmaker completed a study of college dropouts in 1971 stating numerous students were “appalled by the impersonal atmosphere they found in college” as well as feeling ignored by their professors (p. 59). When studying reasons for student attrition, Robin and Johnson (1969) found a failure to adjust to impersonal atmospheres due to lack of communication between students and professors to be the underlying explanation. Furthermore, Hannah (1971) found dropouts were less personally integrated to an institution than retained students.
Another component to fit during college included the extracurricular opportunities available for students at their institution (Lenning, Sauer, & Beal, 1980). Tinto’s (1993) and Astin’s (1997) retention theories also stated the importance of extracurricular activities and their positive relationship with student retention. Extracurricular activities provided opportunities for students to engage with their peers and additional faculty members outside of a classroom setting and often in a less formal environment (Astin, 1997; Lenning, Sauer, & Beal, 1980; Tinto 1993). This setting also allowed students to explore hobbies or find new interests, but the institution needed to help lead students to these opportunities (Naug, Colson, & Donner, 2012; Purdie & Rosser, 2011).

The current study examines a course founded on the premise of connecting students to their campus. As opposed to a freshmen seminar that guides students through the resources of an institution, this course teaches students about the heritage and traditions of their institution in an attempt to establish a sense of pride, fit, and personal connection to their alma mater. This was accomplished through a personal connection with a faculty member as well as other members of the university community including the president, deans and additional faculty members, campus environment experts, and members of the athletics department. By connecting students to both faculty members and The University of Arizona institution as well as leading them to engagement opportunities, students were more likely to remain on campus through graduation.
Conceptual Framework

Model of Student Retention

Student Involvement

through

Positive Faculty Connections

Positive Institutional Connections

leads to

Student Retention

leads to

Increased Graduation Rates

Figure 1. Conceptual Framework. This figure depicts the conceptual framework of this study.
The conceptual framework in Figure 1 was designed after Astin’s student involvement theory (1997). Astin stated involvement and connection were the two underlying factors of student retention. Here, connection can be found through faculty and institutional means, two components of Lenning, Sauer, and Beal’s theory (1980). Overall, if students connect through both faculty and institutional means in a positive way, the connection leads to their retention and graduation.

Summary

Models of student retention have experienced many changes since the 1970s. Enrollment management was formerly known as the key to retention problems on college campuses whereas many current theories involve students and the whole institution as the underlying factors of student success (Astin, 1997; Bean & Eaton, 2000; Cope, 1978; Lenning, Sauer, & Beal, 1980; Pantages & Creedon, 1978; Tinto, 1975; Tinto, 1993). Regardless of its theoretical base, retention has been a concern for numerous years as only half of those who enter a four-year program graduate from that program within six years (Leifer & Huber, 1977; Tinto, 2012). As institutions across the nation work toward studying and increasing their retention rates, it was important to quantify and document their efforts to continue to move in a positive direction.
Chapter III: Procedures

Purpose and Objectives

The purpose of the study was to explore the association between the faculty connection, institution connection, and engagement activities utilized and discussed in Agricultural Education 295B (AED 295B) and the graduation rates of former students from the course. In addition, the study sought to compare the graduation rates of AED 295B students to the average graduation rates of The University of Arizona. The following research objectives guided the study:

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9. Describe the relationship between student engagement and the graduation rates of AED 295B students.

   Research Design

Descriptive-correlational research was determined to be the best method of research to utilize because this study sought to describe variables and determine the presence of any relationships between them in order to answer the objectives (Ary, Jacobs, Razavieh, & Sorensen, 2010). In addition, characteristic data were collected to better understand the population. The data for objective one were collected from The University of Arizona website. All other data were collected via an online survey method. A questionnaire was constructed to ask the subjects if/when they graduated from The University of Arizona or another institution as well as the connections to the institution and connections to faculty members they received from AED 295B. The questionnaire was loosely designed from The College Persistence Questionnaire (Davidson, Beck, & Milligan, 2009) (Appendix J). Appendix E includes a sample of the questionnaire utilized in this study.

   Population and Sample

The target population for this study consisted of students who had previously completed AED 295B at The University of Arizona. During the 2009-2010 academic
year, The University of Arizona switched its e-mail provider to Google Mail (Gmail) known on campus as CatMail. This switch allowed students to keep their e-mail addresses after graduation thus creating the accessible population for the study (Fall 2010 through Spring 2013). Within this range, AED 295B had 858 students, an average of 172 per semester, ranging from 149 in Fall 2011 to 230 in Spring 2013. Now, the class reaches over 300 students each semester. Eighteen of the 858 students were removed from the population; 4 were non-degree seeking students, 13 students withdrew from their semester, and 1 was the researcher. The final population used in the study consisted of the remaining 840 students.

AED 295B was open to students in any year of their coursework and reached a diverse set of students on campus including a variety of majors, career plans, and extracurricular involvement. Due to the size of the accessible population, a census was taken as the selected sample for the study.

The frame for this study was collected from past classroom rosters for AED 295B from the Fall 2010, Fall 2011, Spring 2012, Fall 2012, and Spring 2013 semesters. The course was not offered in the Spring 2011 semester. The University e-mail address associated with each student was used as the only mode of contact in this study.

Instrumentation

A researcher-developed online questionnaire was made on Qualtrics for use in this study. The questionnaire was loosely modeled after The College Persistence Questionnaire (Davidson, Beck, & Milligan, 2009) (Appendix J) and it began with an introduction explaining confidentiality, basic terms, and contact information of the researcher. The first question of the questionnaire asked each student’s class standing
when they took AED 295B. This information was then used to prohibit students who answered “Senior” or “Fifth Year Senior” from answering engagement questions. It was assumed they did not have a full year of opportunity to engage in the activities listed. The full instrument utilized in this study can be found in Appendix E.

Part one of the questionnaire was designed to determine the connection to a faculty member one received during AED 295B. This was achieved through questions from The College Persistence Questionnaire as well as comparing AED 295B to other college courses and finding the effectiveness of certain student-center approaches. This construct was separated into three subsets: faculty connection overview, faculty connection approach, and faculty connection through rapport. Five prompts similar to those found in The College Persistence Questionnaire were asked in the overview section. Due to spacing and software limitations, five-point Likert-type scales were used for all questions. The overview section utilized the following answer choices: 1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree.

The approach section compared the frequency of a connective approach in AED 295B to other University of Arizona courses students have experienced using two prompts. The five-point Likert-type scale used in this section provided the following answer choices: 1=Much Less Than Usual, 2=Less Than Usual, 3=About as Much as Usual, 4=More Than Usual, 5=Much More Than Usual.

The rapport section sought to determine the effectiveness of three faculty/student rapport strategies. The Likert-type scale in this section was as follows: 1=Very Ineffective, 2=Ineffective, 3=Neither Ineffective nor Effective, 4=Effective, 5=Very Effective.
Part two of the questionnaire was designed to determine the connection to the institution one received during AED 295B. This was accomplished through asking five before/after questions regarding institution connection. These questions included five-point Likert-type scales (1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree).

Part three included questions regarding overall course effectiveness as well as involvement and engagement of students. Questions regarding overall faculty and institution connection as well as course value were asked to determine course effectiveness. Students responded to these three prompts on a five-point Likert-type scale (1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree).

Those students who were not seniors or fifth year seniors during their enrollment in AED 295B were asked questions regarding engagement and involvement. One general involvement question was asked and utilized a five-point Likert-type scale (1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree). Engagement questions then asked students’ likeliness to participate in certain activities both before and after completing AED 295B.

Part Four consisted of characteristic questions including first academic semester at The University of Arizona, semester enrolled in AED 295B, semester graduated or semester of intended graduation, whether or not a student transferred from The University of Arizona, and sex. The content validity and face validity of the questionnaire was determined by a panel of experts in the field, which included four instructors and one student at The University of Arizona. Minor changes regarding layout and readability
were made based upon recommendations from the expert panel. The reliability of the questionnaire was determined using Cronbach’s alpha from the responses of a group of 48 students who took AED 295B during the Fall 2013 semester. The reliability of the faculty connection construct questions was 0.84. The institution connection construct questions as well as the engagement activities construct questions produced reliability factors of 0.85. No items were removed or edited after processing the reliability statistics.

*Data Collection*

To help maximize the response rate, Dillman’s suggestion of five points of contact was utilized (2000). The participants of the study were sent a pre-notice 24 hours before the first questionnaire link was sent and no emails failed or bounced back due to incorrect or nonexistent email addresses. Shinn, Baker, and Briers’ theory stated Tuesdays and Wednesdays offer the highest response rates (2007). Due to these findings, the initial questionnaire link was sent on a Wednesday with the first reminder sent 48 hours later on Friday. The following week, two reminders were sent, one on Tuesday (again to follow Shinn, Baker, and Briers’ theory) and one on Thursday. The questionnaire closed the following Sunday. The questionnaire was open from Wednesday, March 5, 2014 until Sunday, March 16, 2014. The email schedule of the questionnaire can be found in Table 1.
Table 1

Participation Contact Schedule

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tuesday, March 4, 2014</td>
<td>Pre-Notice</td>
</tr>
<tr>
<td>Wednesday, March 5, 2014</td>
<td>Initial Questionnaire Link</td>
</tr>
<tr>
<td>Friday, March 7, 2014</td>
<td>First Reminder</td>
</tr>
<tr>
<td>Tuesday, March 11, 2014</td>
<td>Second Reminder</td>
</tr>
<tr>
<td>Thursday, March 13, 2014</td>
<td>Third and Final Reminder</td>
</tr>
</tbody>
</table>

In a second attempt to limit non-respondents, a basketball signed by current Men’s Basketball Coach, Sean Miller, was offered as an incentive. The earlier students responded, the higher the chance they would receive this incentive based on the scale in Table 2. Student names were listed and duplicated in an Microsoft Office Excel Spreadsheet to resemble the entries each received. The RAND function in Excel was utilized to assign every name on the drawing list a random number between one and 1,531 (the number of names listed, including duplicates). The list was then organized numerically, smallest to largest, and a random number was selected via the True Random Number Generator available on www.random.org. The student associated with the random number generated was deemed winner of the drawing and was notified to receive the signed basketball.
Table 2
Entries to Incentive Drawing Based Upon Time of Questionnaire Response

<table>
<thead>
<tr>
<th>Day of Response</th>
<th>Number of Entries toward Incentive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days 1-2</td>
<td>5 entries</td>
</tr>
<tr>
<td>Days 3-5</td>
<td>3 entries</td>
</tr>
<tr>
<td>Days 6-7</td>
<td>2 entries</td>
</tr>
<tr>
<td>Days 8-12</td>
<td>1 entry</td>
</tr>
</tbody>
</table>

Of the 840 emails sent to the questionnaire panel, 488 emails were opened and 377 questionnaires were completed through Qualtrics, LLC. software. The recorded response rate for the study was 45%, or 377 responses out of 840. The response rate of the 488 students who opened the email was 77%. One explanation of this rate was students not forwarding or checking their University of Arizona CatMail accounts regularly. Due to the nature of the data and their uniqueness to the AED 295B course, non-response error was not controlled.

Data Analysis

Data were analyzed using the Statistical Package for the Social Sciences (SPSS), Version 22.0 for Windows. Frequencies were reported for respondents’ class standing at the time of enrollment in AED 295B, first semester of their University of Arizona academic career, graduation and transfer data, and sex. Prompts within the three constructs, faculty connection, institution connection, and engagement activities, were summated and averaged to calculate a summated mean score for each construct. In addition, means and standard deviations were computed for each of these constructs. To examine the differences between summated means of before and after data collected for
institution connection and engagement activities, Cohen’s $d$ coefficients and effect sizes were calculated through an online program from The University of Colorado at Colorado Springs. The magnitude of effect sizes due to differences found in summated means was described by Cohen (1988) as seen in Table 3.

Table 3

Cohen’s $d$ Descriptions

<table>
<thead>
<tr>
<th>Coefficient</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.20</td>
<td>Small difference</td>
</tr>
<tr>
<td>0.50</td>
<td>Medium difference</td>
</tr>
<tr>
<td>0.80</td>
<td>Large difference</td>
</tr>
</tbody>
</table>
Chapter IV: Results

Purpose and Objectives

The purpose of the study was to explore the association between the faculty connection, institution connection, and engagement activities utilized and discussed in Agricultural Education 295B (AED 295B) and the graduation rates of former students from the course. In addition, the study sought to compare the graduation rates of AED 295B students to the average graduation rates of The University of Arizona. The following research objectives guided the study:

1. Describe the graduation rates of former AED 295B students.
2. Compare the graduation rates of AED 295B students and The University of Arizona average.
3. Describe the faculty connection provided by AED 295B.
4. Describe the relationship between faculty connection and the graduation rates of AED 295B students.
5. Describe the institution connection provided by AED 295B.
   a. Describe the institution connection before completion of AED 295B.
   b. Describe the institution connection after completion of AED 295B.
   c. Describe the relationship between institution connection before and after completing AED 295B.
6. Describe the relationship between institution connection and the graduation rates of AED 295B students.
7. Describe the overall effectiveness of AED 295B.
8. Describe the engagement of students completing AED 295B.
   a. Describe the engagement of students before completion of AED 295B.
   b. Describe the engagement of students after completion of AED 295B.
   c. Describe the relationship between student engagement before and after completing AED 295B.

9. Describe the relationship between student engagement and the graduation rates of AED 295B students.

Among the 377 AED 295B students who responded to the study, 48 (12.7%) were freshmen, 147 (39.0%) were sophomores, 78 (20.7%) were juniors, 91 (24.1%) were seniors, 9 (2.4%) were fifth year seniors, and 4 (1.1%) were other when they were enrolled in AED 295B. In addition, the respondents (n = 342) reported starting their academic careers at The University of Arizona at varying times: 9 (2.6%) in Fall 2007, 33 (9.6%) in Fall 2008, 3 (0.9%) in Spring 2009, 86 (25.1%) in Fall 2009, 3 (0.9%) in Spring 2010, 83 (24.3%) in Fall 2010, 2 (0.6%) in Spring 2011, 86 (25.1%) in Fall 2011, 7 (8.5%) in Spring 2012, 29 (8.5%) in Fall 2012, and 1 (0.3%) Other. Four (1.9%) of 215 students who had not yet graduated from The University of Arizona reported having transferred to a different university. Among 342 student responses, 168 (49.1%) were female and 174 (50.9%) were male.

**Objective One**

The purpose of Objective One was to describe the graduation rate of previous AED 295B students. The Integrated Postsecondary Education Data System (IPEDS) defines graduation rate as the successful completion of a degree program within 150% of
the time allotted for said program (2013). For the purpose of this study, it was assumed the allotted time for program completion for all programs was four years, thus graduation rate was calculated within a six year time frame. Of the data collected, only those students who started their educational careers in the Fall 2007 semester had six years to complete their degrees. Of the nine students who started in the Fall 2007 semester, seven of them had graduated, one plans to graduate during the Spring 2014 semester, and one did not respond to the graduation question. These data showed a six-year graduation rate of 87.5% (Table 4).

The University of Arizona also collected four-year (100% allotted time) graduation rate data. This category looked at students who began their academic careers in the Fall 2009 semester. Of the 86 students who began that semester, 62 had graduated, 17 had not yet graduated, and seven did not respond. These data showed a four-year graduation rate of 78.5% (Table 4).
### Table 4

**Graduation Rates of AED 295B Students (n = 331)**

<table>
<thead>
<tr>
<th>Semester academic career began</th>
<th>Graduated from The University of Arizona</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>( f )</td>
</tr>
<tr>
<td>Fall 2007</td>
<td>7</td>
</tr>
<tr>
<td>Spring 2008</td>
<td>0</td>
</tr>
<tr>
<td>Fall 2008</td>
<td>30</td>
</tr>
<tr>
<td>Spring 2009</td>
<td>3</td>
</tr>
<tr>
<td>Fall 2009</td>
<td>62</td>
</tr>
<tr>
<td>Spring 2010</td>
<td>2</td>
</tr>
<tr>
<td>Fall 2010</td>
<td>5</td>
</tr>
<tr>
<td>Spring 2011</td>
<td>0</td>
</tr>
<tr>
<td>Fall 2011</td>
<td>3</td>
</tr>
<tr>
<td>Spring 2012</td>
<td>1</td>
</tr>
<tr>
<td>Fall 2012</td>
<td>0</td>
</tr>
</tbody>
</table>

*Table 4 continued*
Table 4 continued

<table>
<thead>
<tr>
<th>Semester academic career began Item</th>
<th>Graduated Rate</th>
<th></th>
<th>Graduated from The University of Arizona</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Yes</td>
<td></td>
<td>No</td>
<td>Total</td>
</tr>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td></td>
<td>f</td>
<td>%</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>100.0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>114</td>
<td>34.4</td>
<td>217</td>
<td>65.6</td>
<td>331</td>
</tr>
</tbody>
</table>

*Total not yielding 377 due to missing data.
**Objective Two**

Objective Two compared the graduation rates of AED 295B students to the average University of Arizona graduation rates. Previous AED 295B students had a four-year graduation rate of 78.5% and a six-year graduation rate of 87.5%. The University of Arizona records from 2011 (the most recent of those available) showed a six-year graduation rate of 61.4% and a four-year graduation rate of 39.9%. According to the data collected in this study, AED 295B students were 1.5 times as likely (146% higher likeliness) of graduating within six-years than their average University of Arizona student counterpart. In addition, AED 295B students were almost twice as likely as the average University of Arizona student to graduate within four years (197% higher likeliness).

**Objective Three**

The third objective sought to describe the faculty connection provided by AED 295B. This construct was broken down into three subsections: overview, approach, and rapport. The overview subsection asked students to rate their agreeability based upon five prompts (*I had positive interactions with the instructor; I was able to contact the instructor when needed; I was satisfied with the quality of instruction from this course; The instructor was concerned with my success in the course; I was interested in the course topics because of the instructor*). All five prompts had “Strongly Agree” as the modal category (ranging from 224 to 319 responses) followed by “Agree” (ranging from 28 to 101 responses). The summated mean for this subsection was 4.66 with a standard deviation of 0.64, therefore students “Strongly Agreed” with the items relating to their faculty connection overview (Table 5).
<table>
<thead>
<tr>
<th>Faculty Connection Overview Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean$^a$</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had positive interactions with the instructor.</td>
<td>7</td>
<td>0</td>
<td>4</td>
<td>28</td>
<td>319</td>
<td>4.82</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was able to contact the instructor when needed.</td>
<td>7</td>
<td>0</td>
<td>6</td>
<td>55</td>
<td>289</td>
<td>4.73</td>
<td>0.68</td>
</tr>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was satisfied with the quality of instruction from this course.</td>
<td>7</td>
<td>1</td>
<td>5</td>
<td>68</td>
<td>277</td>
<td>4.70</td>
<td>0.70</td>
</tr>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The instructor was concerned with my success in the course.</td>
<td>14</td>
<td>3.9</td>
<td>7</td>
<td>12</td>
<td>50</td>
<td>4.58</td>
<td>0.95</td>
</tr>
<tr>
<td></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Table 5 continued**

<table>
<thead>
<tr>
<th>Faculty Connection Overview Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean$^a$</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$f$</td>
<td>%</td>
<td>$f$</td>
<td>%</td>
<td>$f$</td>
<td>%</td>
<td>$f$</td>
</tr>
<tr>
<td>I was interested in the course topics because of the instructor.</td>
<td>7</td>
<td>1.9</td>
<td>4</td>
<td>1.1</td>
<td>23</td>
<td>6.4</td>
<td>101</td>
</tr>
<tr>
<td>Summated Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

$^*$Total not yielding 377 due to missing data.

$^a$Based upon: 1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree
The faculty approach subsection asked students to compare the frequency of the connective faculty approach in AED 295B to other University of Arizona courses they had experienced. Two prompts were used in this section (The instructor used a personal approach; The instructor was caring toward me). Both prompts had a modal category of “Much More Than Usual,” each with 244 responses. “More Than Usual” followed the modal category ranging from 84 to 90 responses. The summated mean for this subsection was 4.61 with a standard deviation of 0.60 (Table 6). In this regard, students experienced a faculty connection in AED 295B “Much More Than Usual” when compared to their other University of Arizona courses.
Table 6

*Frequency of Faculty Connection Compared to Other Course Experiences (n = 354)*

<table>
<thead>
<tr>
<th>Faculty Connection Approach Item</th>
<th>Much Less Than Usual (f)</th>
<th>%</th>
<th>Less Than Usual (f)</th>
<th>%</th>
<th>About as Much as Usual (f)</th>
<th>%</th>
<th>More Than Usual (f)</th>
<th>%</th>
<th>Much More Than Usual (f)</th>
<th>%</th>
<th>Mean $^a$</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The instructor used a personal approach.</td>
<td>2</td>
<td>0.6</td>
<td>1</td>
<td>0.3</td>
<td>18</td>
<td>5.1</td>
<td>90</td>
<td>25.4</td>
<td>244</td>
<td>68.7</td>
<td>4.61</td>
<td>0.65</td>
</tr>
<tr>
<td>The instructor was caring toward me.</td>
<td>1</td>
<td>0.3</td>
<td>1</td>
<td>0.3</td>
<td>24</td>
<td>6.8</td>
<td>84</td>
<td>23.7</td>
<td>244</td>
<td>68.9</td>
<td>4.61</td>
<td>0.65</td>
</tr>
<tr>
<td>Summated Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.61</td>
<td>0.60</td>
</tr>
</tbody>
</table>

*Total not yielding 377 due to missing data.
$^a$Based upon: 1=Much Less Than Usual, 2=Less Than Usual, 3=About as Much as Usual, 4=More Than Usual, 5=Much More Than Usual
The faculty rapport subsection asked students to rate the effectiveness of specific rapport methods used in AED 295B. Three prompts were used in this subsection (*The instructor greeting me before each class; The instructor knowing my name; The instructor requiring a personal interview component*). The modal category for this section was “Very Effective” (ranging from 291 to 308 responses) followed by “Effective” (ranging from 35 to 49 responses). The summated mean for this subsection was 4.80 with a standard deviation of 0.43 (Table 7). The reported summated mean shows that students believed the faculty rapport efforts of AED 295B to be “Very Effective.”

Overall, students showed a high connection to faculty based upon their responses to the overview, approach, and rapport subsections of this construct (Tables 5-7).
<table>
<thead>
<tr>
<th>Item</th>
<th>Very Ineffective</th>
<th>Ineffective</th>
<th>Neither Ineffective nor Effective</th>
<th>Effective</th>
<th>Very Effective</th>
<th>Mean&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The instructor greeting me before each class.</td>
<td>1 0.3</td>
<td>0 0.0</td>
<td>6 1.7</td>
<td>45 12.6</td>
<td>306 85.5</td>
<td>4.83</td>
<td>0.46</td>
</tr>
<tr>
<td>The instructor knowing my name.</td>
<td>1 0.3</td>
<td>2 0.6</td>
<td>10 2.8</td>
<td>35 9.8</td>
<td>308 86.5</td>
<td>4.82</td>
<td>0.52</td>
</tr>
<tr>
<td>The instructor requiring a personal interview component.</td>
<td>1 0.3</td>
<td>0 0.0</td>
<td>16 4.5</td>
<td>49 13.7</td>
<td>291 81.5</td>
<td>4.76</td>
<td>0.55</td>
</tr>
<tr>
<td>Summated Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.80</td>
<td>0.43</td>
</tr>
</tbody>
</table>

*Total not yielding 377 due to missing data.

<sup>a</sup>Based upon: 1=Very Ineffective, 2=Ineffective, 3=Neither Ineffective nor Effective, 4=Effective, 5=Very Effective
Objective Four

The purpose of Objective Four was to describe the relationship between the faculty connection received through completing AED 295B and the graduation rates of AED 295B students. Only nine students, of those who responded, began their academic careers in the Fall 2007 semester which makes Spring 2013, the last completed semester on The University of Arizona campus, the official six-year mark (150% time allotted) for degree completion. Of these nine students, only eight completed the faculty connection portion of the questionnaire. Seven of these eight had graduated and one plans to graduate after the Spring 2014 semester. Because only one person’s datum was available for faculty connection of students who had not graduated, students who began their academic careers in Fall 2009 were also utilized. These students’ data represent four-year (100% time allotted) graduation rates.

The faculty connection construct was split into three sections based upon the wording of answer choices (agreeability, comparison, and effectiveness which correspond with overview, approach, and rapport, respectively). The seven graduates who began their academic careers in Fall 2007 reported the highest level of agreeability ("Strongly Agree") to the overview of faculty connection as seen by a summated mean of 4.57. The one non-graduate from the same year had a summated mean of 5.00, the highest level of agreeability. The students who began their academic careers in Fall 2009 showed different results. Sixty graduates from that year responded with the highest level of agreeability ("Strongly Agree") through a summated mean of 4.75. Seventeen non-graduates from this year responded with a summed mean of 4.34 and therefore “Agreed” with being connected to faculty through AED 295B.
The faculty approach subset of the faculty connection construct displayed similar results. The same seven graduates who began their careers in Fall 2007 reported faculty connection via personal approach and care was used “More Than Usual” with a summated mean of 4.36. The one non-graduate in this category reported the highest level of personal approach and care used (“Much More Than Usual”) with a score of 5.00.

Sixty one students who graduated and began their academic careers in Fall 2009 reported they experienced faculty connection via personal approach and care “Much More Than Usual” when compared to other University of Arizona courses as seen by a summated mean of 4.73. Seventeen students who began the same year but had not graduated reported they experienced this subset of faculty connection “More Than Usual” with a summated mean of 4.29.

The third subset was faculty connection through faculty rapport with students which was measured by the effectiveness of three rapport methods. Although slight changes were present among the summated means, each group of students reported the faculty rapport methods as “Very Effective.” The seven students who began their academic careers in Fall 2007 and graduated had a summated mean of 4.48 whereas the one student in this group who had not graduated reported a mean of 5.00. Sixty two graduates who began their academic careers in Fall 2009 had a summated mean of 4.86 whereas their non-graduate counterparts had a summated mean of 4.74.

**Objective Five**

The fifth objective sought to describe the institution connection provided by AED 295B. The institution connection provided before completion of AED 295B was described for the first subset of this objective. Students rated their agreeability to five
statements related to institution connection (I had considered stopping my education at the UA; I was confident that the UA was the right university for me; I felt loyal to the UA based upon my college experiences; I felt connected to other students on the UA campus; and I felt connected to faculty on the UA campus). The prompt, I had considered stopping my education at the UA (e.g. transferring, going to work, leaving for other reasons), was reverse coded due to a response of “Strongly Disagree” correlating with positive institution connection. For this prompt, “Strongly Disagree” was the modal category with 204 responses followed by “Disagree” with 66 responses.

The remaining four prompts were not reverse coded. Three of these four, I was confident that the UA was the right university for me, I felt loyal to the UA based upon my college experiences, and I felt connected to other students on the UA campus, all had “Agree” as the modal category (ranging from 153 to 167 students) followed by “Strongly Agree” (ranging from 88 to 129 responses). The prompt I felt connected to faculty on the UA campus resulted in “Neither Disagree nor Agree” as the modal category with 135 responses with “Agree” following at 106 responses. The summated mean for this set of prompts was 3.92 with a standard deviation of 0.51. Therefore, students collectively “Agreed” to being connected to the institution before completing AED 295B (Table 8).
<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean$^a$</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I had considered stopping my education at the UA (e.g. transferring, going to work, leaving for other reasons).¶</td>
<td>204  59.0</td>
<td>66  19.1</td>
<td>27  7.8</td>
<td>39  11.3</td>
<td>10  2.9</td>
<td>4.20</td>
<td>1.16</td>
</tr>
<tr>
<td>I was confident that the UA was the right university for me.</td>
<td>4    1.2</td>
<td>4    1.2</td>
<td>40  11.6</td>
<td>167  48.5</td>
<td>129  37.5</td>
<td>4.20</td>
<td>0.78</td>
</tr>
<tr>
<td>I felt loyal to the UA based upon my college experiences.</td>
<td>3    0.9</td>
<td>12    3.5</td>
<td>60  17.4</td>
<td>153  44.5</td>
<td>116  33.7</td>
<td>4.07</td>
<td>0.85</td>
</tr>
<tr>
<td>I felt connected to other students on the UA campus.</td>
<td>5    1.5</td>
<td>26    7.6</td>
<td>64  18.6</td>
<td>161  46.8</td>
<td>88  25.6</td>
<td>3.88</td>
<td>0.93</td>
</tr>
</tbody>
</table>

Table 8 continued
Table 8 continued

<table>
<thead>
<tr>
<th>Institution Connection Before Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean*</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt connected to faculty on the UA campus.</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Summated Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Total not yielding 377 due to missing data.

*Based upon: 1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree

§Reverse coded.
The second subset of this objective sought to describe institution connection after completion of AED 295B. The five prompts regarding institution connection before completing AED 295B were used and coded the same way. Three of the prompts, *I was confident that the UA was the right university for me; I felt loyal to the UA based upon my college experiences; and I felt connected to other students on the UA campus*, all had “Strongly Agree” as the modal category (ranging from 164 to 266 students) followed by “Agree” (ranging from 52 to 133 responses). The prompt *I had considered stopping my education at the UA (e.g. transferring, going to work, leaving for other reasons)*, had a modal category of “Strongly Disagree” with 251 responses and then “Disagree” with 36 responses (a positive sign of institution connection). Lastly, *I felt connected to faculty on the UA campus* had “Agree” as the modal category with 149 responses and “Strongly Agree” followed with 142 responses. The overall mean for this set of prompts was 4.53 with a standard deviation of 0.46. This resulted in students stating they “Strongly Agreed” to being connected to the institution after completing AED 295B (Table 9).
Table 9

*Institution Connection After Completion of AED 295B  \( (n = 330)*\)

<table>
<thead>
<tr>
<th>Institution Connection After</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean*</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>( f )</td>
<td>%</td>
<td>( f )</td>
<td>%</td>
<td>( f )</td>
<td>%</td>
<td>( f )</td>
</tr>
<tr>
<td>I was confident that the UA was the right university for me.</td>
<td>2</td>
<td>0.6</td>
<td>0</td>
<td>0.0</td>
<td>11</td>
<td>3.3</td>
<td>52</td>
</tr>
<tr>
<td>I felt loyal to the UA based upon my college experiences.</td>
<td>2</td>
<td>0.6</td>
<td>1</td>
<td>0.3</td>
<td>9</td>
<td>2.7</td>
<td>60</td>
</tr>
<tr>
<td>I had considered stopping my education at the UA (e.g. transferring, going to work, leaving for other reasons).</td>
<td>251</td>
<td>76.1</td>
<td>36</td>
<td>10.9</td>
<td>21</td>
<td>6.4</td>
<td>9</td>
</tr>
<tr>
<td>I felt connected to other students on the UA campus.</td>
<td>1</td>
<td>0.3</td>
<td>9</td>
<td>2.7</td>
<td>24</td>
<td>7.3</td>
<td>133</td>
</tr>
</tbody>
</table>

Table 9 continued
Table 9 continued

<table>
<thead>
<tr>
<th>Institution Connection After Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt connected to faculty on the UA campus.</td>
<td>1 0.3</td>
<td>4 1.2</td>
<td>35 10.6</td>
<td>149 45.0</td>
<td>142 42.9</td>
<td>4.29</td>
<td>0.73</td>
</tr>
<tr>
<td>Summated Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4.53</td>
<td>0.46</td>
</tr>
</tbody>
</table>

*Total not yielding 377 due to missing data.

<sup>a</sup>Based upon: 1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree

<sup>§</sup>Reverse coded.
The purpose of the final subset of this objective was to compare the first two subsets. Students agreed to being connected to the institution before completing AED 295B and strongly agreed to post-completion connection. The overall difference between means was reported with a Cohen’s $d$ of 1.26 and an effect size of 0.53, or a medium difference (Table 10). Each prompt increased in agreeability showing a deeper institution connection upon completion of AED 295B. The total range in terms of Cohen’s $d$ was from 0.29 (effect size = 0.15, small difference) to 1.21 (effect size = 0.52, medium difference). Overall, students became more connected to the institution as a result of completing AED 295B.
Table 10

*Difference Between Institution Connection Data Before and After AED 295B*

<table>
<thead>
<tr>
<th>Institution Connection Item</th>
<th>Mean* (Before)</th>
<th>Mean* (After)</th>
<th>Cohen’s d</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>I felt connected to faculty on the UA campus.</td>
<td>3.26</td>
<td>4.29</td>
<td>1.21</td>
<td>0.52</td>
</tr>
<tr>
<td>I felt loyal to the UA based upon my college experiences.</td>
<td>4.07</td>
<td>4.73</td>
<td>0.90</td>
<td>0.41</td>
</tr>
<tr>
<td>I was confident that the UA was the right university for me.</td>
<td>4.20</td>
<td>4.75</td>
<td>0.81</td>
<td>0.37</td>
</tr>
<tr>
<td>I felt connected to other students on the UA campus.</td>
<td>3.88</td>
<td>4.36</td>
<td>0.57</td>
<td>0.27</td>
</tr>
<tr>
<td>I had considered stopping my education at the UA (e.g., transferring, going to work, leaving for other reasons).</td>
<td>4.20</td>
<td>4.52</td>
<td>0.29</td>
<td>0.15</td>
</tr>
<tr>
<td><strong>Summated Value</strong></td>
<td><strong>3.92</strong></td>
<td><strong>4.53</strong></td>
<td><strong>1.26</strong></td>
<td><strong>0.53</strong></td>
</tr>
</tbody>
</table>

*Based upon: 1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree*

§Reverse coded.
**Objective Six**

Objective Six sought to describe the relationship between the institution connection provided by AED 295B and the graduation rates of AED 295B students. Graduation rates were calculated by looking at students who had six years (150% allotted time) to complete their degree program. For this study, this demographic was found with students who began their degree programs in the Fall 2007 semester. Due to the small number of respondents who began their academic careers in Fall 2007, data from students under the four-year graduation rate (100% allotted time) who began their degree programs in the Fall 2009 semester were also utilized.

To compare these data with institution connection, the summated mean (per student) for the five questions of institution connection after completing AED 295B was used. Nine students who completed the questionnaire began their academic careers in Fall 2007. Seven of these students had graduated and reported the highest level of agreeability ("Strongly Agree") for the institution connection construct as shown by a summated mean of 4.57. One student plans to graduate during the Spring 2014 semester and reported he/she "Agreed" to receiving an institution connection through completing AED 295B as shown by a summated mean of 4.20. The remaining student did not complete the institution connection portion of the questionnaire.

Eighty-six students began their academic careers in Fall 2009 and showed similar results. Sixty of these students had already graduated and reported the highest level of agreeability ("Strongly Agree") for the institution connection construct as shown by a summated mean of 4.62. Seventeen students also "Strongly Agreed" with the institution
connection construct as seen by a slightly smaller summated mean of 4.59. Nine students did not complete this portion of the questionnaire.

Objective Seven

Objective Seven sought to describe the overall effectiveness of AED 295B. Students were also asked about the overall effectiveness of AED 295B based upon three prompts (*The knowledge I learned in the course was valuable; The course was effective in connecting me to UA faculty; The course was effective in connecting me to the UA campus*). A Likert-type scale was used (1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree) and the modal category for each prompt was “Strongly Agree” with a range of 155 to 244 responses. The summated mean for this question was 3.98 (SD = 1.07) suggesting students “Agreed” with the overall effectiveness of AED 295B (Table 11).
Table 11

*Overall Effectiveness of AED 295B (n = 345)*

<table>
<thead>
<tr>
<th>Item</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The knowledge I learned in the course was valuable.</td>
<td>2 0.6</td>
<td>4 1.2</td>
<td>10 2.9</td>
<td>85 24.6</td>
<td>244 70.7</td>
<td>4.19</td>
<td>1.31</td>
</tr>
<tr>
<td>The course was effective in connecting me to the UA campus.</td>
<td>2 0.6</td>
<td>0 0.0</td>
<td>9 2.6</td>
<td>93 27.0</td>
<td>241 69.9</td>
<td>4.14</td>
<td>1.35</td>
</tr>
<tr>
<td>The course was effective in connecting me to UA faculty.</td>
<td>1 0.3</td>
<td>5 1.4</td>
<td>42 12.2</td>
<td>142 41.2</td>
<td>155 44.9</td>
<td>3.60</td>
<td>1.41</td>
</tr>
<tr>
<td>Summated Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>3.98</td>
<td>1.07</td>
</tr>
</tbody>
</table>

<sup>*Total not yielding 377 due to missing data.</sup>

<sup>a</sup>Based upon: 1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree
The purpose of Objective Eight was to describe the engagement of students completing AED 295B. This section of the questionnaire was only made available to students who were not seniors or fifth year seniors when they were enrolled in AED 295B. Students were first asked if AED 295B inspired or encouraged them to get more involved on campus (1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree) (Table 12). The modal response was “Agree” with 110 responses followed by “Strongly Agree” with 99 responses (SD = 1.01).
Table 12

Involvement of AED 295B Students (n = 253)*

<table>
<thead>
<tr>
<th>Involvement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
<th>Mean(^a)</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>(f)  (%)</td>
<td>(f)  (%)</td>
<td>(f)  (%)</td>
<td>(f)  (%)</td>
<td>(f)  (%)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AED 295B inspired or encouraged me to get more involved on campus.</td>
<td>2 0.8</td>
<td>7 2.8</td>
<td>35 13.8</td>
<td>110 43.5</td>
<td>99 39.1</td>
<td>3.96</td>
<td>1.01</td>
</tr>
</tbody>
</table>

*Total out of 277 respondents as mentioned in Instrument section. Total not yielding 277 due to missing data.

\(^a\)Based upon: 1=Strongly Disagree, 2=Disagree, 3=Neither Disagree nor Agree, 4=Agree, 5=Strongly Agree
Students were then given sixteen activities [Visit the Biosphere 2; Notice the campus landscape; Attend a football or basketball game; Attend an additional sporting event (other than football or basketball); Attend Homecoming events; Buy a ZonaZoo pass; Meet with a professor during office hours; Join a fraternity or sorority (social or professional); Join a club on campus; Take an elective course that I found interesting; Participate in intramural sports; Go to Spring Fling; Take a tour or visit UA facilities (McKale, Alumni Offices, Mirror Lab, Dendrochronology, etc.); Attend an academic seminar; Take an astronomy course; and Remain a proud and loyal Wildcat] and asked to rate their likeliness of participating in them both before and after completing AED 295B.

The first subset of this objective looked at student likeliness to participate in engagement activities before completing AED 295B. Four activities, Remain a proud and loyal Wildcat; Attend a football or basketball game; Buy a ZonaZoo pass; and Join a fraternity or sorority (social or professional), all had “Very Likely” as the modal category (ranging from 87 to 140 responses). Activities with “Likely” as the modal category included, Take an elective course that I found interesting; Attend an additional sporting event (other than football or basketball); Attend Homecoming events; and Meet with a professor during office hours, ranging from 73 to 108 responses. The next modal category, “Neither Unlikely nor Likely” included the following activities: Join a club on campus; Go to Spring Fling; Participate in intramural sports; Notice the campus landscape; Take a tour or visit UA facilities (McKale, Alumni Offices, Mirror Lab, Dendrochronology, etc.); Take an astronomy course; Attend an academic seminar; and Visit the Biosphere 2. The range for this modal category was 71 to 92 responses. The
summated mean for this data set was 3.37 with a standard deviation of 0.61, therefore students were “Neither Unlikely nor Likely” to participate in said engagement activities before completing AED 295B (Table 13).
Table 13

*Likelihood to Participate in Engagement Activities Before Completion of AED 295B (n = 246)*

<table>
<thead>
<tr>
<th>Engagement Activities Before</th>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neither Unlikely nor Likely</th>
<th>Likely</th>
<th>Very Likely</th>
<th>Mean$^a$</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Remain a proud and loyal Wildcat</td>
<td>2</td>
<td>0.8</td>
<td>7</td>
<td>2.8</td>
<td>19</td>
<td>7.7</td>
<td>83</td>
</tr>
<tr>
<td>Attend a football or basketball game</td>
<td>3</td>
<td>1.2</td>
<td>6</td>
<td>2.4</td>
<td>22</td>
<td>8.9</td>
<td>77</td>
</tr>
<tr>
<td>Buy a ZonaZoo pass</td>
<td>7</td>
<td>2.8</td>
<td>21</td>
<td>8.4</td>
<td>29</td>
<td>11.6</td>
<td>69</td>
</tr>
<tr>
<td>Take an elective course that I found interesting</td>
<td>5</td>
<td>2.0</td>
<td>25</td>
<td>10.0</td>
<td>59</td>
<td>23.7</td>
<td>108</td>
</tr>
<tr>
<td>Attend an additional sporting event (other than football or basketball)</td>
<td>7</td>
<td>2.8</td>
<td>46</td>
<td>18.5</td>
<td>60</td>
<td>24.2</td>
<td>73</td>
</tr>
<tr>
<td>Attend Homecoming events</td>
<td>16</td>
<td>6.5</td>
<td>40</td>
<td>16.1</td>
<td>59</td>
<td>23.8</td>
<td>77</td>
</tr>
</tbody>
</table>

Table 13 continued
Table 13 continued

<table>
<thead>
<tr>
<th>Engagement Activities Before</th>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neither Unlikely nor Likely</th>
<th>Likely</th>
<th>Very Likely</th>
<th>Mean$^a$</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>$f$</td>
<td>$%$</td>
<td>$f$</td>
<td>$%$</td>
<td>$f$</td>
<td>$%$</td>
<td>$f$</td>
</tr>
<tr>
<td>Join a club on campus</td>
<td>13</td>
<td>5.2</td>
<td>39</td>
<td>15.7</td>
<td>76</td>
<td>30.6</td>
<td>69</td>
</tr>
<tr>
<td>Meet with a professor during office hours</td>
<td>9</td>
<td>3.6</td>
<td>48</td>
<td>19.4</td>
<td>76</td>
<td>30.6</td>
<td>84</td>
</tr>
<tr>
<td>Go to Spring Fling</td>
<td>16</td>
<td>6.4</td>
<td>45</td>
<td>18.1</td>
<td>78</td>
<td>31.3</td>
<td>66</td>
</tr>
<tr>
<td>Join a fraternity or sorority (social or professional)</td>
<td>59</td>
<td>23.7</td>
<td>33</td>
<td>13.3</td>
<td>44</td>
<td>17.7</td>
<td>26</td>
</tr>
<tr>
<td>Participate in intramural sports</td>
<td>33</td>
<td>13.4</td>
<td>42</td>
<td>17.0</td>
<td>78</td>
<td>31.6</td>
<td>56</td>
</tr>
<tr>
<td>Notice the campus landscape</td>
<td>22</td>
<td>8.8</td>
<td>58</td>
<td>23.3</td>
<td>81</td>
<td>32.5</td>
<td>74</td>
</tr>
</tbody>
</table>

Table 13 continued
Table 13 continued

<table>
<thead>
<tr>
<th>Engagement Activities Before</th>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neither Unlikely nor Likely</th>
<th>Likely</th>
<th>Very Likely</th>
<th>Mean&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Take a tour or visit UA facilities (McKale, Alumni Offices, Mirror Lab, Dendrochronology, etc.)</td>
<td>25</td>
<td>10.1</td>
<td>58</td>
<td>23.4</td>
<td>85</td>
<td>34.3</td>
<td>57</td>
</tr>
<tr>
<td>Take an astronomy course</td>
<td>36</td>
<td>14.6</td>
<td>76</td>
<td>30.9</td>
<td>78</td>
<td>31.7</td>
<td>38</td>
</tr>
<tr>
<td>Attend an academic seminar</td>
<td>34</td>
<td>13.7</td>
<td>73</td>
<td>29.4</td>
<td>92</td>
<td>37.1</td>
<td>40</td>
</tr>
<tr>
<td>Visit the Biosphere 2</td>
<td>60</td>
<td>24.1</td>
<td>69</td>
<td>27.7</td>
<td>71</td>
<td>28.5</td>
<td>38</td>
</tr>
<tr>
<td>Summated Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Total out of 277 respondents as mentioned in Instrument section. Total not yielding 277 due to missing data.
<sup>a</sup>Based upon: 1=Very Unlikely, 2=Unlikely, 3=Neither Unlikely nor Likely, 4=Likely, 5=Very Unlikely
The second subset to this objective discovered the likeliness of participation in engagement activities after completion of AED 295B. Activities with a modal category of “Very Likely” included *Remain a proud and loyal Wildcat; Attend a football or basketball game; Notice the campus landscape; Take an elective course that I found interesting; Buy a ZonaZoo pass; Attend an additional sporting event (other than football or basketball); Attend Homecoming events; Meet with a professor during office hours; Take a tour or visit UA facilities (McKale, Alumni Offices, Mirror Lab, Dendrochronology, etc.); Join a club on campus; Go to Spring Fling; Participate in intramural sports; and Join a fraternity or sorority (social or professional)*. The responses for these activities ranged from 80 to 230. The remaining activities, *Visit the Biosphere 2; Attend an academic seminar; and Take an astronomy course*, all had a modal category of “Likely” ranging from 68 to 97 responses. The summated mean for this data set was 4.20 with a standard deviation of 0.50 resulting in students being “Likely” to participate in engagement activities after the completion of AED 295B (Table 14).
### Table 14

*Likeliness to Participate in Engagement Activities After Completion of AED 295B (n = 242)*

<table>
<thead>
<tr>
<th>Engagement Activities After</th>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neither Unlikely nor Likely</th>
<th>Likely</th>
<th>Very Likely</th>
<th>Mean*</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Remain a proud and loyal Wildcat</td>
<td>1</td>
<td>0.4</td>
<td>2</td>
<td>0.8</td>
<td>3</td>
<td>1.2</td>
<td>6</td>
</tr>
<tr>
<td>Attend a football or basketball game</td>
<td>0</td>
<td>0.0</td>
<td>0</td>
<td>0.0</td>
<td>5</td>
<td>2.0</td>
<td>37</td>
</tr>
<tr>
<td>Notice the campus landscape</td>
<td>1</td>
<td>0.4</td>
<td>1</td>
<td>0.4</td>
<td>7</td>
<td>2.9</td>
<td>74</td>
</tr>
<tr>
<td>Take an elective course that I found interesting</td>
<td>0</td>
<td>0.0</td>
<td>4</td>
<td>1.6</td>
<td>13</td>
<td>5.3</td>
<td>82</td>
</tr>
<tr>
<td>Buy a ZonaZoo pass</td>
<td>4</td>
<td>1.6</td>
<td>6</td>
<td>2.4</td>
<td>24</td>
<td>9.8</td>
<td>39</td>
</tr>
<tr>
<td>Attend an additional sporting event (other than football or basketball)</td>
<td>1</td>
<td>0.4</td>
<td>5</td>
<td>2.0</td>
<td>18</td>
<td>7.3</td>
<td>78</td>
</tr>
</tbody>
</table>
Table 14 continued

<table>
<thead>
<tr>
<th>Engagement Activities After</th>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neither Unlikely nor Likely</th>
<th>Likely</th>
<th>Very Likely</th>
<th>Mean&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Item</strong></td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Attend Homecoming events</td>
<td>4</td>
<td>1.6</td>
<td>8</td>
<td>3.3</td>
<td>25</td>
<td>10.2</td>
<td>77</td>
</tr>
<tr>
<td>Meet with a professor during office hours</td>
<td>0</td>
<td>0.0</td>
<td>5</td>
<td>2.1</td>
<td>32</td>
<td>13.2</td>
<td>100</td>
</tr>
<tr>
<td>Take a tour or visit UA facilities (McKale, Alumni Offices, Mirror Lab, Dendrochronology, etc.)</td>
<td>3</td>
<td>1.2</td>
<td>6</td>
<td>2.5</td>
<td>37</td>
<td>15.2</td>
<td>89</td>
</tr>
<tr>
<td>Join a club on campus</td>
<td>3</td>
<td>1.2</td>
<td>10</td>
<td>4.1</td>
<td>36</td>
<td>14.8</td>
<td>81</td>
</tr>
<tr>
<td>Go to Spring Fling</td>
<td>4</td>
<td>1.7</td>
<td>14</td>
<td>5.8</td>
<td>33</td>
<td>13.6</td>
<td>72</td>
</tr>
<tr>
<td>Visit the Biosphere 2</td>
<td>8</td>
<td>3.3</td>
<td>14</td>
<td>5.7</td>
<td>51</td>
<td>20.9</td>
<td>97</td>
</tr>
</tbody>
</table>

Table 14 continued
Table 14 continued

<table>
<thead>
<tr>
<th>Engagement Activities - After</th>
<th>Very Unlikely</th>
<th>Unlikely</th>
<th>Neither Unlikely nor Likely</th>
<th>Likely</th>
<th>Very Likely</th>
<th>Mean&lt;sup&gt;a&lt;/sup&gt;</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
<td>%</td>
<td>f</td>
</tr>
<tr>
<td>Participate in intramural sports</td>
<td>19</td>
<td>7.9</td>
<td>25</td>
<td>10.3</td>
<td>56</td>
<td>23.1</td>
<td>62</td>
</tr>
<tr>
<td>Attend an academic seminar</td>
<td>5</td>
<td>2.1</td>
<td>23</td>
<td>9.5</td>
<td>78</td>
<td>32.2</td>
<td>83</td>
</tr>
<tr>
<td>Take an astronomy course</td>
<td>19</td>
<td>7.9</td>
<td>32</td>
<td>13.2</td>
<td>62</td>
<td>25.6</td>
<td>68</td>
</tr>
<tr>
<td>Join a fraternity or sorority (social or professional)</td>
<td>45</td>
<td>18.4</td>
<td>27</td>
<td>11.1</td>
<td>40</td>
<td>16.4</td>
<td>26</td>
</tr>
<tr>
<td>Summated Value</td>
<td></td>
<td></td>
<td></td>
<td>4.20</td>
<td>0.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Total out of 277 respondents as mentioned in Instrument section. Total not yielding 277 due to missing data.

<sup>a</sup>Based upon: 1=Very Unlikely, 2=Unlikely, 3=Neither Unlikely nor Likely, 4=Likely, 5=Very Unlikely
The third subset of Objective Eight sought to compare the likeliness of participation in engagement activities before and after completion of AED 295B. Before the completion of AED 295B, students collectively responded they were “Neither Unlikely nor Likely” to participate in engagement activities with a summated mean of 3.37 and a standard deviation of 0.61. After the completion of AED 295B, students reported they were “Likely” to participate in engagement activities with a summated mean of 4.20 and a standard deviation of 0.50. As seen in Table 15, the Cohen’s $d$ for these results showed an increase of 1.51 with a 0.60 effect size (medium difference). The range of Cohen’s $d$ data for individual activities was 0.22 (effect size = 0.11, small difference) to 2.44 (effect size = 0.77, large difference). Notice the campus landscape had the highest increase in likeliness whereas Join a fraternity or sorority (social or professional) had the lowest.
Table 15

**Difference Between Participation in Engagement Activities Before and After AED 295B**

<table>
<thead>
<tr>
<th>Engagement Activities</th>
<th>Mean&lt;sup&gt;a&lt;/sup&gt; (Before)</th>
<th>Mean&lt;sup&gt;a&lt;/sup&gt; (After)</th>
<th>Cohen’s d</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notice the campus landscape</td>
<td>3.00</td>
<td>4.61</td>
<td>2.44</td>
<td>0.77</td>
</tr>
<tr>
<td>Visit the Biosphere 2</td>
<td>2.48</td>
<td>3.88</td>
<td>2.08</td>
<td>0.72</td>
</tr>
<tr>
<td>Take a tour or visit UA facilities (McKale, Alumni Offices,</td>
<td>2.98</td>
<td>4.21</td>
<td>1.39</td>
<td>0.57</td>
</tr>
<tr>
<td>Mirror Lab, Dendrochronology, etc.)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend an academic seminar</td>
<td>2.67</td>
<td>3.64</td>
<td>1.16</td>
<td>0.50</td>
</tr>
<tr>
<td>Attend Homecoming events</td>
<td>3.47</td>
<td>4.32</td>
<td>0.93</td>
<td>0.42</td>
</tr>
<tr>
<td>Meet with a professor during office hours</td>
<td>3.32</td>
<td>4.26</td>
<td>0.92</td>
<td>0.42</td>
</tr>
<tr>
<td>Attend an additional sporting event (other than football or</td>
<td>3.55</td>
<td>4.46</td>
<td>0.91</td>
<td>0.42</td>
</tr>
<tr>
<td>basketball)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Go to Spring Fling</td>
<td>3.31</td>
<td>4.19</td>
<td>0.86</td>
<td>0.39</td>
</tr>
<tr>
<td>Take an elective course that I found interesting</td>
<td>3.71</td>
<td>4.51</td>
<td>0.78</td>
<td>0.36</td>
</tr>
<tr>
<td>Join a club on campus</td>
<td>3.43</td>
<td>4.20</td>
<td>0.69</td>
<td>0.32</td>
</tr>
<tr>
<td>Take an astronomy course</td>
<td>2.70</td>
<td>3.50</td>
<td>0.61</td>
<td>0.29</td>
</tr>
</tbody>
</table>

Table 15 continued
Table 15 continued

<table>
<thead>
<tr>
<th>Engagement Activities</th>
<th>Mean$^a$ (Before)</th>
<th>Mean$^a$ (After)</th>
<th>Cohen’s d</th>
<th>Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Participate in intramural sports</td>
<td>3.10</td>
<td>3.66</td>
<td>0.54</td>
<td>0.26</td>
</tr>
<tr>
<td>Remain a proud and loyal Wildcat</td>
<td>4.40</td>
<td>4.91</td>
<td>0.43</td>
<td>0.21</td>
</tr>
<tr>
<td>Attend a football or basketball game</td>
<td>4.39</td>
<td>4.81</td>
<td>0.40</td>
<td>0.20</td>
</tr>
<tr>
<td>Buy a ZonaZoo pass</td>
<td>4.12</td>
<td>4.51</td>
<td>0.35</td>
<td>0.17</td>
</tr>
<tr>
<td>Join a fraternity or sorority (social or professional)</td>
<td>3.20</td>
<td>3.50</td>
<td>0.22</td>
<td>0.11</td>
</tr>
<tr>
<td>Summated Value</td>
<td>3.36</td>
<td>4.20</td>
<td>1.51</td>
<td>0.60</td>
</tr>
</tbody>
</table>

$^a$Based upon: 1=Very Unlikely, 2=Unlikely, 3=Neither Unlikely nor Likely, 4=Likely, 5=Very Unlikely
Objective Nine

Objective Nine sought to describe the relationship between AED 295B student engagement through various activities and the graduation rates of AED 295B students. The engagement activities section of the questionnaire was not made available to those who reported being a senior or fifth year student at the time they took AED 295B. Because of this limitation, only two students’ data (of the nine who began their academic careers in Fall 2007) were available. The data from students who began their academic careers in Fall 2009 were also utilized. This group offered 43 potential responses, but only 35 sets of data were submitted.

One of the two available students who began his/her academic career in Fall 2007 graduated and the other had not. The graduate reported he/she was “ Likely” to participate in the engagement activities listed after completing AED 295B with a summated mean score of 3.63. The non-graduate reported he/she was “Very Likely” (the highest likeliness) to participate in the engagement activities listed with a score of 4.75. Due to only two students’ data being available for this item, the results were considered inconclusive.

Twenty two of the 35 available students who began their academic careers in Fall 2009 had graduated. These students reported they were “Likely” to participate in the listed engagement activities with a summated mean of 4.36. The 13 non-graduates of this group also reported they were “Likely” to participate in the engagement activities after completing AED 295B with a summated mean of 4.22 offering little correlation between engagement activities and graduation rates of AED 295B students.
Chapter V: Discussion

**Purpose and Objectives**

The purpose of the study was to explore the association between the faculty connection, institution connection, and engagement activities utilized and discussed in Agricultural Education 295B (AED 295B) and the graduation rates of former students from the course. In addition, the study sought to compare the graduation rates of AED 295B students to the average graduation rates of The University of Arizona. The following research objectives guided the study:

1. Describe the graduation rates of former AED 295B students.
2. Compare the graduation rates of AED 295B students and The University of Arizona average.
3. Describe the faculty connection provided by AED 295B.
4. Describe the relationship between faculty connection and the graduation rates of AED 295B students.
5. Describe the institution connection provided by AED 295B.
   a. Describe the institution connection before completion of AED 295B.
   b. Describe the institution connection after completion of AED 295B.
   c. Describe the relationship between institution connection before and after completing AED 295B.
6. Describe the relationship between institution connection and the graduation rates of AED 295B students.
7. Describe the overall effectiveness of AED 295B.
8. Describe the engagement of students completing AED 295B.
   a. Describe the engagement of students before completion of AED 295B.
   b. Describe the engagement of students after completion of AED 295B.
   c. Describe the relationship between student engagement before and after completing AED 295B.

9. Describe the relationship between student engagement and the graduation rates of AED 295B students.

**Summary of Procedures**

Survey research methods were used for this descriptive-correlational study. An accessible population of students who previously completed AED 295B at The University of Arizona was studied to determine the utility of the course and to find a potential connection between the course and student graduation rates. A questionnaire was adapted from The College Persistence Questionnaire (Davidson, Beck, & Milligan, 2009) to determine if a connection to faculty and/or the institution was made for students completing AED 295B. In addition, graduation rates were captured from the students in the study’s frame. A panel of experts was used to determine the content and face validity of the questionnaire and reliability was tested through a pilot study of students who most recently completed the AED 295B course. Cronbach’s alpha coefficients were calculated for the faculty connection, institution connection, and engagement constructs which resulted in 0.84, 0.85, and 0.85 respectively.

As Dillman recommends, five points of contact were used in an attempt to increase response rate for the study (2000). The response rate was 77% of the emails that were opened and 45% overall. Due to the nature of the data and their uniqueness to the
AED 295B course, non-response error was not controlled for as the information cannot be generalized. Descriptive statistical analysis was performed through SPSS in order to analyze the data present.

**Summary of Results**

Objective One sought to describe the graduation rates of students who had completed AED 295B. Within 150% completion time (considered the standard time allotted when viewing graduation rates), 87.5% of AED 295B students had graduated. Due to low numbers of students who began their University of Arizona careers in Fall 2007 (to allow for 150% completion time), 100% completion time was also considered. These data showed a 78.5% graduation rate.

Objective Two sought to compare the information collected within Objective One to the standard graduation rates of University of Arizona students. The University of Arizona records from 2011 (the most recent of those available) showed a six-year graduation rate of 61.4% and a four-year graduation rate of 39.9%. When compared to the graduation rates of AED 295B students, those who complete AED 295B were 1.5 times more likely (146% higher likeliness) to graduate than the average University of Arizona student within six years. In addition, AED 295B students were almost twice as likely (197% higher likeliness) to graduate within four years.

The purpose of Objective Three was to describe the faculty connection provided by AED 295B through overview, approach, and rapport subsections. The overview subsection reported a summated mean of 4.66 (SD = 0.64) meaning students “Strongly Agreed” with being connected to a faculty member through AED 295B. The approach subsection reported a summated mean of 4.61 (SD = 0.60) which showed students
experienced faculty connection in AED 295B “Much More Than Usual” when compared
to their other University of Arizona courses. The final subsection, rapport, reported a
summated mean of 4.80 (SD = 0.43) meaning students believed the faculty rapport and
connection efforts of AED 295B were “Very Effective.” Overall, the faculty connection
construct results showed a strong sense of connection.

The fourth objective sought to describe the relationship between the three
subsections of faculty connection and graduation rates of AED 295B students. The Fall
2007 group of graduates reported summated means of 4.57, 4.36, and 4.48 meaning they
“Strongly Agreed” to faculty connection overview, experienced faculty connection
“More Than Usual,” and thought the rapport building techniques were “Very Effective,”
respectively. The one non-graduate from this year reported a summated mean of 5.00 for
each category meaning he/she “Strongly Agreed” to faculty connection overview,
experienced faculty connection “Much More Than Usual,” and thought the rapport
building techniques were “Very Effective,” respectively.

The Fall 2009 group showed different results. The graduates from this group had
summated means of 4.75, 4.73, and 4.86 leading to thoughts of “Strongly Agree,”
experiencing faculty connection “Much More Than Usual,” and experiencing “Very
Effective” rapport building techniques, respectively. The non-graduates of this group
produced summated means of 4.34, 4.29, and 4.74 meaning they “Agreed” to being
connected to a faculty member, experienced faculty connection “More Than Usual,” and
experienced “Very Effective” faculty rapport methods, respectively.

The purpose of Objective Five was to describe the institution connection provided
by AED 295B. Before completing AED 295B, students reported they “Agreed” with
being connected to the institution with a summated mean of 3.92 (SD = 0.51). After the completion of AED 295B, students reported they “Strongly Agreed” with being connected to the institution as seen by a summated mean of 4.53 (SD = 0.46). Each prompt in this section increased in agreeability, showing a deeper institution connection upon completion of AED 295B. The Cohen’s $d$ coefficient was calculated between the summated means before and after and reported 1.26 with an effect size of 0.53 (medium difference). Overall, students became more connected to the institution as a result of completing AED 295B.

Objective Six sought to describe the relationship between the institution connection provided by AED 295B and the graduation rates of AED 295B students. The Fall 2007 students who graduated showed a summated mean of 4.57, “Strongly Agreeing” to being connected to the institution. The one non-graduate from Fall 2007 reported he/she “Agreed” to receiving institution connection with a summated mean of 4.20. In addition, the Fall 2009 students who graduated reported a summated mean of 4.62 and therefore “Strongly Agreed” to being connected to the institution. The non-graduates of this group reported they also “Strongly Agreed” to being connected to the institution with a summated mean of 4.59.

The purpose of Objective Seven was to describe the overall effectiveness of AED 295B. Students reported they “Agreed” AED 295B was an effective course in connecting them to The University of Arizona campus and faculty. In addition, the course was reported to contain valuable information for these students. This was determined with a summated mean of 3.98 (SD = 1.07).
Objective Eight sought to describe the engagement of students completing AED 295B. One hundred ten students reported they “Agreed” (the modal category) to being inspired or encouraged to become more involved on The University of Arizona campus due to their completion of AED 295B. In addition, 99 students “Strongly Agreed” to this statement. Before the completion of the course, students reported they were “Neither Unlikely nor Likely” to participate in specific engagement activities with a summed mean of 3.37 (SD = 0.61). After the course, these numbers rose to 4.20 (SD = 50) and students were “Likely” to participate in the engagement activities listed. The Cohen’s $d$ coefficient for these results showed an increase of 1.51 with an effect size of 0.60 (medium difference). Overall, students were more likely to be engaged within The University after completing AED 295B.

The ninth objective sought to describe the relationship between AED 295B student engagement and the graduation rates of said students. Only two students’ data were available for those who began their academic careers in Fall 2007. The graduate reported he/she was “Likely” to participate with a summed mean of 3.63. The non-graduate reported he/she was “Very Likely” to participate with a summed mean of 4.75. Fall 2009 students who graduated reported being “Likely” to participate in the listed engagement activities with a summed mean of 4.36. The non-graduates reported a summed mean of 4.22 and were also “Likely” to participate in engagement activities. The data for this objective were inconclusive.

Conclusions, Implications, and Recommendations

The data for Objective One showed a six-year graduation rate of 87.5% for AED 295B students. The four-year graduation rate of AED 295B students was 78.5%.
Objective Two compared these data to The University of Arizona graduation rate averages (six-year = 61.4%, four-year = 39.9%) and revealed AED 295B students were 1.5 times as likely to graduate within six years and almost twice as likely to graduate within four years. Knowing this to be true, students who complete AED 295B also increase their likeliness of graduation. Therefore, it is recommended that students who are at risk of not graduating should complete AED 295B. In addition, administrative staff and advisors at The University of Arizona should encourage more students to complete the course in order to help the institution’s overall graduation rates.

Data from Objective Three showed students became more connected to a faculty member through completing AED 295B. In addition, Objective Four showed this connection was positively related to graduation rates for those who began their academic careers in the Fall 2009 semester. Students who complete AED 295B are more likely to experience faculty connection and graduate than those who do not. As Lenning, Sauer, and Beal’s (1980) and Astin’s (1997) retention theories state, connecting students to faculty members in a positive way is a crucial component to their successful retention at the university level. With this in mind, it is recommended that more faculty members utilize personal approach and connection strategies within their classrooms. In addition, current and future AED 295B instructors should continue their efforts in connecting with students in the course as this connection is directly related to an increase in graduation rates.

Objective Five showed students became more connected to the institution after completing AED 295B. Furthermore, Objective Six showed this connection is also positively correlated with graduation rates. Due to this idea, connecting students to the
institution should remain as a component of AED 295B in an attempt to increase graduation rates. The more students become connected to the institution, the more likely they are to graduate as backed by both Lenning, Sauer, and Beal’s (1980) and Astin’s (1997) theories on retention. Therefore, it is recommended that more department heads and chairs at The University of Arizona implement tactics to connect students to the institution as a way of increasing graduation rates. This can be accomplished by requiring every student to take a subset of AED 295B for a few weeks in the beginning of their first, freshman year semester, or by including some of the objectives of AED 295B with New Student Orientation programs, Academic Probation programs, or various freshmen colloquium courses.

Responses from Objective Seven show AED 295B was effective in connecting students to The University of Arizona campus and its faculty all while students learned valuable information. Therefore, AED 295B is successfully completing its purpose as a course as defined by the course syllabus (Knight, 2014). Knowing this to be true, the administrative team in charge of the curriculum and longevity of the course should keep AED 295B in The University of Arizona course catalog and make efforts toward expanding its availability for students.

The data from Objective Eight showed students were inspired/encouraged and more likely to participate in engagement activities after completing AED 295B. Objective Nine resulted in inconclusive data, though graduates were slightly more likely to participate in engagement activities after completion of AED 295B than non-graduates. Knowing this to be true, students who complete AED 295B are also more likely to become engaged on campus and are more likely to graduate. This idea follows Tinto’s
theory of student retention, where extracurricular activities are listed as one of the four prongs to student retention (1993). Therefore, students should be encouraged to participate in extracurricular activities related to their college experiences. Furthermore, it is recommended that students who do not feel a connection to The University of Arizona, or do not know how to get involved, should complete AED 295B to develop a deeper understanding of the different facets of The University and to open doors and paths to engagement.

The AED 295B course is largely successful in connecting students to The University of Arizona and various components of its structure. Students who complete this course are more likely to graduate and remain closely knit to the campus. This course is helpful for the Alumni Association and The University of Arizona Foundation as students who graduate and feel a sense of connection to their university are more likely to contribute and give back to it in future years. This course is extremely valuable in helping students graduate and providing the academic and faculty support they may need throughout their university careers.

The questionnaire was sent to students from the past five semesters of the course and four of the students who responded had transferred to a different university. Even though they are no longer a University of Arizona student, they still check their University of Arizona email address and responded to a questionnaire about a course they took during their short careers here. This speaks highly to the connection provided by AED 295B and its importance to The University of Arizona campus and community. This unique course should be opened to more interested students and modified versions of it should be taught to at-risk and of-need students of various backgrounds (while
keeping the personal components to the course as involved as possible). The course has a true connection to The University of Arizona campus and community and is instrumental in helping students graduate and remain loyal to its various components.

Implications for Further Research

This study was limited by available data due to recent changes in University email providers and the timeline for research. Future researchers ought to employ a pre-test/post-test study to retrieve potentially more profound data. In addition, they should follow students from the time they begin their academic careers at The University of Arizona through graduation and compare those who complete AED 295B to those who do not. This method could randomly select students into these groups or follow the students to see who self-selects into taking AED 295B. These data would be instrumental in revealing the bigger picture of the course. Furthermore, researchers should extend the study to have more six-year graduation data available to better process results. A longer timeline would allow for more data as well as potentially more accurate data and should also follow students who transfer out of The University of Arizona to see if they complete their degrees elsewhere.

The questionnaire utilized in this study can be revised to eliminate double-barreled questions and to delve deeper into what specific aspects of the course connect students to faculty members and the institution. Instead of gauging students’ likeliness to participate in engagement activities, further research ought to explore a more definitive answer to these questions (Have you participated in…? Yes/No). In addition, the study could be transformed to include more qualitative data in an attempt to explore ways the course can expand or strengthen its connection for students.
Different programs that may branch out of AED 295B should also be researched or evaluated to learn of their effectiveness in retention and graduation rates. Students who attend multiple retention programs ought to be studied to explore the value of the combination of said programs. Furthermore, non-graduates should be studied to explore reasons why they left and to question ways the institution could have worked more toward their retention or to see if the findings belong with AED 295B.
References


Knight, J. A. (2014). *Syllabus for AED 295B: The Heritage and Traditions of The University of Arizona*. (Available from The University of Arizona Department of Agricultural Education, 1110 E. South Campus Drive, Tucson, AZ 85721).


From: Dr. James Knight

Reply-To Email: lcb@email.arizona.edu

Subject: Heritage & Traditions [Course Feedback]

Message:

Hello ${m://FirstName},

You are invited to participate in a research study about the usefulness of Agricultural Education 295B, AED 295B, a course you took with Dr. James Knight. This study is being conducted by Lo Bannerman and Dr. Knight from the Department of Agricultural Education at The University of Arizona. Your participation in this study would be greatly appreciated!

Your responses to the questionnaire below will be kept confidential, though your IP address will be collected due to the nature of the online questionnaire. Your participation in this study is voluntary and you are free to decline to answer any question for any particular reason.

If you have any questions about the study, please contact Lo Bannerman or Dr. James Knight, University of Arizona, PO Box 210033, Tucson, Arizona 85721; (520) 621-1523; lcb@email.arizona.edu, knightj@email.arizona.edu.

Follow this Link to Take the Questionnaire:
$[l://SurveyLink?d=Complete the Questionnaire]

Or copy and paste the URL below into your internet browser:
$[l://SurveyURL]

Bear Down,
Lo

Follow the link to opt out of future emails:
$[l://OptOutLink?d=Click here to unsubscribe]
Appendix B: Pilot Study Reminder
Hello ${m://FirstName},

Last week, you received an invitation to participate in a research study about the usefulness of Agricultural Education 295B, AED 295B, a course you took with Dr. James Knight. The study is still underway and your participation would be greatly appreciated!

If you have any questions about the study, please contact Lo Bannerman or Dr. James Knight, University of Arizona, PO Box 210033, Tucson, Arizona 85721; (520) 621-1523; lcb@email.arizona.edu, knightj@email.arizona.edu.

Follow this link to the Questionnaire:
${l://SurveyLink?d=Complete the Questionnaire}

Or copy and paste the URL below into your internet browser:
${l://SurveyURL}

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}
Appendix C: Pre-Notice Letter
From: Dr. James Knight

Reply-To Email: lcb@email.arizona.edu

Subject: Heritage & Traditions [Course Feedback]

Message:

Hello ${m://FirstName},

Later this week, you will receive an e-mail containing a questionnaire about AED 295B, The Heritage and Traditions of The University of Arizona, a class you took with me a few semesters ago. Currently, our department is trying to learn about the usefulness of this course and we would greatly appreciate your help in doing so! As a thank you for your time, we are giving away a basketball signed by Coach Sean Miller from our University of Arizona Men's Basketball team! Don't miss your opportunity to win this basketball as our Wildcats head to the National Championship tournament!

Go Cats!
Dr. Knight
Appendix D: First Cover Letter
From: Dr. James Knight

Reply-To Email: lcb@email.arizona.edu

Subject: Heritage & Traditions [Course Feedback]

Message:

Hello ${m://FirstName},

You are invited to participate in a research study about the usefulness of Agricultural Education 295B, AED 295B, a course you took with me within the past three years. Lo Bannerman and I are conducting this study from the Department of Agricultural Education at The University of Arizona as part of her thesis work. Your participation in this study would be greatly appreciated!

The questionnaire has taken other students an average of less than five minutes to complete. There are no costs or known risks if you decide to participate in this research study. The information you provide will be used to analyze the usefulness of AED 295B in retaining students on The University of Arizona campus and ultimately will provide general benefits to the future of the Heritage and Traditions course.

As promised, you will be given the opportunity to win a basketball signed by Coach Sean Miller as a thank you for your participation. The earlier you respond to the questionnaire, the greater chance you have of taking home the basketball as explained below:

- **Wednesday, March 5 - Friday, March 7:** 5 entries
- **Saturday, March 8 - Monday, March 10:** 3 entries
- **Tuesday, March 11 - Wednesday, March 12:** 2 entries
- **Thursday, March 13 - Sunday, March 16:** 1 entry

Your responses to the questionnaire will be kept confidential, though your IP address will be collected due to the nature of the online questionnaire. No one will be able to identify you or your responses or connect your IP address to your responses in any way. In addition, your participation in this study is voluntary and you are free to decline to answer any question for any particular reason.

If you have any questions about the study or the questionnaire below, please contact Lo Bannerman or myself, University of Arizona, PO Box 210033, Tucson, Arizona 85721; (520) 621-1523; lcb@email.arizona.edu, knightj@email.arizona.edu.

**Follow this Link to Take the Questionnaire:**

${l://SurveyLink?d=Complete the Questionnaire}

Or copy and paste the URL below into your internet browser:

${l://SurveyURL}

**GO CATS!**

Dr. Knight

Follow the link to opt out of future emails:

${l://OptOutLink?d=Click here to unsubscribe}
Appendix E: Questionnaire
Thank you for taking time to complete this questionnaire!

Our goal is to discover if students gain some sense of connection to The University of Arizona through taking Agricultural Education 295B (AED 295B) The Heritage and Traditions of The University of Arizona. Throughout this questionnaire, "UA" means "The University of Arizona" and "this course" or "AED 295B" means "Agricultural Education 295B, The Heritage and Traditions of The University of Arizona."

This process is confidential but not fully anonymous due to the nature of the questionnaire. The IP address you use while taking the online questionnaire will be collected so the researcher knows who has and has not completed the study at any given point. Your IP address will not be connected to your responses and, as long as you do not write your name on the questionnaire, the researcher will have no way to connect your IP address or your identity to your given responses. No one will be able to identify you or your answers and should the data be published, no individual information will be disclosed.

Your participation in this study is voluntary. By completing and submitting this questionnaire, you are voluntarily agreeing to participate. You are free to decline to answer any particular question you do not wish to answer for any reason.

If you have any questions about the study, please contact Le Bannerman or Dr. James Knight, University of Arizona, PO Box 210033, Tucson, Arizona 85721, (520) 621-1523, lcb@email.arizona.edu, knight@email.arizona.edu.

BEAR DOWN!
When you took AED 295B, where were you in your academic career?

- Freshman
- Sophomore
- Junior
- Senior
- Fifth Year Senior
- Other [ ]
**Directions:**
Based upon the scale provided, please respond to the following statements about your connection to the AED 295B instructor (Dr. James Knight).

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I was interested in the course topics because of the instructor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was satisfied with the quality of instruction from this course.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The instructor was concerned with my success in the course.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I was able to contact the instructor when needed.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I had positive interactions with the instructor.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Directions:**
Please select the response choice that best completes the statement when comparing AED 295B to other UA courses.

<table>
<thead>
<tr>
<th>Much Less Than Usual</th>
<th>Less Than Usual</th>
<th>About as Much as Usual</th>
<th>More Than Usual</th>
<th>Much More Than Usual</th>
</tr>
</thead>
<tbody>
<tr>
<td>The instructor used a personal approach...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The instructor was caring toward me...</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Directions:**
Please rate the effectiveness of the following statements in terms of connecting you to a faculty member on campus.

<table>
<thead>
<tr>
<th>Very Ineffective</th>
<th>Ineffective</th>
<th>Neither Ineffective nor Effective</th>
<th>Effective</th>
<th>Very Effective</th>
</tr>
</thead>
<tbody>
<tr>
<td>The instructor greeting me before each class.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The instructor requiring a personal interview component.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The instructor knowing my name.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Directions:
Based upon the scale provided, please respond to the following statements about your thoughts before and after taking AED 295B.

<table>
<thead>
<tr>
<th></th>
<th>Before taking AED 295B</th>
<th>After taking AED 295B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly Disagree</td>
<td>Disagree</td>
</tr>
<tr>
<td>I was confident that the UA was the right university for me.</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I had considered stopping my education at the UA (e.g., transferring, going to work, leaving for other reasons).</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I felt loyal to the UA based upon my college experiences.</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I felt connected to faculty on the UA campus.</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>I felt connected to other students on the UA campus.</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

AED 295B inspired or encouraged me to get more involved on campus.

<table>
<thead>
<tr>
<th></th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
**Directions:**
Considering your overall course experience, please rate each of the following statements based upon the scale provided.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly Disagree</th>
<th>Disagree</th>
<th>Neither Disagree nor Agree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>The course was effective in connecting me to the UA campus.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The course was effective in connecting me to UA faculty</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>The knowledge I learned in the course was valuable.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Directions:
Based upon the scale provided, please rate your likeliness to participate in the following items before and after taking AED 295B.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Before taking AED 295B</th>
<th>After taking AED 295B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Very Unlikely</td>
<td>Unlikely</td>
</tr>
<tr>
<td>Visit the Biosphere 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Notice the campus landscape</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend a football or basketball game</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend an additional sporting event (other than football or basketball)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend Homecoming events</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buy a ZonaZoo pass</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meet with a professor during office hours</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Join a fraternity or sorority (social or professional)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Join a club on campus</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take an elective course that I found interesting</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in intramural sports</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Go to Spring Fling</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take a tour or visit UA facilities (McKale, Alumni Offices, Mirror Lab, Dundrochronology, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend an academic seminar</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Take an astronomy course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Remain a proud and loyal Wildcat</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
When did you start your academic career at The University of Arizona?

- Fall 2007
- Spring 2008
- Fall 2008
- Spring 2009
- Fall 2009
- Spring 2010
- Fall 2010
- Spring 2011
- Fall 2011
- Spring 2012

What semester and year did you take AED 295B?

- Fall 2010
- Fall 2011
- Spring 2012
- Fall 2012
- Spring 2013

Have you graduated from The University of Arizona?

- Yes
- No
Questionnaire, Page 8

Sex

[ ]
We thank you for your time spent taking this survey.
Your response has been recorded.
Appendix F: First Reminder
From: Dr. James Knight

Reply-To Email: lcb@email.arizona.edu

Subject: Heritage & Traditions [Course Feedback]

Message:

Hello ${m://FirstName},

Early this week, you received an invitation to participate in a research study about the usefulness of Agricultural Education 295B, AED 295B, a course you took with me a few semesters ago. The study is still underway and your participation would be greatly appreciated! Responding any time today ensures you will receive five entries to win the Sean Miller autographed basketball!

If you have any questions about the study, please contact myself or Lo Bannerman, University of Arizona, PO Box 210033, Tucson, Arizona 85721; (520) 621-1523; lcb@email.arizona.edu, knightj@email.arizona.edu.

Follow this Link to the Questionnaire:
$!/\SurveyLink?d=Complete the Questionnaire)

Or copy and paste the URL below into your internet browser:
$!/\SurveyURL

Go Cats!
Dr. Knight

Follow the link to opt out of future emails:
$!/\OptOutLink?d=Click here to unsubscribe)
Appendix G: Second Reminder
From: Dr. James Knight

Reply-To Email: lcb@email.arizona.edu

Subject: Heritage & Traditions [Course Feedback]

Message:

Hello ${m://FirstName},

Early this week, you received an invitation to participate in a research study about the usefulness of AED 295B. I would still like to request five minutes of your time and ask that you complete the questionnaire linked below. Responding today or tomorrow ensures you will receive two entries to win the Sean Miller autographed basketball! Your participation would be greatly appreciated!

If you have any questions about the study, please contact myself or Lo Bannerman, University of Arizona, PO Box 210033, Tucson, Arizona 85721; (520) 621-1523; lcb@email.arizona.edu, knightj@email.arizona.edu.

Follow this Link to the Questionnaire:
$!://SurveyLink?id=Complete the Questionnaire)

Or copy and paste the URL below into your internet browser:
$!://SurveyURL

Go Cats!
Dr. Knight

Follow the link to opt out of future emails: $!://OptOutLink?id=Click here to unsubscribe
Appendix H: Final Reminder
From: Dr. James Knight

Reply-To Email: lcb@email.arizona.edu

Subject: Heritage & Traditions [Course Feedback]

Message:

Hello ${m://FirstName},

Last week, you received an invitation to participate in a research study about the usefulness of AED 295B. I would still like to request five minutes of your time and ask that you complete the questionnaire linked below. Responding today or tomorrow ensures you will receive one entry to win the Sean Miller autographed basketball! The questionnaire closes this Sunday, March 16th, and your participation before this Sunday would be greatly appreciated!

If you have any questions about the study, please contact myself or Lo Bannerman, University of Arizona, PO Box 210033, Tucson, Arizona 85721; (520) 621-1523; lcb@email.arizona.edu, knightj@email.arizona.edu.

Follow this Link to the Questionnaire:
${l://SurveyLink?d=Complete the Questionnaire}

Or copy and paste the URL below into your internet browser:
${l://SurveyURL}

Go Cats!
Dr. Knight

Follow the link to opt out of future emails:
${l://OptOutLink?d=Click here to unsubscribe}
Appendix I: Thank You Message
From: Dr. James Knight

Reply-To Email: lcb@email.arizona.edu

Subject: Heritage & Traditions [Course Feedback]

Message:

Hello ${m://FirstName},

I want to thank you for your participation in this research study! Your support is vital for the continuation of our course! The winner of the basketball will be notified within the hour!

BEAR DOWN and have a great year!

GO CATS!
Dr. Knight
Appendix J: The College Persistence Questionnaire
Instructions: Students differ a great deal from one another in how they feel about their college experiences. This questionnaire asks you about your reactions to many aspects of your life here at this college. Please consider each of the questions carefully, and indicate the answer that best represents your thoughts. There are no "right or wrong" answers, so mark your real impressions. There are only 81 questions, and it is very important that you answer all of them. This should take you about 30-35 minutes. Your answers will be treated as confidential information. Please circle your response to the following items. Be sure to answer each question.

1. On average across all your courses, how interested are you in the things that are being said during class discussions?

   Very interested
   Somewhat interested
   Neutral
   Somewhat disinterested
   Very disinterested
   Not applicable

2. What is your overall impression of the other students here?

   Very favorable
   Somewhat favorable
   Neutral
   Somewhat unfavorable
   Very unfavorable
   Not applicable

3. How supportive is your family of your pursuit of a college degree, in terms of their encouragement and expectations?

   Very supportive
   Somewhat supportive
   Neutral
   Somewhat unsupportive
   Very unsupportive
   Not applicable
4. Students differ quite a lot in how distressed they get over various aspect of college life. Overall, how much stress would you say that you experience while attending this institution?

Very much stress  
Much stress  
Some stress  
A little stress  
Very little stress  
Not applicable

5. How easy is it to get answers to your questions about things related to your education here?

Very easy  
Somewhat easy  
Neutral  
Somewhat hard  
Very hard  
Not hard  
Not applicable

6. In general, how enthused are you about doing academic tasks?

Very enthusiastic  
Somewhat enthusiastic  
Neutral  
Somewhat unenthusiastic  
Very unenthusiastic  
Not applicable

7. College students have many academic responsibilities. How often do you forget those that you regard as important?

Very often  
Somewhat often  
Sometimes  
Rarely  
Very rarely  
Not applicable
8. How confident are you that this is the right college or university for you?

Very confident
Somewhat confident
Neutral
Somewhat unconfident
Very unconfident
Not applicable

9. How often do you worry about having enough money to meet your needs?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable

10. How confident are you that you can get the grades you want?

Very confident
Somewhat confident
Neutral
Somewhat unconfident
Very unconfident
Not applicable

11. Some courses seem to take a lot more time than others. How much extra time are you willing to devote to your studies in those courses?

Very much extra time
Much extra time
Some extra time
A little extra time
Very little extra time
Not applicable
12. When interacting with disagreeable people, how often are you courteous to them?

Always
Usually
Sometimes
Rarely
Never
Not applicable

13. In general, how satisfied are you with the quality of instruction you are receiving here?

Very satisfied
Somewhat satisfied
Neutral
Somewhat dissatisfied
Very dissatisfied
Not applicable

14. How much have your interactions with other students had an impact on your personal growth, attitudes, and values?

Very much
Much
Some
Little
Very little
Not applicable

15. How difficult is it for you or your family to be able to handle college costs?

Very difficult
Somewhat difficult
Neutral
Somewhat easy
Very easy
Not applicable
16. How inclined are you to do most of your studying within 24 hours of a test rather than earlier?

Very inclined
Somewhat inclined
A little inclined
Not very inclined
Not at all inclined
Not applicable

17. At this moment in time, how strong would you say your commitment is to earning a college degree, here or elsewhere?

Very strong
Somewhat strong
Neutral
Somewhat weak
Very weak
Not applicable

18. How much pressure do you feel when trying to meet deadlines for course assignments?

Extreme pressure
Much pressure
Some pressure
A little pressure
Hardly any pressure at all
Not applicable

19. How satisfied are you with the academic advising you receive here?

Very satisfied
Somewhat satisfied
Neutral
Somewhat dissatisfied
Very dissatisfied
Not applicable
20. How well do you understand the thinking of your instructors when they lecture or ask students to answer questions in class?

Very well
Well
Neutral
Not well
Not at all well
Not applicable

21. How often do you turn in assignments past the due date?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable

22. How much thought have you given to stopping your education here (perhaps transferring to another college, going to work, or leaving for other reasons)?

A lot of thought
Some thought
Neutral
Little thought
Very little thought
Not applicable

23. How often do you read educationally-related material not assigned in courses?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable
24. How strong is your sense of connectedness with others (faculty, students, staff) on this campus?

Very strong  
Somewhat strong  
Neutral  
Somewhat weak  
Very weak  
Not applicable

25. How good are you at correctly anticipating what will be on tests beforehand?

Very good  
Somewhat good  
Neutral  
Somewhat bad  
Very bad  
Not applicable

26. How frequently do you become jealous of the good fortune of others?

Never  
Rarely  
Sometimes  
Usually  
Always  
Not applicable

27. When you think of the people who mean the most to you (friends and family), how disappointed do you think they would be if you quit school?

Very disappointed  
Somewhat disappointed  
Neutral  
Not very disappointed  
Not at all disappointed  
Not applicable
28. How satisfied are you with the extent of your intellectual growth and interest in ideas since coming here?

Very satisfied
Somewhat satisfied
Neutral
Somewhat dissatisfied
Very dissatisfied
Not applicable

29. When considering the financial costs of being in college, how often do you feel unable to do things that other students here can afford to do?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable

30. When you think about your overall social life here (friends, college organizations, extracurricular activities, and so on), how satisfied are you with yours?

Very satisfied
Somewhat satisfied
Neutral
Somewhat dissatisfied
Very dissatisfied
Not applicable

31. Students vary widely in their view of what constitutes a good course, including the notion that the best course is one that asks students to do very little. In your own view, how much work would be asked of students in a really good course?

Very much
Much
Some
Little
Very little
Not applicable
32. There are so many things that can interfere with students making progress toward a degree; feelings of uncertainty about finishing are likely to occur along the way. At this moment in time, how certain are you that you will earn a college degree?

Very certain
Somewhat certain
Neutral
Somewhat uncertain
Very uncertain
Not applicable

33. How often do you feel overwhelmed by the academic workload here?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable

34. How well does this institution communicate important information to students such as academic rules, degree requirements, individual course requirements, campus news and events, extracurricular activities, tuition costs, financial aid and scholarship opportunities?

Very well
Well
Neutral
Not well
Not at all well
Not applicable

35. When you do not get your own way, how often do you feel resentful?

Always
Usually
Sometimes
Rarely
Never
Not applicable
36. How much of a connection do you see between what you are learning here and your future career possibilities?

Very much
Much
Some
Little
Very little
Not applicable

37. How often do you miss class for reasons other than illness or participation in school-related activities?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable

38. How much have your interactions with other students had an impact on your intellectual growth and interest in ideas?

Very much
Much
Some
Little
Very little
Not applicable

39. How often do you encounter course assignments that are actually enjoyable to do?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable
40. When you consider the techniques you use to study, how effective do you think your study skills are?

   Very effective
   Somewhat effective
   Neutral
   Somewhat ineffective
   Very ineffective
   Not applicable

41. After beginning college, students sometimes discover that a college degree is not quite as important to them as it once was. How strong is your intention to persist in your pursuit of the degree, here or elsewhere?

   Very strong
   Somewhat strong
   Neutral
   Somewhat weak
   Very weak
   Not weak

42. How frequently are you irritated when people ask you for a favor?

   Never
   Rarely
   Sometimes
   Usually
   Always
   Not applicable

43. How concerned about your intellectual growth are the faculty here?

   Very concerned
   Somewhat concerned
   Neutral
   Somewhat unconcerned
   Very unconcerned
   Not applicable
44. How much do you think you have in common with other students here?

Very much
Much
Some
Little
Very little
Not applicable

45. This semester, how much time do you spend studying each week relative to the number of credit hours you are taking? Assume each credit hour equals one hour of studying per week.

Many more hours studying than the credit hours
A few more hours studying than the credit hours
The same number of hours studying as the credit hours
A few less hours studying than the credit hours
A lot less hours studying than the credit hours
Not applicable

46. How much of a financial strain is it for you to purchase the essential resources you need for courses such as books and supplies?

Very large strain
Somewhat of a strain
Neutral
A little strain
Hardly any strain at all
Not applicable

47. When you are waiting for a submitted assignment to be graded, how assured do you feel that the work you have done is acceptable?

Very assured
Somewhat assured
Neutral
Somewhat unassurred
Very unassured
Not applicable
48. How much input do you think you can have on the decision-making process here (on matters such as course offerings, rules and regulations, and registration procedures)?

Very much
Much
Some
Little
Very little
Not applicable

49. All of us make mistakes in our interactions with other people. If you realize your mistake, how often do you apologize?

Always
Usually
Sometimes
Rarely
Never
Not applicable

50. How much do other aspects of your life suffer because you are a college student?

Very much
Much
Some
Little
Very little
Not applicable

51. How often do you wear clothing with this college's emblems?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable
52. How often do you arrive late for classes, meetings, and other college events?

Very often
Somewhat often
Sometimes
Rarely
Very rarely
Not applicable

53. How much time do you spend proofreading writing assignments before submitting them?

A lot
Some
Little
Very little
None
Not applicable

54. How much doubt do you have about being able to make the grades you want?

Very much doubt
Much doubt
Some doubt
Little doubt
Very little doubt
Not applicable

55. Often parents or other people whose opinions are important have unrealistic expectations about how students should perform in college. Thus far, how do you think that those important people would assess your performance?

Far below the level they expected
Below the level they expected
About the level they expected
Better than they expected
Much better than they expected
Not applicable
56. How would you rate the academic advisement you receive here?

Excellent
Good
Fair
Poor
Very poor
Not applicable

57. How would you rate the quality of the instruction you are receiving here?

Excellent
Good
Fair
Poor
Very poor
Not applicable

58. When you consider the benefits of having a college degree and the costs of earning it, how much would you say that the benefits outweigh the costs, if at all?

Benefits far outweigh the costs
Benefits somewhat outweigh the costs
Benefits and costs are equal
Costs somewhat outweigh the benefits
Costs far outweigh the benefits
Not applicable

59. How likely is it that you will reenroll here next semester?

Very likely
Somewhat likely
Neutral
Somewhat unlikely
Very unlikely
Not applicable
60. How likely is it you will earn a degree from here?

Very likely
Somewhat likely
Neutral
Somewhat unlikely
Very unlikely
Not applicable

61. How much does the cost of courses limit how many you take?

Very much
Much
Some
Little
Very little
Not applicable

62. When you think about the advantages and disadvantages of attending this school, how much do you think the advantages outweigh the disadvantages, or vice versa?

Disadvantages far outweigh the advantages
Disadvantages somewhat outweigh the advantages
Disadvantages and advantages are equal
Advantages somewhat outweigh the disadvantages
Advantages far outweigh the disadvantages
Not applicable

63. During the first class session, many instructors present students with an overview of the course. In general, how accurate have these previews been in forecasting what you actually experienced in these courses?

Very accurate
Somewhat accurate
Neutral
Somewhat inaccurate
Very inaccurate
Not applicable
64. How much do the instructors and the courses make you feel like you can do the work successfully?

Very much
Much
Some
Little
Very little
Not applicable

65. Based on your current financial situation, how inclined are you to work more hours per week than you want in order to pay bills?

Very inclined
Somewhat inclined
A little inclined
Not very inclined
Not at all inclined
Not applicable

66. In general, when you receive evaluative feedback from instructors, how useful has it been in figuring out how to improve?

Very useful
Somewhat useful
Neutral
Not very useful
Not at all useful
Not applicable

67. On a typical day, how preoccupied are you with personal troubles?

Very preoccupied
Somewhat preoccupied
A little preoccupied
Not very preoccupied
Not at all preoccupied
Not applicable
68. How much do the faculty at this school care about you?

Very little
Little
Some
Much
Very much
Not applicable

69. How much do you think class attendance should count in grading?

Very much
Much
Some
Very little
Not at all
Not applicable

70. Compared to what you anticipated just before entering college, how much work has been involved in the courses?

Much less than expected
Less than expected
About the same as expected
More than expected
Much more than expected
Not applicable

71. How fair are the tests at this school?

Very unfair
Somewhat unfair
Neutral
Somewhat fair
Very fair
Not applicable
72. The life of a college student typically has both positive and negative aspects. At this time, would you say that the positives outweigh the negatives, or vice versa?

Positives far outweigh the negatives
Positives somewhat outweigh the negatives
Positives and negatives are equal
Negatives somewhat outweigh the positives
Negatives far outweigh the positives
Not applicable

73. How clear have the instructors and syllabi usually been in detailing what you need to do in order to be successful in courses?

Very unclear
Somewhat unclear
Neutral
Somewhat clear
Very clear
Not applicable

74. On a typical day, how much do you worry about getting your work done on time?

Very much
Much
Some
A little
Very little
Not applicable

75. Relative to what you expected when beginning college, how interesting have you found class sessions to be?

Much less interesting
Less interesting
About as interesting as expected
More interesting
Much more interesting
Not applicable
76. How much loyalty do you feel to this college, based on your experiences here?

- Very much loyalty
- Much loyalty
- Some loyalty
- Little loyalty
- Very little loyalty
- Not applicable

77. How often do you encounter course work that makes you wonder whether you can do it successfully?

- Very often
- Somewhat often
- Sometimes
- Rarely
- Very rarely
- Not applicable

78. If you are supposed to complete a reading assignment before the next class session, how likely are you to actually do it?

- Very likely
- Somewhat likely
- Neutral
- Somewhat unlikely
- Very unlikely
- Not applicable

79. How good is your school performance relative to the expectations of your parents or others who are important to you?

- Far below their expectations
- Below their expectations
- About what they expected
- Better than they expected
- Much better than they expected
- Not applicable
80. If the costs of attending college rise in upcoming semesters, how much strain would that place on your personal budget?

A very large strain
Somewhat of a strain
Neutral
A little strain
Hardly any strain at all
Not applicable

81. How organized are you in terms of keeping track of upcoming assignments and tests?

Very organized
Somewhat organized
Neutral
Somewhat disorganized
Very disorganized
Not applicable