

AGRIBUSINESS DEPARTMENT RECRUITMENT STUDY

Presented to the  
Faculty of the Agribusiness Department  
California Polytechnic State University

In Partial Fulfillment  
of the Requirements for the Degree  
Bachelor of Science

by  
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## ABSTRACT

The Agribusiness (AGB) Department within the College of Agriculture, Food, and Environmental Sciences (CAFES) of California Polytechnic State University (Cal Poly) is interested in understanding why AGB freshmen are motivated to choose AGB as their major. Consequently, this recruitment study was undertaken to assist the Department in determining why freshmen chose AGB as their major. This study also attempts to assist the Department in understanding freshmen's overall experience applying to Cal Poly and their perceptions related to agricultural business.

Two surveys were created and used to collect data on freshmen's overall application experience and perceptions surrounding agricultural business. The collected data was then analyzed through descriptive statistical testing, as well as hypothesis testing.

The results of the study suggest that freshmen become more exposed to AGB through classes, major-related activities, extracurricular opportunities, and alike. This exposure influences their perceptions of and attitudes toward AGB to the extent that their interest in the industry gradually increases over time, specifically from the start to the end of the quarter. This increase in interest has long-term implications, as freshmen become inspired to continue experiencing AGB in all its facets by exploring internship opportunities, pursuing networking opportunities with professionals at events, like Ag Showcase, and more.

This suggests the importance of having and requiring all freshmen to take an introductory class such as Introduction to Agribusiness, AGB 101. An introductory class serves as a foundation for freshmen, providing them with a clear understanding of the industry while simultaneously and indirectly helping them to identify aspects within the industry they enjoy and could potentially transform into a successful career.

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## Chapter 1

### INTRODUCTION

There seems to be a resurgence of interest in agricultural bachelor's degree programs. Enrollment in agricultural bachelor's degree programs nationwide “grew by 21.8% from 2005 to 2008” (Hansel, 2009). In 2012, the College of Agriculture at the California State University Chico experienced a 14% growth in enrollment in 2012 (CSU Chico, 2013). In the same year, Chico's Agribusiness Department grew by 43% (CSU Chico, 2013). Agriculture programs at Penn State University have increased by 40% since 2004 (Krogstad, 2012). University of Connecticut's College of Agriculture and Natural Resources “has more than doubled since 2004” (Krogstad, 2012). Oregon State University's College of Agricultural Sciences increased by more than 40% in 2012 (Hearden, 2013).

The deans of these colleges realize a trend among recent agriculture college graduates—that they are interested in “the big problems of the day,” like obesity and food safety (Krogstad, 2012). Andrea Cox, the assistant director of recruitment and retention of the COA at Washington State University, agrees, stating, “. . .students are interested in working with areas that will be relevant to society” (Hearden, 2013). The increasing job market in agriculture, Cox points out, provides an incentive for students to pursue an agriculture degree. Agriculture is becoming “hip,” as students realize that they can earn a living and live a rewarding life working to find solutions to the crises society faces today (Hearden, 2013).

Despite these enrollment increases, the number of farms in the United States continues to decrease. In 1978, there were 2.4 million farms (Hansel, 2009). More than thirty years later, this number has decreased to 2.2 million farms (Hansel, 2009). The increase in enrollment given this decline in farms suggests that students no longer assume that majoring in agriculture translates to farm work. Students realize they have career options—from pest control advisers and crop consultants to food marketers and sales consultants.

Interested in maintaining this upward trend in enrollment, colleges of agriculture are surveying their students and adjusting their recruitment strategies accordingly. In doing so, colleges of agriculture are learning more about their students, such as their motivations for pursuing a degree in agriculture. This information is useful when designing effective recruitment programs. The colleges of agriculture with a clear understanding of prospective students—and that have recruitment strategies which reflect this understanding—attract more students.

The Agribusiness (AGB) Department within the College of Agriculture, Food, and Environmental Sciences (CAFES) of California Polytechnic State University (Cal Poly) is interested in understanding AGB freshmen and their experiences applying to Cal Poly. The department wants students who are passionate about and excited to work in the AGB industry. These students represent the future leaders of the global AGB industry.

To learn more about freshmen, a recruitment study was conducted during the fall quarter of 2013. The purpose of this study was to understand freshmen and the reasons behind why they pursued a degree in AGB, as well as their perceptions of and attitudes toward AGB in general.

### Problem Statement

The AGB Department needs to implement a recruitment strategy that encourages prospective students to major in AGB. In doing so, the Department can offset declining applications.

### Hypothesis

Over the quarter, as freshmen become more exposed to AGB through in-class projects, industry speakers, and introductory material about the agribusiness industry, their perceptions of and attitudes toward AGB change; that is, freshmen become more interested in AGB at the end of the quarter as compared to the beginning of the quarter.

### Objectives

- 1) To determine factors that influence freshmen's decision to major in AGB.
- 2) To assess freshmen's attitudes toward agriculture and agriculture education.
- 3) To identify freshmen's agricultural career and advanced education plans.

### Significance of the Study

It is important that this study was undertaken because it revealed freshmen's motivations for pursuing a degree in AGB. The results of this study will benefit the AGB Department. The Department will find the results most useful when designing and creating recruitment strategies. This research will also benefit any university, college, or individual interested in boosting enrollment into AGB and colleges of agriculture.

## Chapter 2

### REVIEW OF LITERATURE

#### Survey Research Design

A research design provides a guideline for conducting market research (Pearson, 2010). There are six steps to the marketing research process: problem definition, approach to problem, research design, field work, data preparation and analysis, and report preparation and presentation (Pearson, 2010). When creating a research design, the survey method should be considered because it provides a precise way to classify information (Fontela, 2013).

In the survey method, people are asked questions about certain topics. Surveying is the process of asking a sample of interest questions and using their answers to produce statistics about a particular aspect of the sample of interest (Fowler, 2009). Surveys are used for a multitude of purposes, such as measuring public opinion, and by various entities, such as newspapers and politicians.

Depending on the nature of the research, surveys can be used for either non-probability or probability samples. Non-probability samples are used for exploratory research, or research that intends to create ideas and gain insights (Pearson, 2010). This

recruitment study used a non-probability sample. The insights gained from this exploratory research will help the AGB Department create ideas for ways to enhance recruitment.

There are many ways to conduct surveys, including in-person, by mail, by telephone, and electronically by the computer (Pearson, 2010). When choosing a method, it is important to consider all relevant factors, such as sample size. It is also important to consider the amount of funding available to conduct a survey; some survey methods are more expensive, time-consuming, and labor-intensive than others (Pearson, 2010). An example of an inexpensive and quick way to survey respondents is an electronic survey method. Electronic surveying can take place either through e-mail or the Internet (Pearson, 2010). This recruitment study used the Internet to survey freshmen due to budget constraints and the availability of Internet access on campus.

An online survey is also most ideal because it avoids the risk of interviewer bias. Interviewer bias arises when the interviewer misinterprets the survey questions, imposing their personal opinions, judgments, and attitudes on the respondent and affecting the respondent's ability to answer the question (Pearson, 2010). There are several ways interviewer bias can occur, including: stereotyping, inconsistency in questioning, first-impression error, negative emphasis, cultural noise, nonverbal bias, contrast effect, and similar-to-me error (Human Resources, 2006).

Despite interviewer bias and other survey method disadvantages, surveys are especially valuable because they provide the data necessary to conduct statistical testing. Statistical testing is important because it is used to generate results about a sample that can then be analyzed. It is important to note that data should always be entered, cleaned, and organized before any basic analyses and statistical testing occurs (Pearson, 2010).

Basic analyses include frequency distribution and chi-squared test statistic. Both a frequency distribution and chi-squared test statistic were conducted for the appropriate survey questions. A frequency distribution is a mathematical distribution that focuses on one variable at a time (Pearson, 2010). The frequency for each value of the variable is calculated to obtain a count of each value associated with a variable (Pearson, 2010). The counts are typically expressed in percents. A frequency distribution also provides insight into missing, extreme, or out-of-range values, as well as the central tendency and variability associated with the distribution (Pearson, 2010). After frequencies have been calculated, chi-squared testing was conducted. A chi-square statistic tests whether an observed association between more than one variable in a cross-tabulation is statistically significant (Pearson, 2010). Cross-tabulation is a statistical method used to describe two or more variables at the same time (Pearson, 2010).

Statistical testing also involves hypothesis testing. Hypothesis testing involves 8 steps, including: formulating the null and alternative hypotheses, selecting the appropriate test, determining alpha, or the level of significance, collecting data and calculating the test statistic, finding the p-value, or the probability associated with the test statistic, comparing the p-value to the level of significance, rejecting or failing to reject the null hypothesis, and concluding by either accepting the null or alternative hypothesis (Pearson, 2010). When conducting hypothesis testing, it is important not to make incorrect inferences about a population. Incorrect inferences can be made two ways. The first type of error, a type-I error, occurs when the null hypothesis is rejected when it is actually true. The second type of error, a type-II error, occurs when the null hypothesis fails to be rejected when it is actually false (Pearson, 2010).

## Student Motivations for Enrolling in COAs

Studies conducted by Cole and Thompson (1999) and Scofield (1995) found that parents had the most influence on whether or not students chose to attend college. Behind parents, the researchers found friends, high school teachers, and role models to have a significant influence on students' decisions. Researchers studying freshmen at The Ohio State University, on the other hand, found conflicting results; they found that high school counselors, teachers, and extension workers had the least influence (Donnermeyer and Kreps, 1994). Previous experience in farming or agriculture, a desire to live a rural lifestyle, and a preference for working with animals were the factors with the greatest influence on The Ohio State University freshmen (Donnermeyer and Kreps, 1994). Job opportunities and parental influence followed in fourth and fifth place, respectively (Donnermeyer and Kreps, 1994). Although the different results warrant further research, the studies suggest that limited success will be achieved if colleges of agriculture continue to rely solely on outside sources of influence. Donnermeyer and Kreps (1994) suggest colleges of agriculture start taking a more active role in attracting prospective students to their campuses.

Other important factors include college tuition and costs, scholarships and financial aid, location of the university or college, the effectiveness of the college's communication, and students' interests (Robinson et al., 2007). According to Bradley (2000), individuals with an interest in the outdoors or who grew up gardening are more likely to pursue agriculture-related majors and enjoy working in the agriculture industry. For instance, the study found that 88% of horticulture majors experienced working in a garden, of that 26.9% had more than eight years of gardening experience. This research suggests that colleges of agriculture

focus on high schools that already have horticulture or gardening programs, as these students are more likely to enter into horticulture and agriculture-related departments at the post-secondary school level.

## Sources of Information Used by College of Agriculture Enrollees

There are many ways prospective students learn about colleges of agriculture. However, the effectiveness of each information resource varies. Cole and Thompson (1999) found publications and printed literature as the most valuable sources of information for students. A College of Agriculture, Food and Natural Resources at the University of Missouri (U of M) study found that 65% of first- and second-time enrollees used college publications to choose their college and 70% indicated that the publications provided the information needed to choose a college (Robinson et al., 2007). The college website, however, was used least by U of M enrollees for information purposes. Robinson et al. (2007) suggests making websites for the undergraduate, graduate, and other programs more differentiated so that students can easily tell the difference between the offered programs.

Visits to campus and letters mailed to prospective students from college admissions representatives were other sources of information used by college of agriculture enrollees (Cole and Thompson, 1999). Robinson et al. (2007) found that 75% of U of M first- and second-time enrollees agreed with the statement: “Visiting campus provided them with the information needed to choose a college”.

Donnerymeyer and Kreps (1994) found that media oriented marketing efforts were ineffective. Freshmen ranked mass media methods (radio, television, newspapers, magazines, and farm journals) as having the least influence on their decision to enroll in agriculture (Donnerymeyer and Kreps, 1994). The researchers suggest that media-oriented marketing campaigns be reserved for prospective students from urban or city environments. These students tend to have a more limited view of agriculture.

Regardless of the extent to which media marketing is used, media marketing should not dominate college recruitment strategies; but, rather, be used in conjunction with other recruitment strategies (Donnermeyer and Kreps, 1994).

## Recruitment Strategies for Colleges of Agriculture

Successful recruitment efforts focus on the needs and motivations of the student. Prospective students often need information and recruitment strategies should respond to this need by providing adequate information. Recruitment strategies should provide enough information so that prospective students are left with an understanding of what it takes to succeed in his or her major of choice (Robinson et al., 2007). Having a thorough understanding of students' motivations is also crucial to having a successful recruitment program (Donnermeyer and Kreps, 1994). Information about agriculture students' personalities in conjunction with an understanding of student motivations would facilitate recruiters in targeting future agriculture students. Information about student values and beliefs would similarly be beneficial, and this information would further help recruiters understand agriculture student behavior (Skaggs, 1992).

Among recruiting students with different personality types, goals of effective student recruitment programs include showing students how many career opportunities exist in agriculture, as well as dispelling myths related to agriculture, agricultural education, and the agriculture industry. The College of Agriculture and Natural Resources at Michigan State University (MSU) is an example of a college working to increase diversity and dispel myths about agriculture student demographics through recruitment. The College of Agriculture and Natural Resources developed a seven-week Minority Apprenticeship Program (MAP) to increase recruitment of minority students. The program creators found that 20% of students who participated in MAP attended MSU. Almost half of the former MAP participants who attended MSU enrolled in the College of Agriculture and Natural Resources (Gardner, 1991).

Universities and colleges are responding to these results by duplicating MAP or designing similar programs (Gardner, 1991).

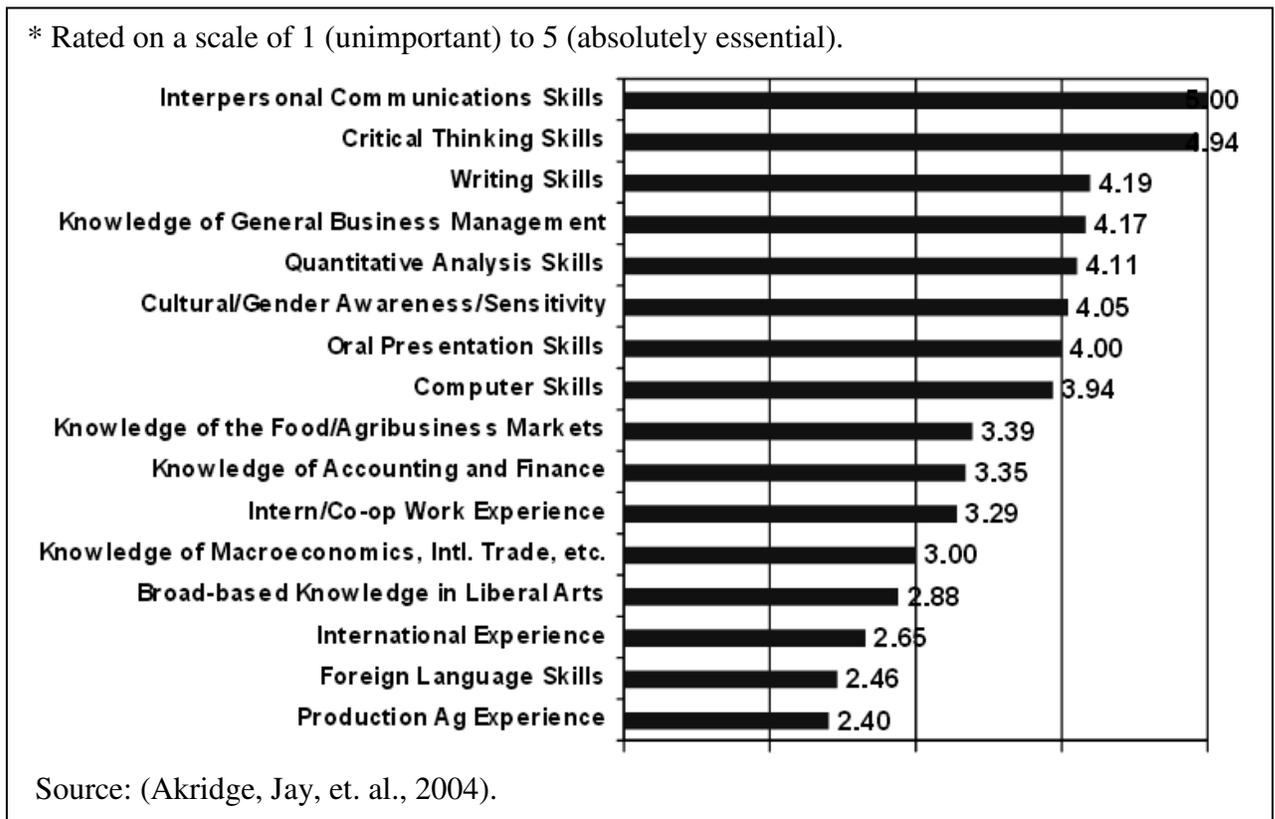
The College of Agriculture at the University of Georgia designed a similar event, called “Ag Horizons: A Career Institute.” The purpose of the program is to expose high school students to the campus and increase their awareness and appreciation for agriculture. As more colleges of agriculture start to create and implement summer student recruitment programs, Moore et al. (2013) advises that these colleges embrace the millennial generation by creating a virtual—rather than traditional—learning environment in which students are taught about innovation and the relationship between technology and agribusiness.

Focusing on agribusinesses and determining what factors agribusinesses look for in graduates will also make a recruitment strategy more effective. The National Food and Agribusiness Management Education Commission interviewed 26 senior leaders in the agribusiness industry during spring of 2003. Industry leaders considered interpersonal communication skills as absolutely essential and critical thinking skills, writing skills, knowledge of general business, quantitative analysis skills, and oral presentation skills as essential (Akridge et. al., 2004). Figure 1. displays the ratings of skills, abilities, and experiences desired in new employees with the potential to become future company managers and leaders.

Major shortcomings of new hires according to industry leaders included the ability to work in groups or a team environment, a lack of “impactive internship/cooperative learning experiences,” an absence of interpersonal communication skills and international experiences, as well as a lack of involvement in leadership and extracurricular opportunities (Akridge et. al., 2004). Industry leaders also want new hires to be more exposed to “mega

influences” affecting the agribusiness industry and to have a more extensive view of diversity (Akridge et. al., 2004).

**Figure 1. Ratings of skills, capabilities, and experiences sought in new hires with the potential to become future company leaders\***



In response to these gaps, the Commission suggested academia increase the level of diversity, in terms of not only race, gender, and culture, but thought as well. The Commission also suggested academia listen to agribusinesses and maintain their competitive edge by preparing students for the future of agribusiness and not the past. Alongside listening, the

Commission advised academia to develop stronger relationships with agribusinesses, such as by “sharing resources, courses, faculty, etc.” (Akridge et. al., 2004).

According to Boland, the future agribusiness task force will be international. Boland emphasizes the need for new hires to have a basic understanding of the “key functional knowledge and tools for operating firms within a global marketplace” (Boland, 2012.). After conducting 19 personal interviews with industry professionals, he found that employers desire new hires willing to move domestically and internationally, who have agricultural experience through working or living on a farm, and have experience working in “diverse, multicultural, international teams on complex projects” (Boland, 2012.). He also notes that language—although not considered a requirement—is beneficial in the eyes of employers.

Strategic colleges of agriculture will adopt recruitment methods that emphasize the ways and extent to which they mold their students to meet these future job qualifications and expectations.

## Chapter 3

### METHODOLOGY

#### Procedures for Data Collection

The purpose of this study was to understand the perceptions of freshmen and their underlying motivations to pursue a college career in agribusiness. To test this hypothesis, an electronic survey was used. Prior to administering the survey, a Human Subjects Protocol Approval Form was completed and submitted electronically to the Chair of the Cal Poly Human Subjects Committee.

An electronic survey is a type of convenience and non-probability sampling (Pearson, 2010). Convenience sampling is frequently used in these types of exploratory research studies (Pearson, 2010). Exploratory research is a type of research that focuses on obtaining qualitative data, gaining insights, and creating ideas (Pearson, 2010). By using a convenience sampling technique, qualitative data about the freshmen was obtained. The qualitative data offered insight into the freshmen's perceptions.

Insights about a population usually cannot be drawn from convenience sampling, unless the sample participants have the same characteristics as the defining characteristics of the target population (Pearson, 2010). This convenience sampling limitation did not affect

this study because the freshmen were both the sample participants and the target population; hence, the characteristics of the sample participants and the target population were the same.

Electronic surveys are preferred because they are inexpensive and quick. They also remove any risk of interviewer bias (Pearson, 2010). Disadvantages of this survey method include low sample control, no control of environment, representativeness and low response rate (Pearson, 2010). This study used a fixed sample. This addresses the low sample control and low response rate disadvantages because the goal response rate and sample number were already known. Low sample control was addressed by incentivizing the freshmen with class credit for their participation in the survey.

To address representativeness, the sample pool for this study was controlled to prevent misrepresenting freshmen. The freshmen enrolled in Dr. Lynn Hamilton's class, Introduction to Agribusiness, AGB 101, who all had Internet access, participated in the survey. Cal Poly provides a wireless connection on campus and all freshmen live on campus their first year of college. The environment in which participants took the survey is insignificant; the freshmen completed the survey in any location with an available connection to the Internet.

The survey was written in a Word Document. Once reviewed and pre-tested for errors and bias, the survey questions were transferred to "Survey Monkey," an online survey provider (Survey Monkey). A link generated by "Survey Monkey" to the survey was electronically mailed to the freshmen. Electronically mailing the link to the survey prevented multiple survey responses, as well as responses from random or unwanted web surfers (Pearson, 2010).

The survey had three objectives: 1) To identify factors that influence freshmen's decision to major in AGB; 2) To assess freshmen's attitudes toward AGB; and 3) To determine the extent to which freshmen see themselves working in the AGB industry. Survey questions 5 through 8 relate to the first objective and ask students about AGB and whether AGB was their first choice of major. Question 10 through 14 also relate to the first objective by inquiring about the various ways students found out about AGB. Question 9 relates to the second survey objective by asking participants about what they think about when they hear the words, "agricultural business." Questions 21 through 24 relate to the third objective by asking students about their future careers in AGB.

Each question can be classified by the type of scale of measurement. Four scales of measurement exist: nominal, ordinal, interval, and ratio. This survey used nominal and ordinal scales of measurement. A nominal scale of measurement provides a way "to classify cases into categories, but not to rank the cases or describe a degree of difference between the cases in different categories" (Hanneman, 2013). An ordinal scale of measurement builds on the information provided by nominal variables. Not only do ordinal variables convey the "category each case falls into," but they reveal the rank of the variable and show "if it is ranked more highly, the same, or less highly than another case" (Hanneman, 2013). The scales of measure for each question include: Questions 1 through 12, nominal scale; Question 13, ordinal; Questions 14 through 18, nominal; Questions 19 through 21, ordinal; Questions 22 through 30, nominal.

We wanted to compare freshmen's perceptions of and attitudes toward AGB over time, specifically from the beginning to the end of the quarter. A follow-up survey (Appendix B) was created and administered using the same data collection procedures as in the first

survey—the only significant difference being that the follow-up survey was administered at the end of the quarter, while the initial survey was administered at the beginning of the quarter. The purpose of the follow-up survey was to observe if freshmen’s views of and attitudes toward AGB had changed over time, and if their first quarter had affected their initial AGB-related career plans. As a result, the short, ten question survey focused less on recruitment and more on freshmen’s thoughts. We asked freshmen to again consider what they thought of when they heard the words “agricultural business (Question 2)” as well as the extent to which they could see themselves working in AGB (Questions 6 to 9).

## Procedures for Data Analysis

After the deadline to complete the survey had passed, the survey responses were electronically collected by “Survey Monkey” and then downloaded in a Microsoft Excel file. Once downloaded, the data within the file was cleaned, organized, and prepared for statistical testing. The statistical tests that were used included: frequency distribution and chi-squared tests.

A frequency distribution presents a count of the number of scores associated with the many values of a single variable (Pearson, 2010). The counts of the number of responses are usually expressed in percentage terms. After frequencies for all nominal and ordinal variables were calculated, chi-squared testing was conducted. A chi-square statistic tests whether an observed association between more than one variable in a cross-tabulation is statistically significant (Pearson, 2010). Following chi-squared testing, hypothesis testing was performed. The goal of hypothesis testing is to invalidate the null hypothesis. A null hypothesis represents the researcher’s expectations when—after they have analyzed the data—the hypothesis is wrong (Hanneman, 2013). The null hypothesis used for this study was that, despite their exposure to the industry, freshmen’s perceptions of and attitudes toward AGB do not change; that is, they do not become more interested in their major at the end of the quarter. The hypothesis that freshmen’s perceptions of and attitudes toward AGB actually do change was tested by applying the hypothesis to the sample of freshmen. The hypothesis provided direction and insight, in terms of what needs to be observed, as well as prior expectations about what should be observed when the investigation begins (Hanneman, 2013).

For the hypothesis testing, p-values were calculated. The p-value represents the risk of being wrong if the null hypothesis is rejected (Hanneman, 213). Specifically, the p-value communicates if the null hypothesis is rejected or failed to be rejected. If the p-value is less than 5% or 0.05, the level of significance, then the null hypothesis is rejected. However, if the p-value is greater than 5% or 0.05, then the null hypothesis fails to be rejected.

Regarding the follow-up survey, the results were collected using the same data analysis procedures as in the first survey outlined and discussed above.

### Assumptions

This study assumed that freshmen were aware of the factors that influenced them to choose AGB as their major when they applied to Cal Poly. This study assumed that freshmen maintain opinions about agriculture and agriculture education. This study assumed that freshmen think about advanced education plans, in addition to their future career in the AGB industry. This study assumed that freshmen truthfully responded to the survey questions.

### Limitations

The results of this study will most directly impact the AGB Department at Cal Poly. Consequently, other colleges, universities, or individuals may not benefit as much from the results of this study. The focus on AGB, as opposed to a wider array of agriculture-related majors, as well as Cal Poly's unique application process—requiring prospective students to

declare a major when applying—are two aspects of this study that make the results less significant for others.

## Chapter 4

### DEVELOPMENT OF THE STUDY

Once the freshmen had taken the survey, the response data was downloaded in an Excel spreadsheet format from Survey Monkey. The response data was then cleaned and organized in order to conduct frequency distribution, chi-squared, and hypothesis testing. At the end of the quarter, these steps were taken again to analyze the results generated by the follow-up survey.

#### Analysis

A total of 166 freshmen were enrolled in Introduction to Agribusiness, AGB 101. The purpose of the class is to orient freshmen to the agribusiness sector of agriculture. The introductory class exposes freshmen to the “breadth, size, scope and management aspects of the agricultural business complex” (Cal Poly Course Catalog). Basic, fundamental concepts, such as the marketing channel, and all aspects of the industry, from production to sales, are discussed. The class primes freshmen for the coming years and equalizes the playing field, in the sense that freshmen from non-farming backgrounds receive an 11-week “crash course” so-to-speak in AGB and the industry. By the end of the quarter, all freshmen—regardless of their background—share a basic understanding of AGB and what the industry entails.

The recruitment survey (Appendix A) was made available to the entire AGB 101 class. Freshmen were given a week to respond. 149 freshmen attempted to take the survey, but 147 (88.5%) freshmen actually finished the survey. The majority of the class was male (64%), while 36% were female (Table 1). We wanted to find out where freshmen were from, so we asked them a series of location-related questions: 1) what region of the state they came from (Table 2), what their specific 5-digit ZIP-code was (Figure 2), and 3) what “type” of area category they considered the place they came from to fall within (Figure 3).

Most of the class represents Northern California (64%), while 35% of the class is from Southern California (Table 2). Only 1 student (1%) is from out of state: Winnetka, IL.

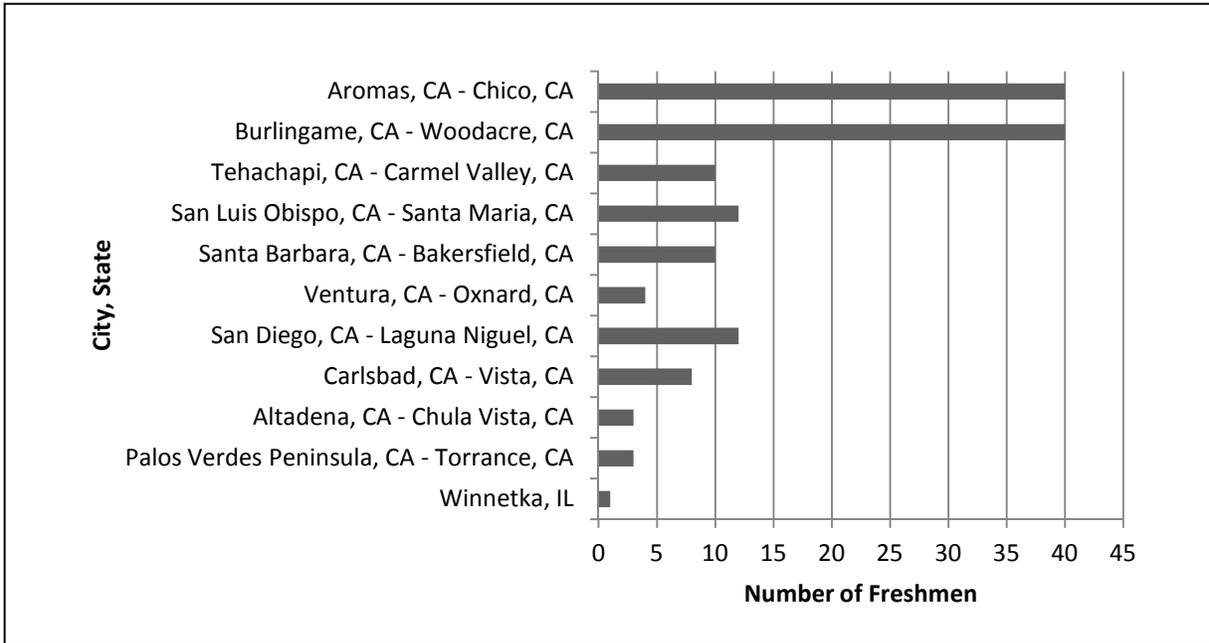
Table 1. Distribution of Freshmen, by Gender

	<b>Number of respondents (n=143)</b>	<b>Percent of respondents</b>
Male	92	64%
Female	51	36%
Total	143	100%

Table 2. Distribution of Freshmen, by Location

I am from ____.	<b>Number of respondents (n=143)</b>	<b>Percent of respondents</b>
The Bay Area/Northern California	92	64%
Southern California	50	35%
Out of state	1	1%
Total	143	100%

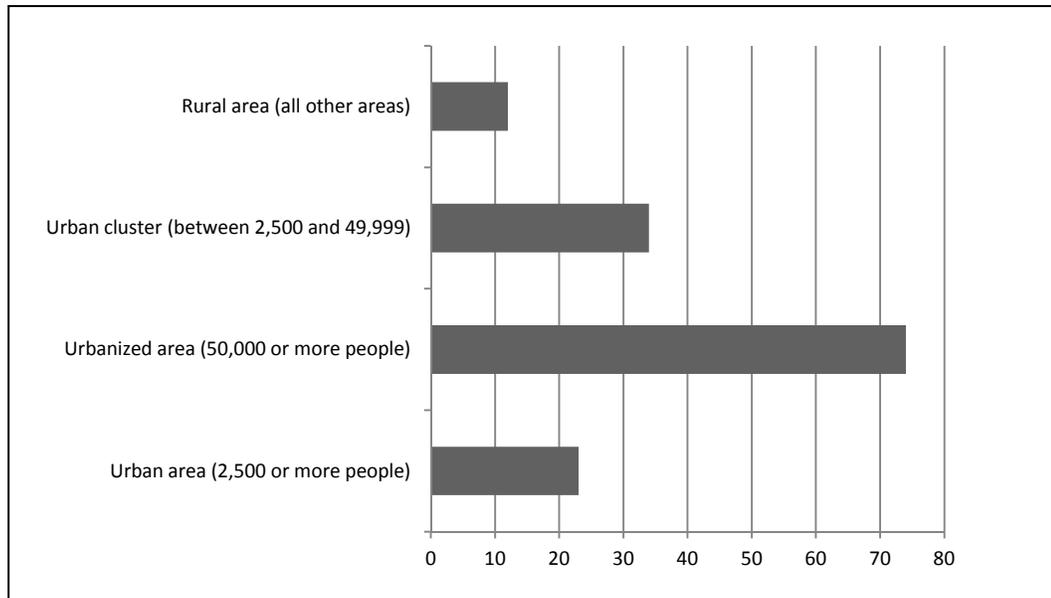
**Figure 2. Distribution of Freshmen, by Location (City, State)**



Regarding the question that asked about the “type” of area, freshmen were presented with four area “types”: Rural, Urban Cluster, Urbanized Area, and Urban Area. The Rural and Urbanized Area type cohorts are clearly differentiated based on the type requirements in parentheses. However, the requirements for the Urban Cluster and Urban Area cohorts are misleading; “between 2,500 and 49,999” and “2,500 or more people” is essentially the same requirement. As a result, this data is inconsistent. Freshmen were likely confused when answering this question, unsure as to which type of area category is the “correct” area that their hometown falls into. When/if a second application of this study is conducted, the type of area cohorts should be reconsidered and paired down to three options: Rural Area, Urban Area *or* Urban Cluster, and Urbanized Area. Despite this inconsistency, over half of the freshmen (52%) come from hometowns that are considered to be an Urbanized Area. 24% of

freshmen are from hometowns that are considered to be Urban Cluster Areas and 16% from Urban Areas. Only 12 freshmen (8%) are from Rural Areas with less than 2,500 people.

**Figure 3. Distribution of Freshmen, by Type of Area**



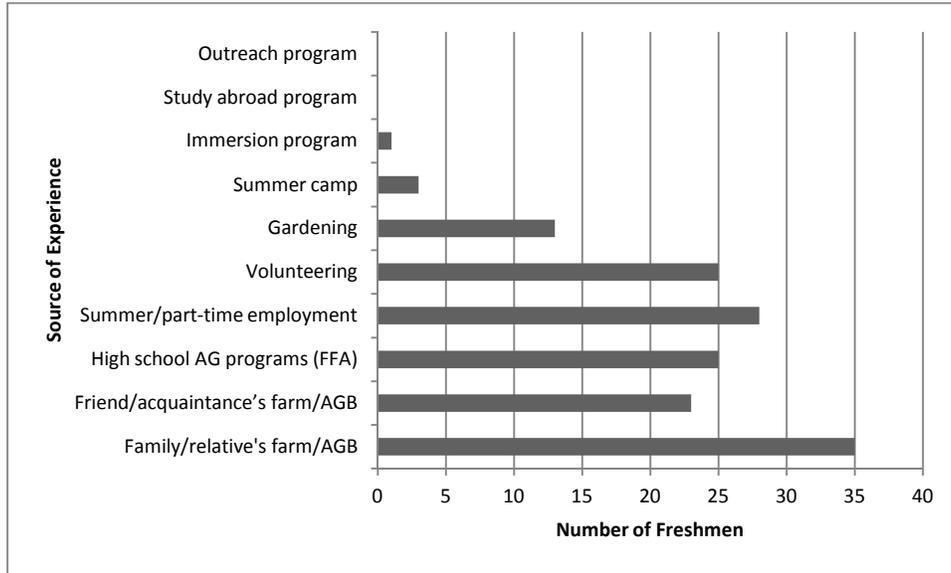
Given that over half of the freshmen are from densely populated areas, it is not surprising that the majority of freshmen (76%) do not come from a family that owns a farm, winery, or other agricultural business. Given the nature of the type of business, agribusinesses typically demand a larger amount of land for production purposes. As a result, agribusinesses are more common in rural areas where more land is available for agricultural uses, as opposed to living purposes.

Although the majority of freshmen do not have a “traditional” background in agriculture or agribusiness—in the sense that they come from a family farm or food-related business—more than half (61%) have experience working in agribusiness. 36% of freshmen

indicated that they do not have any experience, while 3% indicated they were unsure if they had any experience. The difference between those who have experience in AGB and those who considered AGB as their first choice of major was significant, with a p-value of 0.01. A possible explanation is that the experience of working in an agribusiness leaves students with a preview of what pursuing a degree in AGB entails, as students become exposed to agribusiness terminology, concepts, and more while on the job or in a given experience setting.

There is a strong agriculture presence in the state of California. Given this presence, opportunities abound left and right for interested individuals to experience a taste of California agriculture and agriculture-related industries. We were curious to see how freshmen gained their experience working in agribusiness. Although most freshmen do not come from a family that owns an AGB, 23% of freshmen experienced working in AGB on their family/relative's farm or agribusiness. Perhaps their immediate family does not own a farm or AGB, but an extended family member or relative does. This is one possible explanation for the large number of freshmen who indicated that they have experience working in AGB on their family/relative's farm operation or AGB. Fortunately, family is not the only avenue to experience working in AGB. Summer/part-time employment (19%), volunteering (17%), and high school programs, like FFA, (17%) were all major ways freshmen experienced working in AGB.

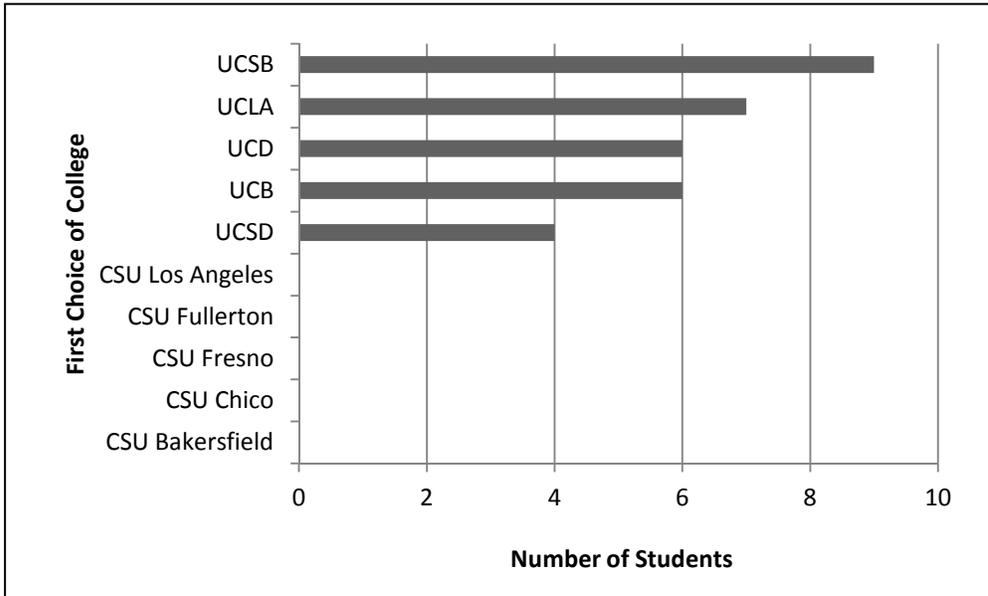
**Figure 4. Freshmen’s Sources of Experience in AGB**



This exposure to agriculture and AGB during high school and the years prior to applying to college is a possible explanation for the high percent (68%) of freshmen who considered Cal Poly to be their first choice for college.

However, we also wanted to consider the 32% of freshmen who felt differently by asking them to indicate their first choice of college (Figure 5). The majority of the first choice universities are not as specialized in agriculture—with the exception of UC Davis—as Cal Poly. An interesting question that could be asked in the second application of this study following this question is “What would you study at your first choice college?” It would be interesting to note the number of freshmen who would continue to pursue a college career in AGB or agriculture-related major despite not attending Cal Poly.

**Figure 5. Freshmen’s First Choice of Major**



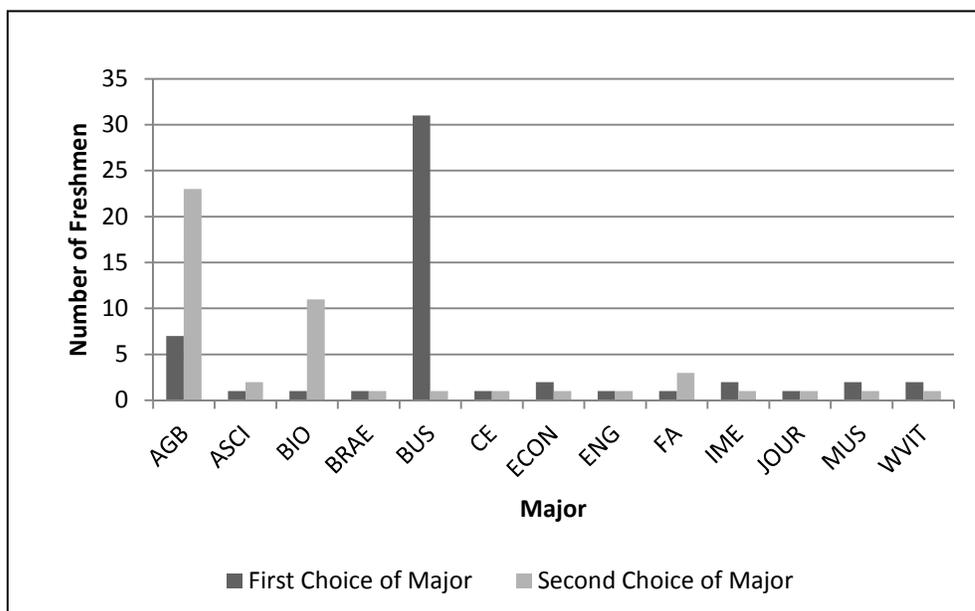
Once we had established the extent to which Cal Poly was freshmen’s first choice of college, we wanted to find out the extent to which AGB was freshmen’s first choice of major—and, if not, what their first choice of major was. Over half (61%) agreed that AGB was their first choice of major. 26% of freshmen disagreed and 12% indicated they were unsure (Table 3). The difference between those freshmen who considered AGB as their first choice of major and those who come from a family who owns an AGB was significant, with a p-value of 0.00. Given their upbringing, it is logical that freshmen who come from a family who own an agribusiness would want to study agribusiness and declare it as their first choice of major.

Table 3. Statement: “Agribusiness was my first choice of major.”

	<b>Number of respondents (n=145)</b>	<b>Percent of respondents</b>
Yes	89	61%
No	38	26%
I'm not sure	18	12%
Total	145	100%

To determine the majors of interest of the freshmen who either answered “No” or “I’m not sure” to the statement “Agribusiness was my first choice of major,” we asked these freshmen (38%) to indicate their first and second choice of major. Most freshmen considered Business to be their first choice of major (Figure 6). This seems to be a common occurrence among AGB freshmen, especially those freshmen who do not come from an agriculture background. These freshmen see little resemblance between business and agribusiness; when in reality, they are essentially the same—just agribusiness is within the context of agriculture. This is an example of one misconception AGB 101 strives to dispel. This trend is also a possible explanation for the large number of freshmen who indicated AGB as their second choice of major, as they realize the similarities between Business and Agribusiness; they consider AGB to be a logical “Plan B,” in case they are denied into the College of Business.

**Figure 6. Freshmen’s First and Second Choice of Major**

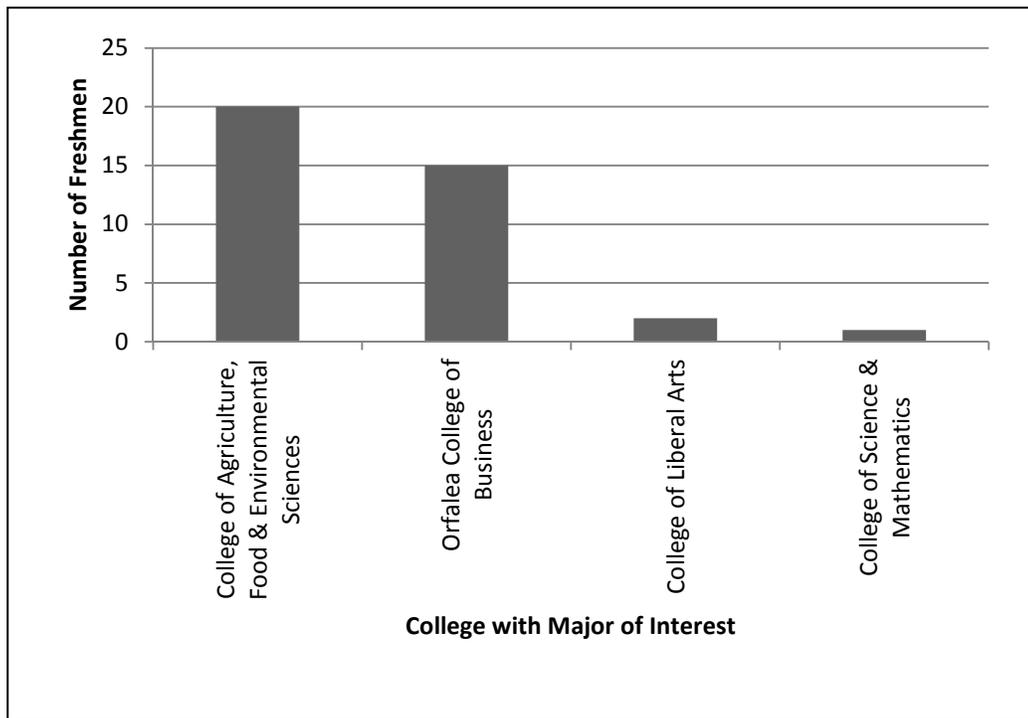


Another option available to freshmen is to go through the process of transferring into another major. 18% of freshmen indicated that they plan on transferring into another major, while 29% indicated that they plan on staying with AGB. More than half (54%) of the freshmen indicated that they are unsure as to whether or not they plan on transferring into another major. This is not surprising, given that the freshmen were only a few weeks into their major; they likely did not have enough experience at the time to make a decision regarding transferring. Of the freshmen who were certain that they plan on transferring, more than half (54%) indicated that they would be transferring into another major within the College of Agriculture, Food, and Environmental Sciences (Figure 7). This could be because some students prefer to pursue majors with a greater focus on the production or management

sides of agriculture, as opposed to the more business and economic related aspects. 39% indicated that the College of Business offers the major they plan on transferring into, while 5% and 3% indicated the College of Liberal Arts and College of Science and Mathematics, respectively. The large number of freshmen intending on transferring into the College of Business is understandable, given the closeness to AGB; however, possibly freshmen are looking for a broader business education that can be applied to a variety of industries, rather than solely agriculture.

**Figure 7. Specific College that Offers Freshmen’s (those who intend on transferring)**

**Major of Interest**



We were curious to see freshmen’s perceptions of AGB regarding how difficult they think the major is. Almost half (48%) considered AGB to be Somewhat Difficult another

almost half (45%) considered AGB to be Moderately Difficult (Table 4). Only 5% indicated that they perceived AGB to be Difficult, while 1% perceived AGB to be an Easy major.

Depending on the AGB Department’s goals, strategies could be implemented to influence prospective students’ perceptions of AGB, in terms of difficulty as a major. Nevertheless, the results suggest the Department is maintaining their standards in a balanced manner; students’ perceptions do not reflect any of the extremes, but rather occupy a middle ground in the Moderate to Somewhat Difficult ranges.

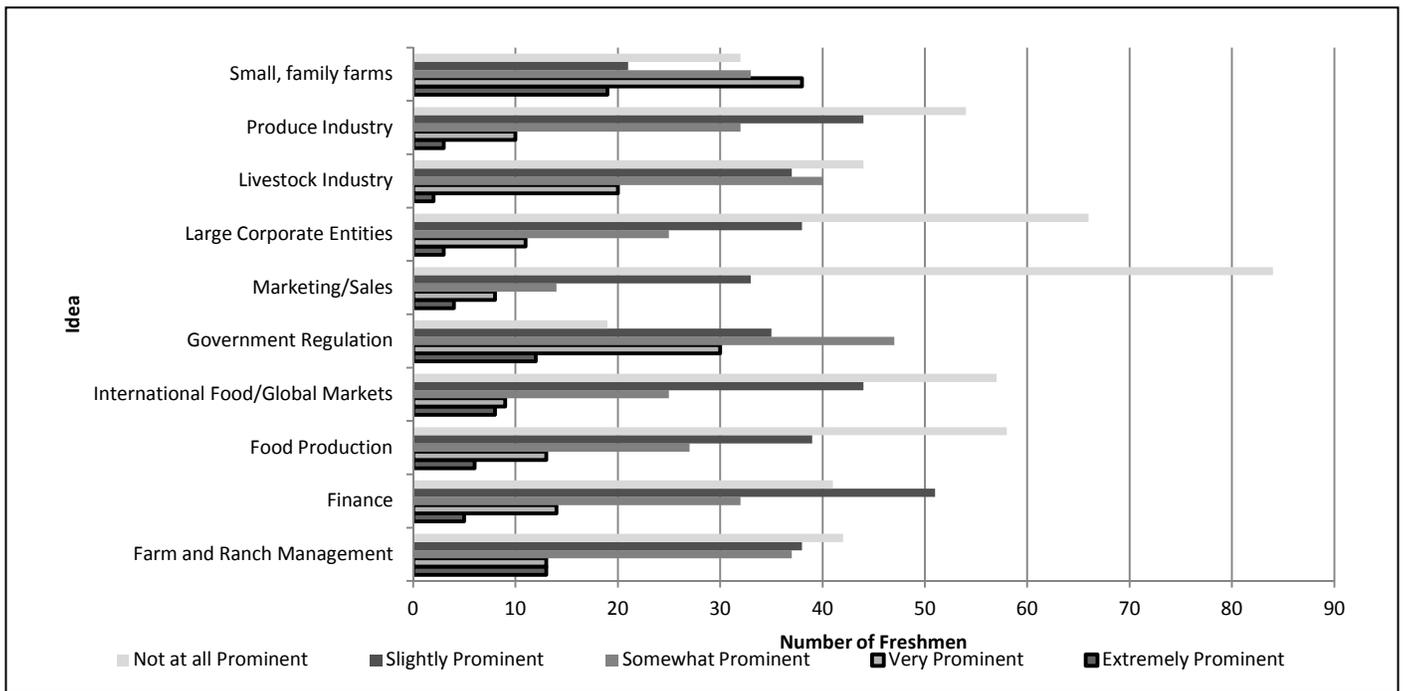
Table 4. Perception of AGB, in terms of Difficulty

	<b>Number of respondents (n=143)</b>	<b>Percent of respondents</b>
Easy	2	1%
Moderate	65	45%
Somewhat Difficult	69	48%
Difficult	7	5%
Total	143	100%

We also wanted to investigate freshmen’s perceptions of AGB regarding what they thought of when they heard the words “agricultural business.” Most freshmen (13%) thought of small, family farms, farm and ranch management (9%), government regulation (8%), and international/global markets (6%) (Figure 8). A possible explanation for the large percentage of freshmen who thought of small, family farms is that these freshmen, prior to taking AGB 101, were unaware of large-scale agriculture and its presence in the domestic and international food system. Naturally, small, family farms is what they originally thought of when they considered agricultural business; when in reality, these small-scale farms produce only a fraction of the food supply compared to large agribusiness, such as Cargill, Tyson, and General Mills. The lack of prominence certain, key ideas, such as marketing/sales, food

production, and specific industries within the broad industry of agribusiness like the produce industry, also point to freshmen’s lack of awareness of the reality of agribusiness and its role in the world on all levels, from regional and national to global. This is why a class like AGB 101 is necessary to provide freshmen with a baseline understanding of agribusiness and the complex system involved in supplying the demand for food.

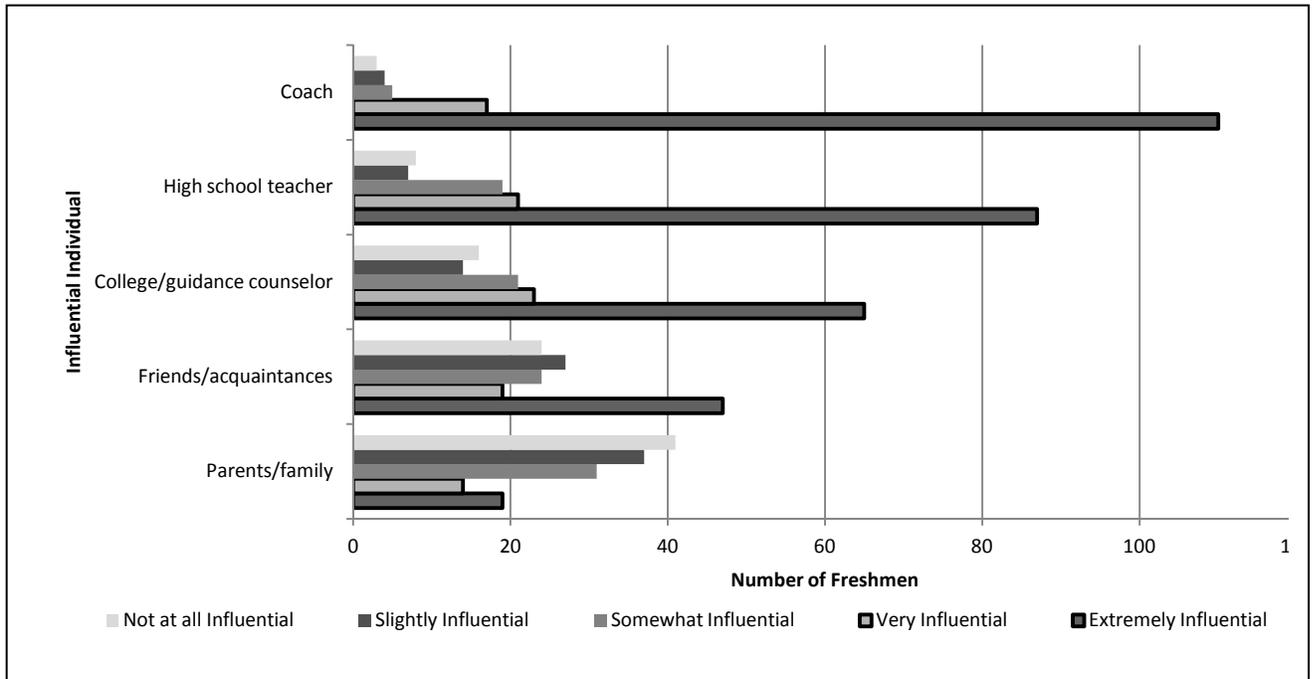
**Figure 8. Freshmen’s Rating of Ideas, in terms of their Prominence when Considering AGB**



People’s perceptions are always changing, freshmen included. For many, their perceptions are influenced by people, such as family members, teachers, and coaches, as well as experiences. To get a better understanding of the influential people in freshmen’s lives, we

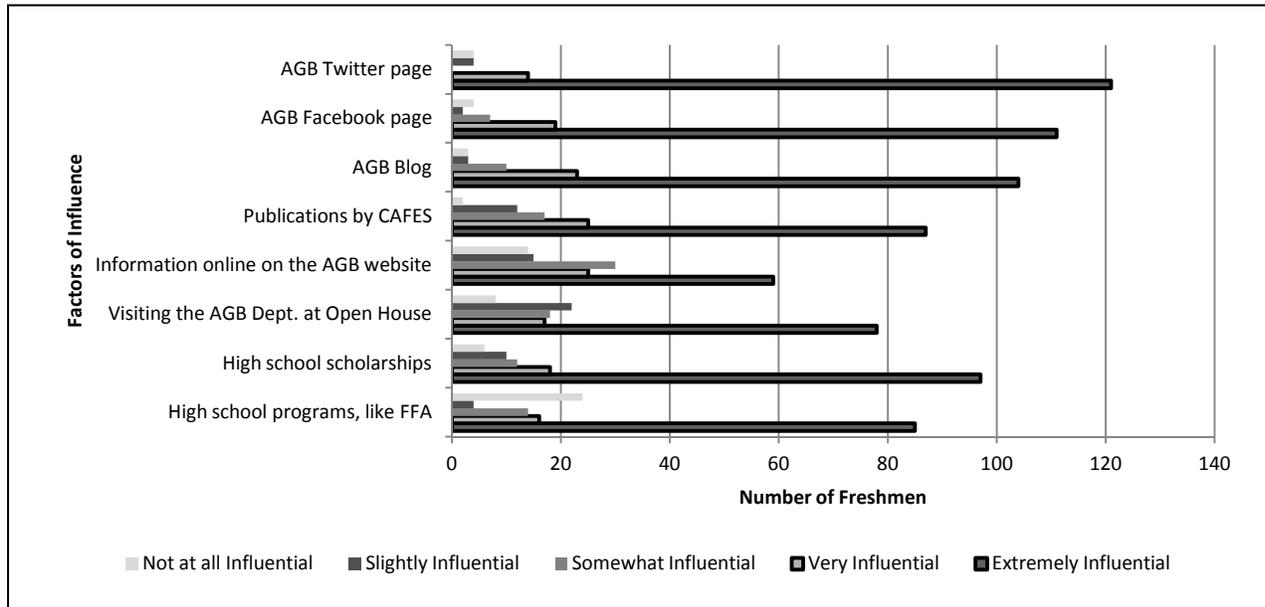
asked freshmen to consider who or what influenced their decision to study AGB. Over half (79%) of freshmen indicated that their coach was Extremely Influential in their decision to major in AGB (Figure 9). It would be interesting to note, if any, the number of freshmen who are athletes and play for Cal Poly. High school teachers (61%), college/guidance counselors (47%), and friends/acquaintances of freshmen (33%) were also Extremely Influential in freshmen's decision to major in AGB. Surprisingly, parents and family were the least Extremely Influential (13%). However, given that most freshmen do not come from families who own an AGB, their parents and family members might not be as exposed to agriculture as other families. Therefore, these parents may be less inclined to encourage their child's decision to major in AGB or an agriculture-related major in general.

**Figure 9. Impact of Influential Individuals on Freshmen’s Decision to Major in AGB**



Alongside influential people, experiences also play an influential role in one’s decision to choose a major. Experiences, such as FFA in high school and visiting a college for the first time, and sources of influences, like pamphlets or publications about a major program distributed at Open House and other orientation-like events, are all considered by freshmen when they decide on their major. We wanted to know the degree to which certain factors (listed on Figure 10) influenced freshmen’s decision to major in AGB.

**Figure 10. Factors and their Influence on Incoming Freshmen’s Decision to Choose AGB**



More than half (85%) indicated that the AGB Twitter page influenced their decision to choose AGB. 78% and 73% of freshmen indicated that the AGB Facebook page and AGB blog influenced their decision, respectively. This large emphasis on social media and technology-based sources of influence is congruent with the freshmen’s generation and their proclivity towards using technology. With the Internet and mobile devices, like the iPhone, people have 24-hour access to a plethora of information. Almost all (94%) of freshmen have a Facebook account (Table 5). However, less than half (46%) use Twitter and only 15% of freshmen indicated that they read blogs (Table 6 and 7). Given that less than half of freshmen use Twitter and only a small portion of freshmen read blogs, the finding that most freshmen thought their decision to major in AGB was influenced by the AGB Twitter and Blog pages

is inconsistent. A possible explanation for this inconsistency is that freshmen could have misread or misunderstood the question, interpreting the question less of “what” and more as “what *would have*” influenced their decision. A recommendation for the future is to reword this question so that freshmen clearly understand what is being asked of them. Another recommendation is to ask “warm-up” questions, such as “Are you aware that the AGB Department has its own Facebook, Twitter, and Blog pages?”, “When was the last time you checked the AGB Facebook, Twitter, and/or Blog pages?”, and “How frequently do you check the AGB Facebook, Twitter, and/or Blog pages?” Asking these types of questions would help to identify areas of potential inconsistency and paint a more accurate picture of future freshmen’s social media use as it relates to the college application process.

Table 5. Distribution of Freshmen, by Facebook Use

	<b>Number of respondents (n=143)</b>	<b>Percent of respondents</b>
I have a Facebook account	134	94%
I do not have a Facebook account	9	6%
Total	143	100%

Table 6. Distribution of Freshmen, by Twitter Use

	<b>Number of respondents (n=143)</b>	<b>Percent of respondents</b>
I do not use Twitter	77	54%
I use Twitter	66	46%
Total	143	100%

Table 7. Distribution of Freshmen, by Blog Use

	<b>Number of respondents (n=143)</b>	<b>Percent of respondents</b>
I do not read blogs	121	85%
I read blogs	22	15%
Total	143	100%

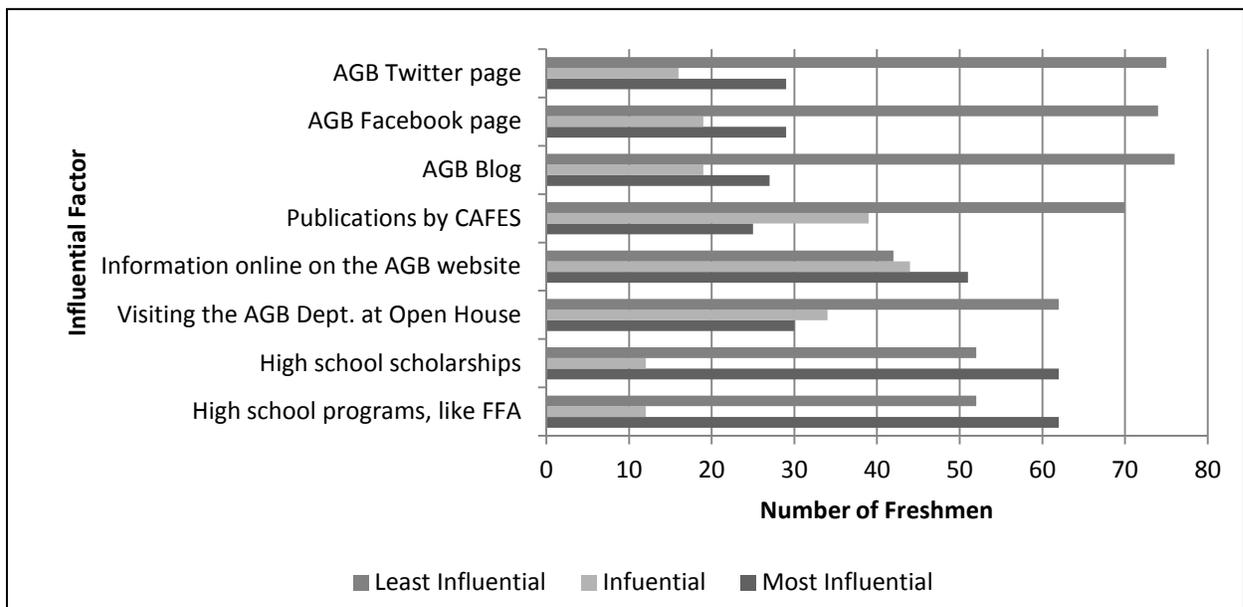
This inconsistency is apparent again in the follow-up question, asking freshmen to rank the list of influential factors on a scale of 1 to 3, 1 (Counter-intuitive; certain scales used in this study use the smallest number in a given scale to represent the highest degree of agreeability. A suggestion for the future is to make the scales uniform and have the largest number in a given scale always represent the highest degree of agreeability) to 3, 1 being the most influential. Interestingly, the AGB Facebook (52%), Twitter (53%), and Blog (54%) pages were considered Least Influential, despite their observed Extremely Influential presence previously mentioned.

The rationale behind this question was to identify the top three influential factors, which could then be taken into consideration come the recruitment strategy design process. Ideally, the AGB Department would focus on these influential factors first, based on their observed influence on freshmen (Figure 11). However, given the inconsistency within the data, the Department might be wise to wait for a second application of this study when survey questions have the opportunity to be reworded and presented more clearly.

In the meantime, the Department could focus on developing the AGB website to better suit the needs of prospective students, as well as planning and executing a great booth at Cal Poly’s annual Open House every spring quarter—almost half (39%) of freshmen rated Open House as Most Influential, while 36% rated the AGB website as Most Influential in

their decision to major in AGB. The AGB website provides a great platform for the Department to advertise their booth to the worldwide web, particularly prospective AGB students.

**Figure 11. Freshmen’s Consideration of the 3 Most Influential Factors Out of All of the Influential Factors**

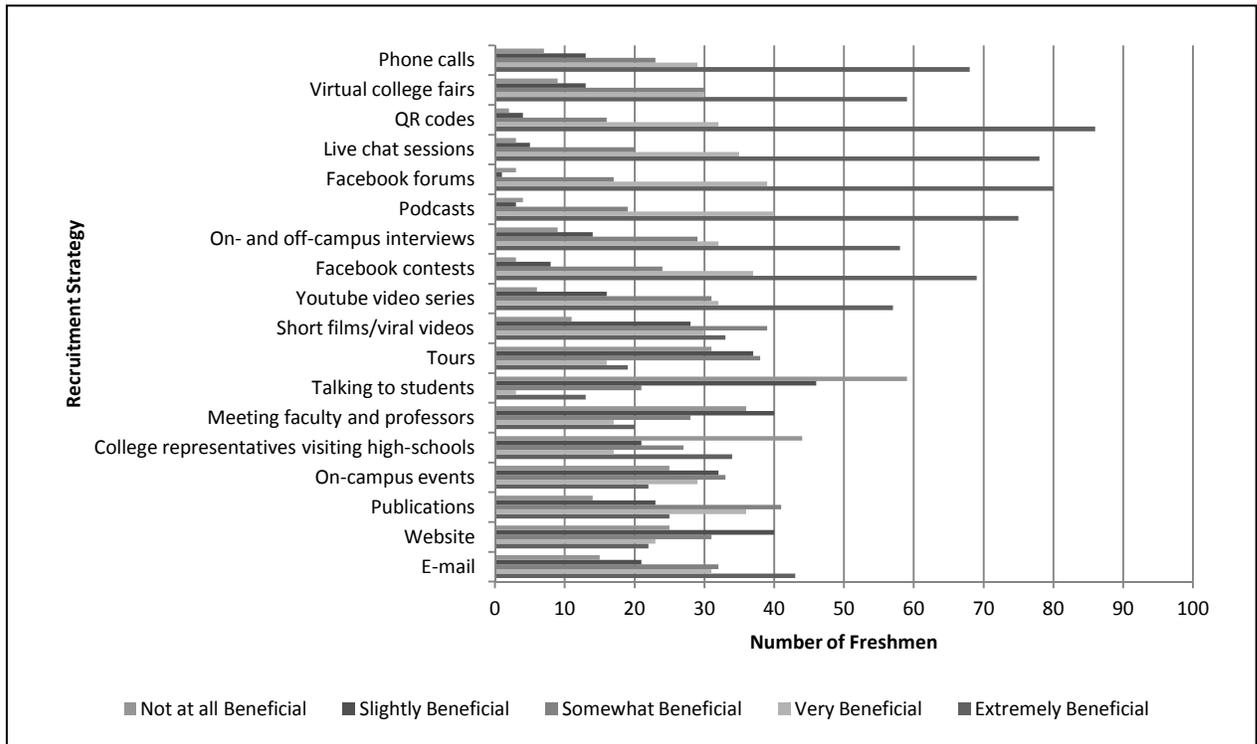


In addition to strategically using the Internet to recruit students, the Department could incorporate other recruitment strategies. We wanted to know if there were other ways to assist prospective students in deciding to major in AGB, so we asked freshmen to consider a list of recruitment strategies, from traditional methods like publications to more innovative modes like QR codes, virtual college fairs, and podcasts, and rate each strategy on the list on a scale from 1 to 5, 5 being the most beneficial (Figure 12). Interestingly, more than half (61%) of freshmen indicated that QR codes would have been an Extremely Beneficial method to facilitate their major decision process. Given the relative “newness” of QR codes,

it is interesting that such a large number of freshmen apparently know about QR codes and understand how they work. Potential follow-up questions could look more into the potential of using QR codes by asking freshmen “How frequently do you use QR codes?” and “Why do you use QR codes?”

The majority of freshmen also indicated that Facebook forums (57%), live chat sessions (55%), and podcasts (53%) would have been Extremely Beneficial. Not surprisingly, these recruitment strategies are heavily technology-focused and driven. They are also more removed from reality, in the sense that prospective students are not physically meeting with recruiters or college representatives; rather, a virtual world is constructed and it is through this world that students learn about their potential major of interest. Depending on the Department’s feelings about creating a virtual AGB major orientation, the Department could consider designing such a system.

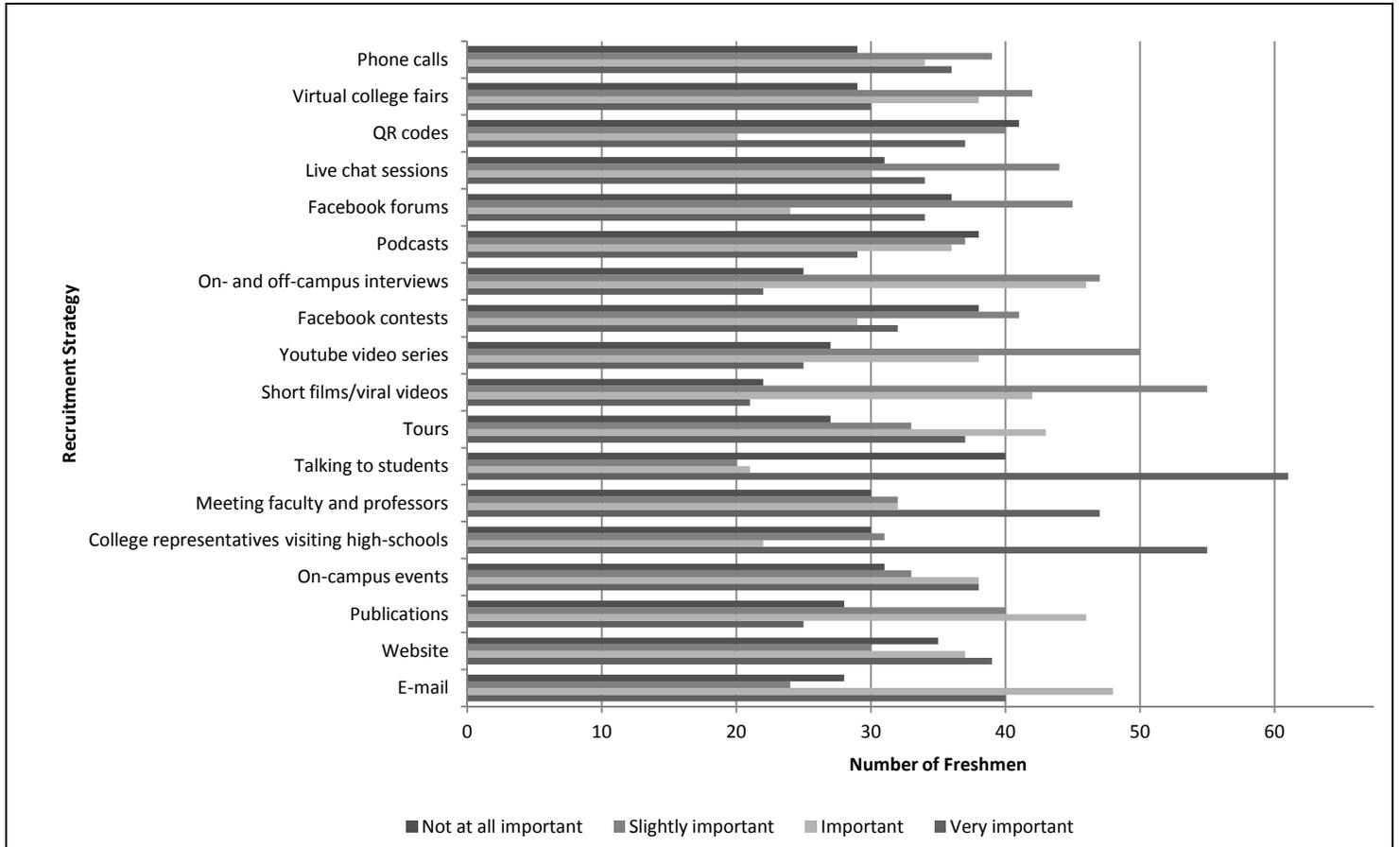
**Figure 12. Recruitment Strategies that would have Helped Freshmen Choose AGB**



In addition to attempting to understand freshmen’s perceptions about recruitment strategies overall, we wanted to determine how freshmen felt about the Department using the various recruitment strategies (Figure 13). The purpose of this question was to attempt to determine freshmen’s expectations of the Department, in terms of how they should use or what they should do with the various recruitment strategies. Interestingly, almost half (43%) of freshmen think it is Very Important that the Department should use students as a recruitment strategy (despite freshmen’s observed preference for technology and virtual-based learning). 40% of freshmen think that it is also Very Important that the Department use college representatives as a recruitment strategy.

QR codes, on the other hand, were interestingly considered by the majority (59%) of freshmen to range between Slightly Important to Not at all Important (despite their previously observed Extremely Beneficial status). This trend is also evident with the other three Extremely Beneficial recruitment strategies; most freshmen considered Facebook forums (32%), live chat sessions (32%), and podcasts (26%) to be only Slightly Important. It is interesting that although most freshmen rated certain recruitment strategies as Extremely Beneficial they did not apparently feel that it would be Very Important that the Department use those Extremely Beneficial recruitment strategies. Evidently, this is a “gap” in the research; perhaps the way the question was worded confused freshmen and caused them to misunderstand what the question was asking. Again, it will be necessary to reword this question come a second application.

**Figure 13. Degree of Importance that the AGB Department Uses a Particular Recruitment Strategy According to Incoming Freshmen**



Extracurricular activities, in addition to classes, offer freshmen another opportunity to experience AGB. To get a better sense of freshmen’s potential club and/or Greek life plans, we asked freshmen what their intentions were. Over half (55%) of freshmen indicated that they plan on joining AGB/AG clubs and/or Greek organizations. 35% of freshmen indicated that they did not know what their plans were yet, while only 10% of freshmen indicated that they have no intentions of joining (Table 8).

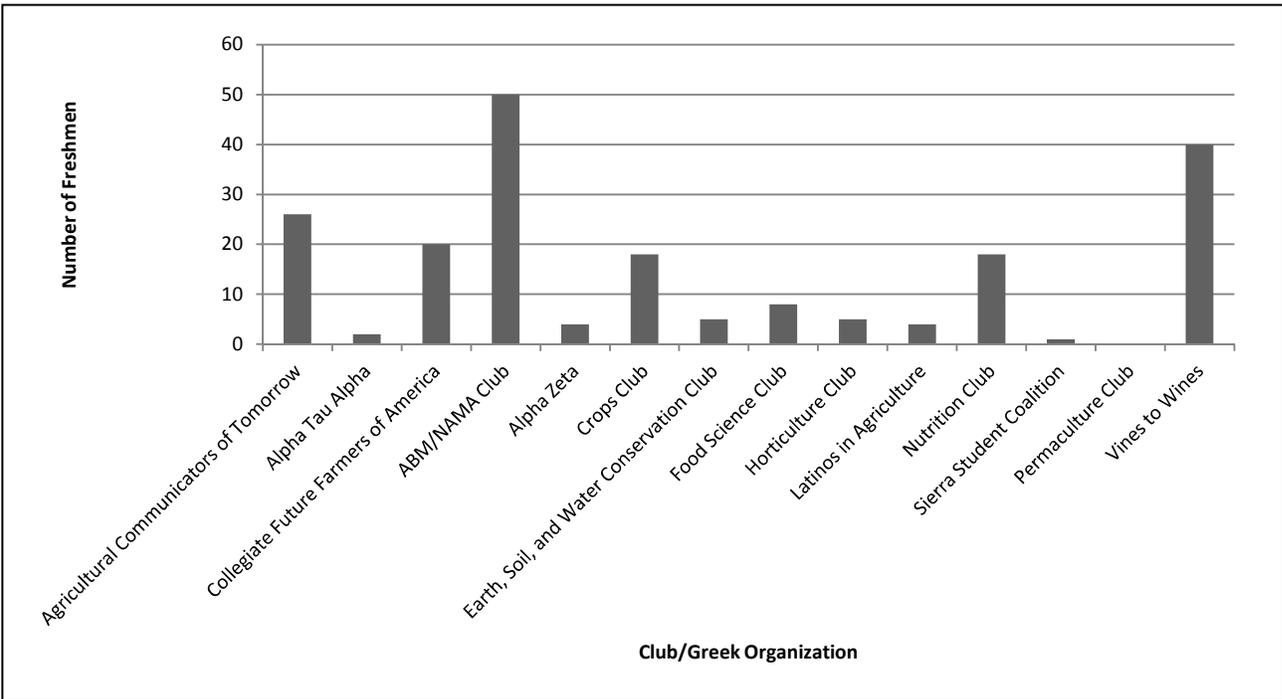
Table 8. Freshmen’s Club and/or Greek Organization Plans

___ plan on joining agribusiness/agriculture clubs and/or Greek organizations?	Number of respondents (n=143)	Percent of respondents
I do	78	55%
I'm not sure if I	50	35%
I do not	15	10%
Total	143	100%

Specifically, we wanted to know the exact club and/or Greek organizations freshmen were interested in. We were curious to see the degree of freshmen who, given their agriculture-related major, were interested in agriculture-related groups. Our rationale was that these types of groups may make the AGB “transition” easier, such as by making agriculture-related material more relatable and fun for freshmen through socials, guest speakers, and alike.

Given their major, it is not surprising that most freshmen desire to be in an agriculture- or AGB-related club, like ABM, and/or Greek Organization, such as Alpha Zeta (Figure 14). 34% of freshmen had plans to join the ABM/NAMA Club, a club that exposes students to industry leaders, networking opportunities, and more. The difference between those who plan on joining ABM/NAMA and those freshmen who considered AGB as their first choice of major was significant, with a p-value of 0.00. 27% of freshmen had plans to join the Vines to Wines club, a popular club that focuses on viticulture and the wine making industry.

**Figure 14. Freshmen’s Plans to Join Clubs and/or Greek Organizations**



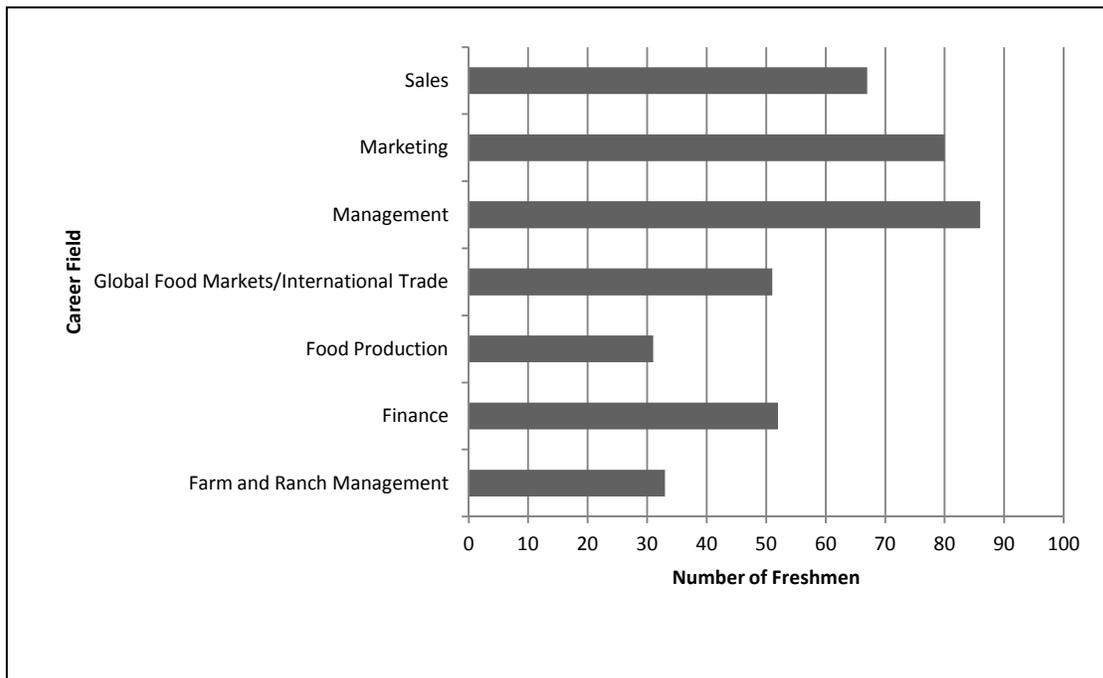
The advantage of meeting industry leaders and people working in the AGB industry through classes, clubs, and other campus-sponsored events for students is that they can consider the extent to which they see themselves working in the field. To get a better idea of how interested freshmen are in working in AGB, we asked freshmen if they plan on working in the industry upon graduation. Half (50%) of freshmen indicated that they do plan on working in the industry (Table 9). Given that freshmen filled out this survey during their first few weeks as AGB students, it is not surprising that 43% of freshmen were unsure. College is a defining time for young people, and it is natural for people not to restrict their future to their educational background and what they studied in college.

Table 9. Statement “\_\_\_\_\_ plan on working in agricultural business.”

	<b>Number of respondents (n=143)</b>	<b>Percent of respondents</b>
I do	71	50%
I'm not sure if	62	43%
I do not	10	7%
Total	143	100%

However, for the half of freshmen who appear certain of their future career plans, it is interesting to note the specific career fields these students indicated that they would desire to work in within the agribusiness industry (Figure 15). Over half (58%) of freshmen plan on working in management positions. 54% of freshmen intend on working in marketing, while 45% of freshmen plan on working in sales. Recalling the observation that most freshmen thought of small, family farms when they heard the words “agricultural business,” it is interesting that most freshmen desire to work in the business tasks within an agribusiness, like management, marketing, and sales, as opposed to production tasks which seem more congruent with the idea of agribusiness as small, family farms. A possible explanation is that AGB 101 freshmen quickly become aware of the translatability between agribusiness and business and, as a result, they realize that the jobs they desire to perform in a general business setting can be extended to any agribusiness.

**Figure 15. Career Fields Freshmen Desire to Work in within the AGB Industry**



Once we had established the specific career fields freshmen wanted to work in, we were curious to see how confident they felt a degree in AGB from Cal Poly would prepare them for that potential career. We asked freshmen to consider the statement, “A degree in AGB from Cal Poly will prepare me for my future in agribusiness.” On average, freshmen strongly agreed that they felt a degree in AGB from Cal Poly would prepare them for their future in agribusiness (Table 10). Given the Department’s longstanding reputation and strong presence in the AGB industry as a whole, it is not surprising that most freshmen believe they are in the “right” spot, in terms of choosing a respectable university to pursue a career in AGB.

After we found out how freshmen felt, in terms of their own capabilities to perform in the future AGB industry, we followed with a question that broadened the concept behind the

initial question. We were curious to see freshmen’s perceptions regarding the AGB industry as a whole, particularly its presence in the future, in terms of job availability. We asked freshmen to consider the statement, “I think good career opportunities exist in agricultural business.” Our basis for this question was that most people pursue a degree believing they will be able to find a career that uses the degree. Freshmen also agreed on average that they believe career opportunities exist in the industry. Males agreed less, with an average agreeability rating of 1.57, whereas females had a higher agreeability rating of 1.41 (Table 11). The difference between those freshmen who believe good career opportunities exist in AGB and those who plan on working in AGB was significant, with a p-value of 0.00. The difference also between those freshmen who believe a degree in AGB from Cal Poly would prepare them for their future in AGB and those freshmen who believe that good career opportunities exist in AGB was significant, with a p-value of 0.00. A possible explanation for this observation is that freshmen perceive a degree in AGB from Cal Poly as a gateway into landing a career within the field after graduation.

Table 10. Statement: "A degree in AGB from Cal Poly will prepare me for my future in agribusiness."

	<b>Average agreeability rating* of freshmen (n=143)</b>
Male	1.39
Female	1.31

Table 11. Statement: "I think good career opportunities exist in agricultural business."

	<b>Average agreeability rating* of freshmen (n=143)</b>
Male	1.57
Female	1.41

\*Rating Scale for Table 10 and 11.

1	Strongly agree
2	Agree
3	Somewhat agree
4	Somewhat disagree
5	Disagree
6	Strongly disagree

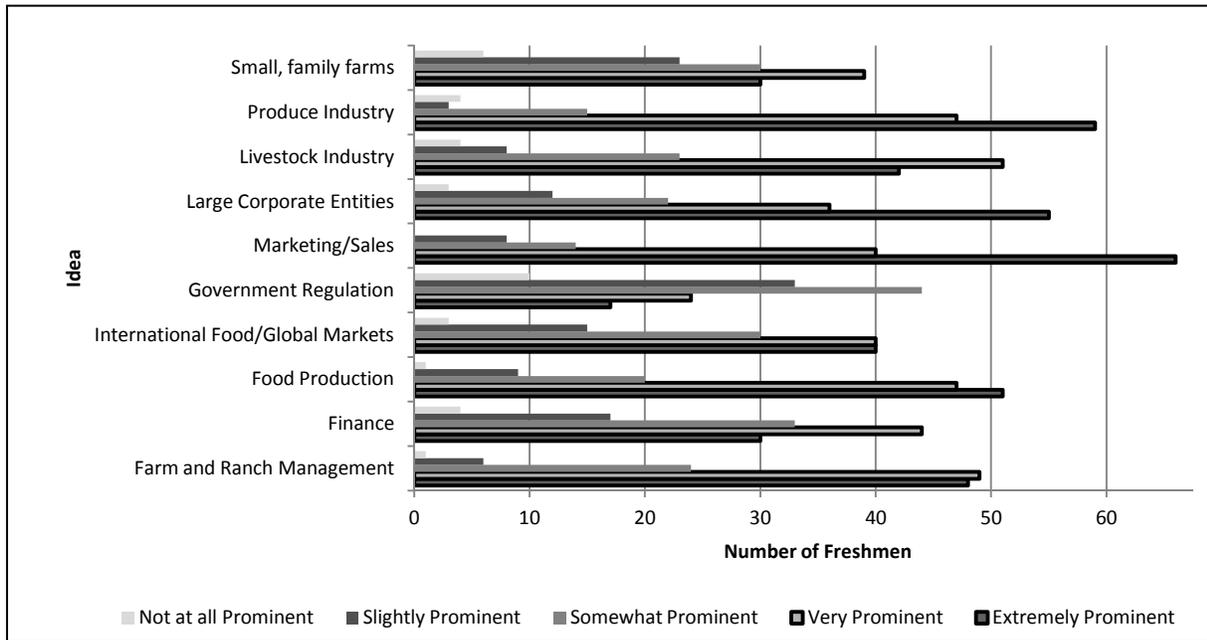
### **Follow-up Survey**

We wanted to investigate freshmen’s perceptions and to see if and/or how they progressed over the duration of the quarter, so we asked freshmen to complete a follow-up survey (Appendix B). The purpose of the follow-up survey was to observe freshmen’s interest in AGB and determine if their interest had increased given their exposure to the industry over the entire 11-week period.

With a greater understanding of agribusiness and its complexity, freshmen should have a more expanded view of agribusiness. We asked freshmen again to consider what comes to mind when they think of “agricultural business” (Figure 16). In the beginning of the quarter, incoming freshmen thought about small, family farms and ranch management when they considered AGB. Now, freshmen think about—and consider to be very prominent ideas—marketing and sales, as well as large corporate entities when they consider AGB. This suggests the AGB 101 course objectives, such as to expose freshmen to the size and scope of agricultural business, are being accomplished; freshmen are entering the course with a limited, idealistic view of agribusiness and leaving the course with a solid understanding of how agriculture and business work together—with the many players and processes—to

provide the food on their plate.

**Figure 16. Incoming Freshmen’s Rating of Ideas, in terms of their Prominence when Considering AGB**



In addition to the class itself, perhaps extracurricular activities are partly responsible for freshmen’s expanded understanding of agribusiness. When asked again about their extracurricular plans, more than half (73%) of freshmen indicated that they intend on joining a club and/or Greek organization. This is an 18% increase from the beginning of the quarter, when 55% of freshmen indicated that they plan on joining a club and/or Greek organization. 17% had no intention on joining, while 38% indicated that they are unsure as to whether they plan on joining (Table 12). To take into consideration the freshmen who actually followed through and joined a club and/or Greek organization, a question should be included in the second rendition of this study asking, “Have you joined any clubs and/or Greek organizations

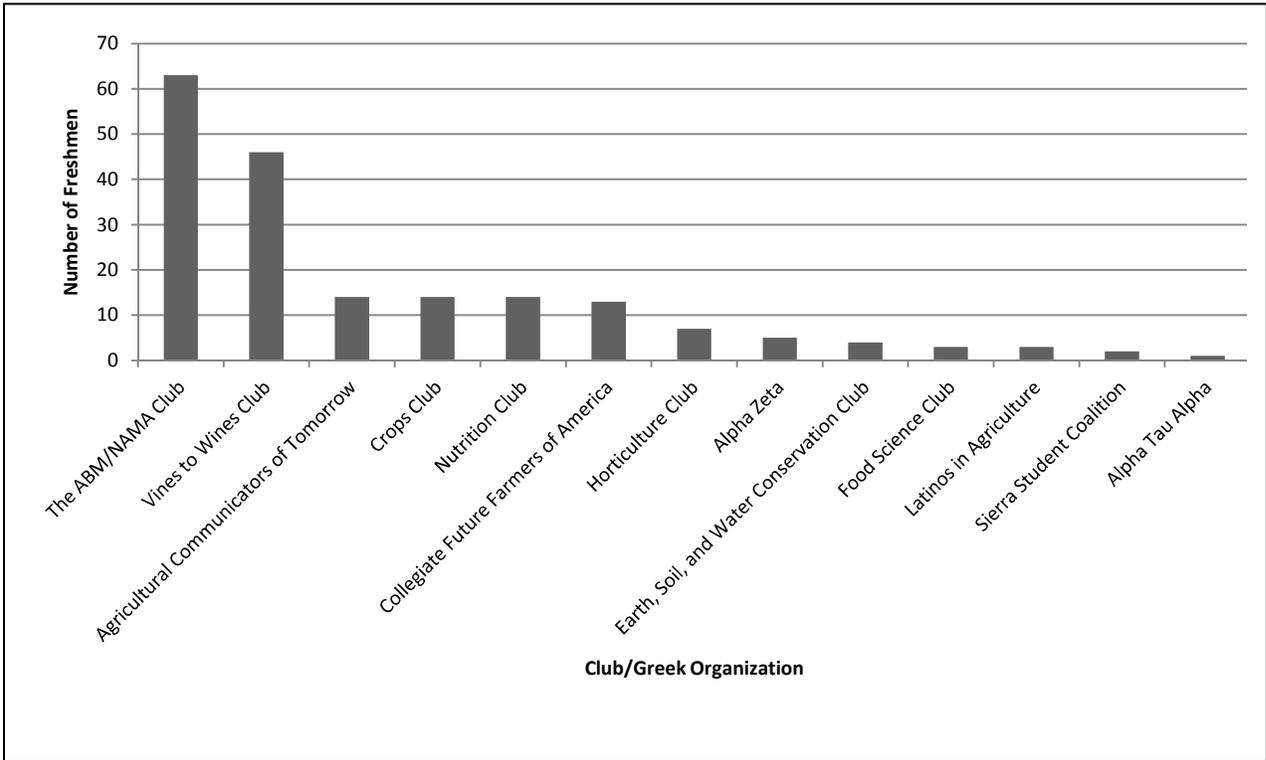
since the beginning of the quarter?” and “If so, which one(s)?” It would be interesting to compare the list of clubs and/or Greek organizations freshmen show an interest in to the groups they actually join.

Table 12. Freshmen’s Club and/or Greek Organization Plans

___ plan on joining agribusiness/agriculture clubs and/or Greek organizations?	<b>Number of Freshmen</b>	<b>Percent of respondents</b>
I do not	17	13%
I do	73	57%
I'm not sure if I	38	30%
Total	128	100%

In the meantime, the clubs and/or Greek organizations freshmen (with intentions to join) can be reconsidered. Although freshmen’s clubs of interest did not change much over the quarter (ABM/NAMA and Vines to Wines still the two most popular clubs among freshmen), the number of freshmen who expressed interest in joining increased (Figure 17). Over half (57%) plan on joining ABM/NAMA and 42% plan on joining Vines to Wines. This is a 23% increase for ABM/NAMA and a 15% increase for Vines to Wines. A possible explanation is that as freshmen learn more about AGB through AGB 101, their interest in the industry increases and they desire to immerse themselves in agribusiness-related activities and experiences, like joining ABM/NAMA and/or Vines to Wines.

**Figure 17. Freshmen’s Plans to Join Clubs and/or Greek Organizations at the End of the Quarter**



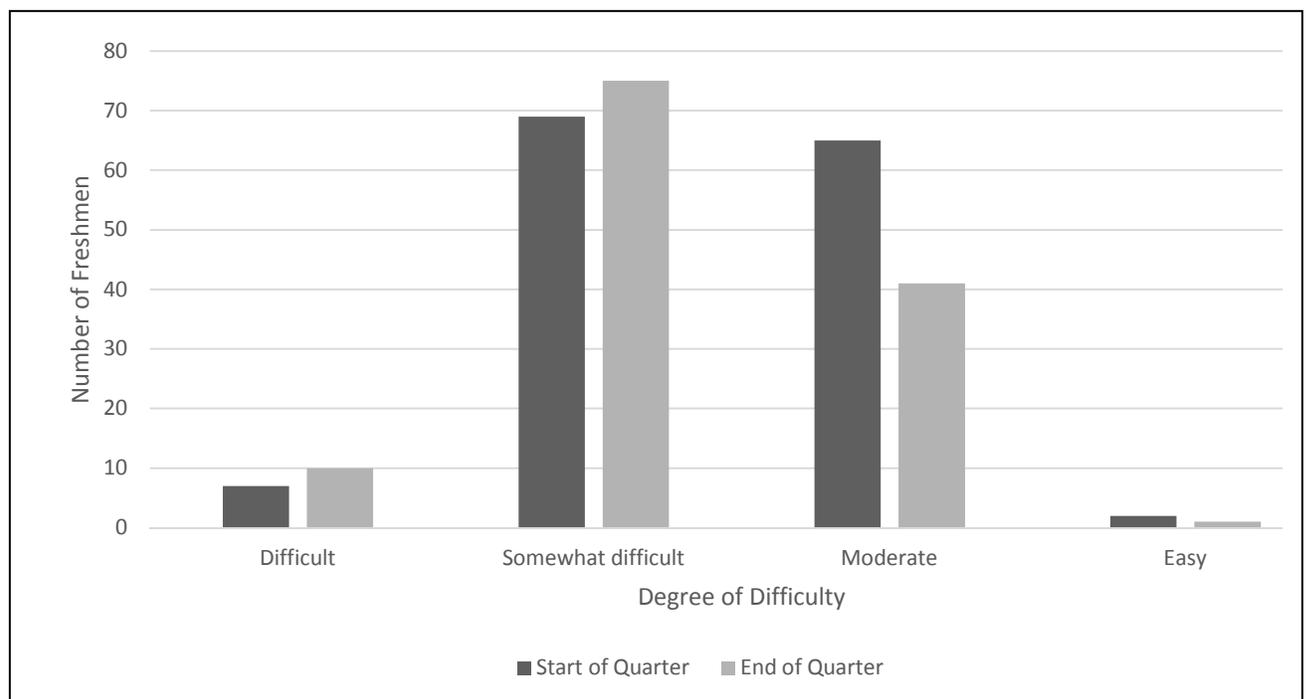
We were curious to see freshmen’s perceptions regarding their major, in terms of difficulty, and if they had changed since the beginning of the quarter. We wanted to know if the given course work over the entire quarter had changed their perceptions of their major, so we asked freshmen again to consider how difficult they think AGB is as a major. More than half (59%) now consider AGB to be a somewhat difficult major, as compared to 48% of freshmen in the beginning of the quarter (Table 13). At the start of the quarter, most freshmen considered AGB to be Moderately Difficult. However, given 11-weeks and an introductory, challenging class like AGB 101, most freshmen now perceive AGB as

Somewhat Difficult (Figure 18). An interesting follow-up question to ask in the future is “What factors contributed to your rating?” A list of factors, such as class projects or papers, could be listed. It would be interesting to see what factors freshmen consider to be difficult and influence their overall perceptions of degree difficulty.

Table 13. Perception of AGB, in terms of Difficulty

I perceive AGB as a ____ major.	Number of respondents (n=127)	Percent of respondents
Somewhat difficult	75	59%
Moderate	41	32%
Difficult	10	8%
Easy	1	1%
Total	127	100%

**Figure 18. Comparison of Freshmen’s Feelings about Major Difficulty from the Start to the End of the Quarter**



We were interested in seeing if freshmen felt more secure in their major after having experienced their first quarter, so we asked freshmen again to consider the statement, “A degree in AGB from Cal Poly will prepare me for my future in agribusiness.” Freshmen on average strongly agreed that they felt their eventual degree in AGB from Cal Poly would prepare them for their future in agribusiness (Table 14). That is, a future specifically with career opportunities, as freshmen also agreed on average that they believe career good opportunities exist in agricultural business (Table 15). Males agreed less, with an average agreeability rating of 1.56, whereas females had a higher agreeability rating of 1.45. Compared to their feelings in the beginning of the quarter, freshmen on average share similar feelings at the end of the quarter towards the statements, with the exception of females (Figure 19 and 20). For both statements, females tended to agree less with the statements at the end of the quarter. Males, on the other hand, felt the same, only slightly agreeing less with the statement that a degree in AGB from Cal Poly would prepare them for a future in AGB (Figure 18).

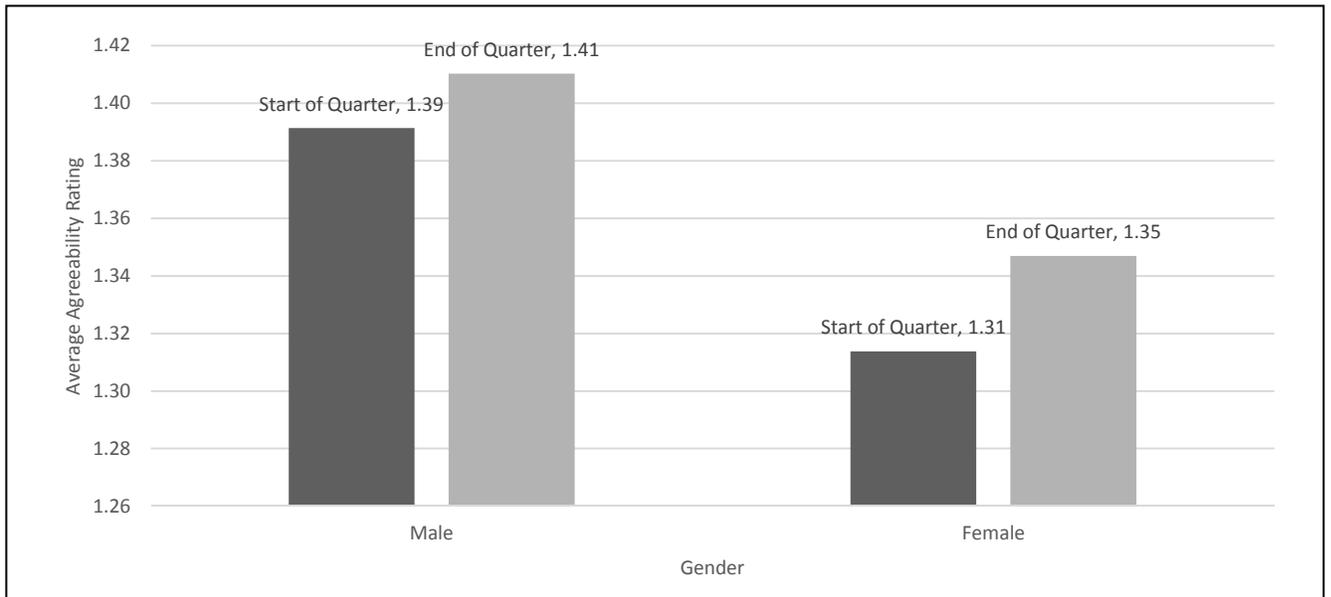
Table 14. Statement: “A degree in AGB from Cal Poly will prepare me for my future in agribusiness.”

Statement: "A degree in AGB from Cal Poly will prepare me for my future in agribusiness."	Average agreeability rating of freshmen (n=143)
Male	1.41
Female	1.35

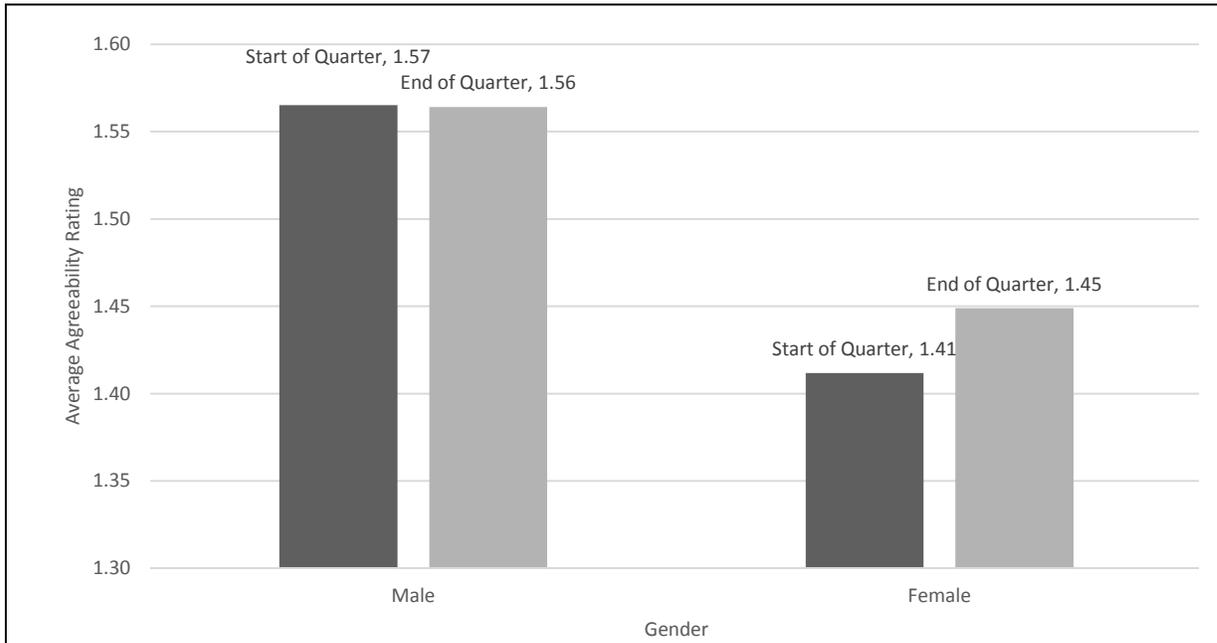
Table 15. Statement: "I think good career opportunities exist in agricultural business."

Statement: "I think good career opportunities exist in agricultural business."	Average agreeability rating of freshmen (n=143)
Male	1.56
Female	1.45

**Figure 19. Comparison of Freshmen's Average Agreeability Rating from the Start to the End of the Quarter for the statement, "I think good career opportunities exist in agricultural business."**

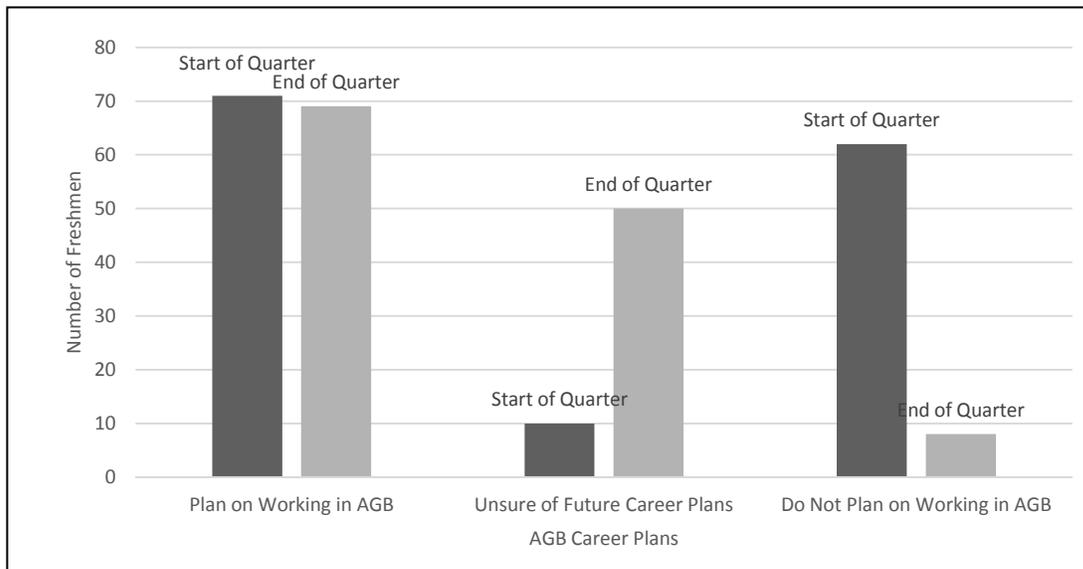


**Figure 20. Comparison of Freshmen’s Average Agreeability Rating from the Start to the End of the Quarter for the statement, "A degree in AGB from Cal Poly will prepare me for my future in agribusiness."**



Despite the similar feelings to the previous two statements expressed by freshmen at the end of the quarter, over half (54%) of freshmen plan on working in AGB. Only 6% of freshmen do not plan on working in AGB, while 39% are unsure of their future career plans. This is a 4% increase from the beginning of the quarter, when 50% of freshmen indicated that they plan on working in AGB (Figure 21). Perhaps their exposure to the industry through AGB 101, club orientations, or a combination of school and extracurricular activities as well as personal realizations (ie. Agribusiness does not translate to becoming a farmer) has instilled more freshmen to work in the industry.

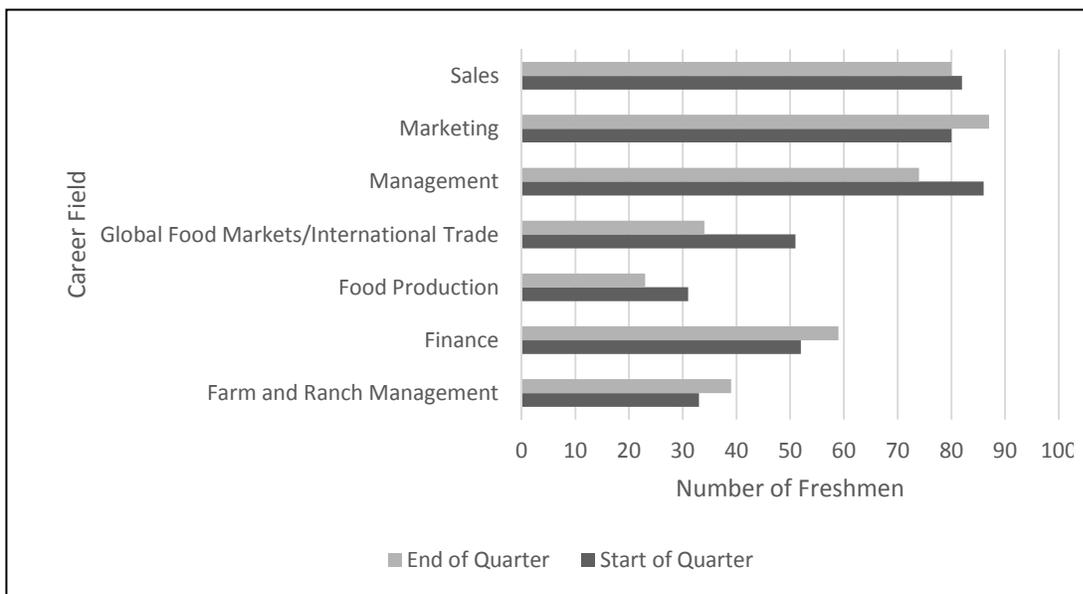
**Figure 21. Comparison of Freshmen’s Plans to Work in AGB from the Start of the Quarter to the end of the Quarter**



At the start of the quarter, the majority of freshmen desired to work in management, sales, and marketing. Interest in management, marketing, and sales was maintained

throughout the quarter; over half (70%) of freshmen plan on working in marketing, while 60% and 59% of freshmen plan on working in management and sales, respectively (Figure 22). Interest in finance increased 8% from the start of the quarter, when 35% of freshmen indicated that they plan on working in the specific field compared to 48% of freshmen at the end of the quarter. Given that freshmen expressed only an increased desire in wanting to work in the fields of marketing, finance, and farm and ranch management from the start to the end of the quarter, perhaps the AGB 101 course could be broadened in a manner that leaves freshmen feeling excited to work in other fields, such as food production and global food markets/international trade, that are just as important and necessary to the industry as a whole.

**Figure 22. Comparison of Freshmen’s Plans to Work in a Specific Field of AGB from the Start of the Quarter to the End of the Quarter**





## Chapter 5

### SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

#### Summary

Literature relating to recruitment strategies and colleges of agriculture was researched to provide a theoretical foundation for this recruitment study. After a theoretical base was constructed, an appropriate hypothesis and data methodology was created. An application phase followed this organizational phase. The application phase involved surveying and collecting responses from incoming AGB freshmen, as well as analyzing the collected data using descriptive statistics and hypothesis testing. Freshmen's perceptions of and attitudes toward agricultural business changed over the duration of the quarter. As freshmen learned more about the industry through classes and extracurricular activities, they developed a broader view of agribusiness. This broader view naturally impacted their decisions related to their major, such as deciding to involve themselves in agribusiness-related activities or clubs. This shows the importance of an introductory class like AGB 101, particularly in expanding freshmen's understanding of a given industry as it relates to their major. The increased

knowledge contributes to an increasingly more excited, interested class of freshmen who recognize the importance of their major and the potential role they can play in the industry.

### Conclusions

The AGB Department is attracting largely “untraditional” students, in the sense that over half of the freshmen are from densely-populated cities with no family history in farming or agriculture. Perhaps this is why freshmen did not indicate that they felt their parents played an extremely influential role in their decision to major in AGB. Rather, friends, college guidance counselors, high school teachers, and coaches had the greatest influence. Other extremely influential factors included high school programs, such as FFA, high school scholarships, visiting the AGB Department during Open House, information on the AGB website, publications by the Cal Poly CAFES, and social media platforms such as the AGB Blog, Facebook page, and Twitter page.

Despite coming from an untraditional agriculture background, freshmen are still interested in agricultural business. Most freshmen indicated that AGB was their first choice of major and more than half have experience working in agricultural business. A relationship exists between the area freshmen grew up in and their experience working in agribusiness. This finding seems to suggest that people from cities are presented with similar opportunities to experience working in agribusiness as people from rural areas, and that living in a city is not a disadvantage in the sense that it does not inhibit one’s exposure to agribusiness. With more experience working in agribusiness, freshmen express a greater interest in majoring in agribusiness. A correlation exists between experience working in agribusiness and

freshmen's desire to major in AGB. This is congruent with the finding that freshmen from families who own an agribusiness find AGB as their first choice of major. Freshmen see the value in majoring in agribusiness and desire to return home to the family agribusiness with their new skills and expertise to make the family business that much more profitable.

Most freshmen consider AGB to be somewhat to moderately difficult. Aware of the potential challenges associated with pursuing a degree in AGB from Cal Poly, the majority of freshmen see the difficulty of the major as a positive aspect, in the sense that they feel a degree in AGB from Cal Poly would prepare them to become experts in agribusiness and leaders of the future food economy.

Most freshmen view the future of agribusiness as plentiful, in terms of job availability and career opportunities. However, the majority of freshmen at the start of the quarter related agribusiness to small, family farms, as opposed to food production, international food and global markets, and other major aspects within the industry. Given that most of the freshmen are from urbanized areas, a more bucolic sense of agribusiness—as opposed to large food production, as an example—is understandable. Nevertheless, this perception changed throughout the duration of the quarter; now, freshmen relate AGB to marketing, sales, and large corporate entities. Freshmen now recognize the apparent job demand for college of agriculture graduates in these fields.

## Recommendations

There are two sets of recommendations associated with this study. This first set of recommendations is intended for the AGB Department, while the second set of recommendations is intended for anyone considering expanding or continuing the research study by studying related recruitment issues or AGB recruitment in greater detail.

Concerning the AGB Department, given the finding that almost all freshmen have a Facebook account and nearly half of the freshmen use Twitter, the Department should consider investing resources in developing a strong social media presence using these platforms and other platforms, such as Youtube. The role of technology is ever-increasing, and technology offers the Department with a fast and efficient way to recruit, as well as target students who met specific search parameters, such as GPA. The social media potential for the Department is limitless, as freshmen indicated a variety of technology-based recruitment strategies that would have been extremely beneficial in helping them make their decision to major in AGB. For example, freshmen would have found a Youtube video series about the Department and AGB student life extremely beneficial. Other extremely beneficial strategies the Department should consider developing and creating include Facebook contests and forums, podcasts, live chat sessions, and a virtual AGB college fair experience.

In addition to social media, the Department should continue to maintain a presence at Cal Poly's annual Open House, as freshmen considered this experience as one of the most beneficial influential factors in their decision to major in AGB. Open House provides a great opportunity for the Department to engage with potential students, as well as to offer them opportunities, such as meeting faculty and professors and talking with AGB student and

college representatives—all of which were recruitment strategies considered by freshmen to be very important for the Department to use.

Regarding the second set of recommendations concerning further research, the Department or anyone interested should consider conducting this survey again next year and perhaps for an extended period of time. This longitudinal-like survey structure would result in more data and, through analysis, a greater understanding of freshmen in general, their perceptions of the Department, and their ideas about AGB as both a major and potential career field.

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## APPENDIX A: Survey

1. INFORMED CONSENT TO PARTICIPATE IN AN AGRIBUSINESS RECRUITMENT STUDY

A senior research project on Agribusiness student recruitment is being conducted by Zoe Sanchez, a student, in the Department of Agribusiness at Cal Poly, San Luis Obispo, under the supervision of Dr. Lynn Hamilton. The purpose of the study is to understand why incoming Agribusiness freshmen were motivated to choose Agribusiness as their major.

You are being asked to take part in this study by completing the online survey hosted on “Survey Monkey,” an online survey provider (www.surveymonkey.com), by the deadline specified by Dr. Hamilton. Your participation will take approximately 5 minutes to complete the survey. Please be aware that you are not required to participate in this research and you may discontinue your participation at any time without penalty; an alternative form of course credit will be given to those students who choose not to participate in the study. You may also omit any items on the questionnaire you prefer not to answer.

The possible risks associated with participation in this study include potential difficulty in answering the survey questions. If you should experience discomfort or emotional distress, please be aware that you may contact Dr. Lynn Hamilton at (805) 756-5032, lhamilto@calpoly.edu for assistance.

Your responses will be provided anonymously to protect your privacy. Potential benefits associated with the study include enhanced enrollment in Agribusiness, improved Agribusiness recruitment strategies, and the contribution of information to the Agribusiness Department. You will also earn course credit for participating. If you chose not to participate, an alternate method of earning credit will be provided.

If you have questions regarding this study or would like to be informed of the results when the study is completed, please feel free to contact Zoe Sanchez and Dr. Lynn Hamilton at zasanche@calpoly.edu, and (805) 756-5032, lhamilto@calpoly.edu. If you have questions or concerns regarding the manner in which the study is conducted, you may contact Dr. Steve Davis, Chair of the Cal Poly Human Subjects Committee, at (805) 756-2754, sdavis@calpoly.edu, or Dr. Dean Wendt, Interim Dean of Research, at (805) 756-1508, dwendt@calpoly.edu.

If you agree to voluntarily participate in this research project as described, please indicate your agreement by completing and returning the attached questionnaire. Please print this form now for your reference, and thank you for your participation in this research.

- Yes, I volunteer ..... 1  
 No, Thanks ..... 2
2. Out of all the colleges I applied to, Cal Poly was my first choice. (Please check only one.)  
 Yes (If yes, skip to Question 4) \_\_\_\_\_ 1  
 No \_\_\_\_\_ 2
3. What college(s) was your first choice? (Please check all that apply.)  
 UC Los Angeles \_\_\_\_\_ 1  
 UC Berkeley \_\_\_\_\_ 2  
 UC Davis \_\_\_\_\_ 3  
 UC San Diego \_\_\_\_\_ 4  
 UC Santa Barbara \_\_\_\_\_ 5  
 CSU Bakersfield \_\_\_\_\_ 6  
 CSU Chico \_\_\_\_\_ 7  
 CSU Fresno \_\_\_\_\_ 8  
 CSU Fullerton \_\_\_\_\_ 9  
 CSU Los Angeles \_\_\_\_\_ 10  
 Other: please specify \_\_\_\_\_ 11
4. Of the following factors, which do you think was most influential in your choice of Cal Poly? (Please check only one.)  
 My family \_\_\_\_\_ 1  
 High school and/or guidance counselor \_\_\_\_\_ 2  
 Tuition costs \_\_\_\_\_ 3  
 Financial aid/scholarships \_\_\_\_\_ 4  
 The location/climate \_\_\_\_\_ 5  
 Academics/college programs \_\_\_\_\_ 6  
 The Cal Poly reputation \_\_\_\_\_ 7  
 Other: please specify \_\_\_\_\_ 8
5. Agribusiness was my first choice of major. (Please check only one.)  
 Yes (If yes, skip to Question 7) \_\_\_\_\_ 1  
 No \_\_\_\_\_ 2

- I'm not sure \_\_\_\_\_ 3
6. Please indicate your first and second choice of major.  
 First: \_\_\_\_\_ 1  
 Second: \_\_\_\_\_ 2
7. I plan on transferring into another major. (Please check only one.)  
 Yes \_\_\_\_\_ 1  
 No (If no, skip to Question 9) \_\_\_\_\_ 2  
 I'm not sure \_\_\_\_\_ 3
8. Please specify what college offers the major. (Please check only one.)  
 College of Agriculture, Food & Environmental Sciences \_\_\_\_\_ 1  
 College of Architecture & Environmental Design \_\_\_\_\_ 2  
 College of Engineering \_\_\_\_\_ 3  
 College of Liberal Arts \_\_\_\_\_ 4  
 Orfalea College of Business \_\_\_\_\_ 5  
 College of Science & Mathematics \_\_\_\_\_ 6
9. What comes to mind when you think of agricultural business? Please rate each idea on a scale of 1 to 5, 5 being the most prominent idea.  
 Farm and Ranch Management \_\_\_\_\_ 1  
 Finance \_\_\_\_\_ 2  
 Food Production \_\_\_\_\_ 3  
 International Food/Global Markets \_\_\_\_\_ 4  
 Government Regulation \_\_\_\_\_ 5  
 Marketing/Sales \_\_\_\_\_ 6  
 Large corporate entities (i.e. Cargill, Tyson) \_\_\_\_\_ 7  
 Livestock Industry \_\_\_\_\_ 8  
 Produce Industry \_\_\_\_\_ 9  
 Small, family farms \_\_\_\_\_ 10  
 Other: please specify \_\_\_\_\_ 11
10. Who influenced your decision to choose Agribusiness? Please rate each source of influence on a scale of 1 to 5, 5 being the most influential.  
 Parents/family \_\_\_\_\_ 1  
 Friends/acquaintances \_\_\_\_\_ 2  
 College/guidance counselor \_\_\_\_\_ 3  
 High school teacher \_\_\_\_\_ 4  
 Coach \_\_\_\_\_ 5  
 Other: please specify \_\_\_\_\_ 6
11. What influenced your decision to choose Agribusiness? Please rate each source of influence on a scale of 1 to 5, 5 being the most influential.  
 High school programs, like FFA \_\_\_\_\_ 1  
 High school scholarships \_\_\_\_\_ 2  
 Visiting the AGB Department at Open House \_\_\_\_\_ 3  
 Information online on the Agribusiness website \_\_\_\_\_ 4  
 Publications by Cal Poly CAFES \_\_\_\_\_ 5  
 AGB Blog \_\_\_\_\_ 6  
 AGB Facebook page \_\_\_\_\_ 7  
 AGB Twitter page \_\_\_\_\_ 8  
 Other: Please Specify \_\_\_\_\_ 9
12. Of the influential factors, which 3 do you think were the most influential? Indicate with a number 1 to 3, 1 being the most influential.  
 High school programs, like FFA \_\_\_\_\_ 1  
 High school scholarships \_\_\_\_\_ 2  
 Visiting the AGB Department at Open House \_\_\_\_\_ 3  
 Information online on the Agribusiness website \_\_\_\_\_ 4  
 Publications by Cal Poly CAFES \_\_\_\_\_ 5  
 AGB Blog \_\_\_\_\_ 6  
 AGB Facebook page \_\_\_\_\_ 7  
 AGB Twitter page \_\_\_\_\_ 8  
 Other: Please Specify \_\_\_\_\_ 9

13. What recruitment strategies do you think might have helped your decision to choose Agribusiness? Please rate each recruitment strategy on a scale of 1 to 5, 5 being the most beneficial.

- E-mail \_\_\_\_\_ 1
- Website \_\_\_\_\_ 2
- Publications \_\_\_\_\_ 3
- On-campus events \_\_\_\_\_ 4
- College representatives visiting high-schools \_\_\_\_\_ 5
- Meeting faculty and professors \_\_\_\_\_ 6
- Talking to students \_\_\_\_\_ 7
- Tours \_\_\_\_\_ 8
- Short films/viral videos \_\_\_\_\_ 9
- Youtube video series \_\_\_\_\_ 10
- Facebook contests \_\_\_\_\_ 11
- On- and off-campus interviews \_\_\_\_\_ 12
- Podcasts \_\_\_\_\_ 13
- Facebook forums \_\_\_\_\_ 14
- Live chat sessions \_\_\_\_\_ 15
- QR codes \_\_\_\_\_ 16
- Virtual college fairs \_\_\_\_\_ 17
- Phone calls \_\_\_\_\_ 18
- Other: Please specify \_\_\_\_\_ Rank \_\_\_\_\_ 19

14. How important is it that the Agribusiness Department uses the following recruitment strategies? Please rank each recruitment strategy on a scale of 1 to 4, 4 being not at all important.

	<b>Very important</b> (1)	<b>Somewhat important</b> (2)	<b>Not very important</b> (3)	<b>Not at all important</b> (4)
<b>E-mail</b>	1 _____	2 _____	3 _____	4 _____
Website	1 _____	2 _____	3 _____	4 _____
<b>Publications</b>	1 _____	2 _____	3 _____	4 _____
On-campus events	1 _____	2 _____	3 _____	4 _____
<b>College Representatives</b>	1 _____	2 _____	3 _____	4 _____
Visiting high-schools	1 _____	2 _____	3 _____	4 _____
<b>Meeting faculty /professors</b>	1 _____	2 _____	3 _____	4 _____
Talking to students	1 _____	2 _____	3 _____	4 _____
<b>Tours</b>	1 _____	2 _____	3 _____	4 _____
Short films/ Video series	1 _____	2 _____	3 _____	4 _____
<b>Youtube</b>	1 _____	2 _____	3 _____	4 _____
Facebook contests	1 _____	2 _____	3 _____	4 _____
<b>On- and</b>				

<b>off-campus interviews</b>	1 _____	2 _____	3 _____	4 _____
Podcasts	1 _____	2 _____	3 _____	4 _____
<b>Facebook forums</b>	1 _____	2 _____	3 _____	4 _____
Live chat sessions	1 _____	2 _____	3 _____	4 _____
<b>QR codes</b>	1 _____	2 _____	3 _____	4 _____
Virtual college experience	1 _____	2 _____	3 _____	4 _____
<b>Phone calls</b>	1 _____	2 _____	3 _____	4 _____
Other: Please specify	_____	_____	_____	_____

15. Do you have a Facebook account? (Please check only one.)  
 Yes \_\_\_\_\_ 1  
 No \_\_\_\_\_ 2
16. Do you use Twitter? (Please check only one.)  
 Yes \_\_\_\_\_ 1  
 No \_\_\_\_\_ 2
17. Do you read blogs? (Please check only one.)  
 Yes \_\_\_\_\_ 1  
 No \_\_\_\_\_ 2
18. I plan on joining agribusiness/agriculture clubs and/or Greek organizations? (Please check only one.)  
 Yes \_\_\_\_\_ 1  
 No (If no, skip to Question 20) \_\_\_\_\_ 2  
 I'm not sure \_\_\_\_\_ 3
19. Which one(s)? (Please check all that apply.)  
 Agricultural Communicators of Tomorrow \_\_\_\_\_ 1  
 Alpha Tau Alpha \_\_\_\_\_ 2  
 Collegiate Future Farmers of America \_\_\_\_\_ 3  
 The ABM/NAMA Club \_\_\_\_\_ 4  
 Alpha Zeta \_\_\_\_\_ 5  
 Crops Club \_\_\_\_\_ 6  
 Earth, Soil, and Water Conservation Club \_\_\_\_\_ 7  
 Food Science Club \_\_\_\_\_ 8  
 Horticulture Club \_\_\_\_\_ 9  
 Latinos in Agriculture \_\_\_\_\_ 10  
 Nutrition Club \_\_\_\_\_ 11  
 Sierra Student Coalition \_\_\_\_\_ 12  
 Permaculture Club \_\_\_\_\_ 13  
 Vines to Wines Club \_\_\_\_\_ 14  
 Other: \_\_\_\_\_ Rank: \_\_\_\_\_ 15
20. In terms of difficulty, I perceive AGB as a \_\_\_\_\_ major (Please check only one.)

**Easy                      Moderate                      Somewhat difficult                      Difficult**

21. A degree in Agribusiness from Cal Poly will prepare me for my future in agribusiness. (Please check only one.)

**Strongly agree    Agree    Somewhat agree    Somewhat disagree    Disagree    Strongly disagree**

22. I think good career opportunities exist in agricultural business. (Please check only one.)

**Strongly agree    Agree    Somewhat agree    Somewhat disagree    Disagree    Strongly disagree**

23. I plan on working in agricultural business. (Please check only one.)

- Yes ..... 1
- No (If no, skip to Question 25) ..... 2
- I'm not sure ..... 3

24. In what career field of agricultural business? (Please check all that apply.)

- Farm and Ranch Management \_\_\_\_\_ ..... 1
- Finance \_\_\_\_\_ ..... 2
- Food Production ..... 3
- Global Food Markets/International Trade \_\_\_\_\_ ..... 4
- Management \_\_\_\_\_ ..... 5
- Marketing \_\_\_\_\_ ..... 6
- Sales \_\_\_\_\_ ..... 7
- Other: Please specify \_\_\_\_\_

25. I grew up in a predominantly \_\_\_\_\_ area. (Please check only one.)

- Urban area (2,500 or more people) ..... 1
- Urbanized area (50,000 or more people) ..... 2
- Urban cluster (between 2,500 and 49,999) ..... 3
- Rural area (all other areas) ..... 4

26. What is your home 5-digit ZIP code?

ZIP code: \_\_\_\_\_

27. My family owns a farm, winery, or other agriculture business(s). (Please check only one.)

- Yes \_\_\_\_\_ ..... 1
- No \_\_\_\_\_ ..... 2

28. I have experience working in agricultural business. (Please check only one.)

- Yes \_\_\_\_\_ ..... 1
- No (Skip to Question 30) \_\_\_\_\_ ..... 2
- I'm not sure \_\_\_\_\_ ..... 3

29. Please specify where or how you experienced working in agriculture. (Please check all that apply).

- On my family/relative's farm or agriculture business \_\_\_\_\_ ..... 1
- On a friend/acquaintance's farm or agriculture business \_\_\_\_\_ ..... 2
- In high school agriculture programs, like FFA \_\_\_\_\_ ..... 3
- Summer/part-time employment \_\_\_\_\_ ..... 4
- Volunteering \_\_\_\_\_ ..... 5
- Gardening \_\_\_\_\_ ..... 6
- Summer camp \_\_\_\_\_ ..... 7
- Immersion program \_\_\_\_\_ ..... 8
- Study abroad program \_\_\_\_\_ ..... 9
- Outreach program \_\_\_\_\_ ..... 10
- Other: Please specify \_\_\_\_\_ ..... 11

30. I am from \_\_\_\_\_. (Please check only one.)

- The Bay Area/Northern California \_\_\_\_\_ ..... 1
- Southern California \_\_\_\_\_ ..... 2
- Out of state \_\_\_\_\_ ..... 3
- A foreign country \_\_\_\_\_ ..... 4
- Other: Please specify \_\_\_\_\_ ..... 5

31. I am \_\_\_\_\_. (Please check only one.)

- Male \_\_\_\_\_ ..... 1
- Female \_\_\_\_\_ ..... 2



## APPENDIX B: Follow-up Survey

1. **INFORMED CONSENT TO PARTICIPATE IN AN AGRIBUSINESS RECRUITMENT STUDY**  
 A senior research project on Agribusiness student recruitment is being conducted by Zoe Sanchez, a student, in the Department of Agribusiness at Cal Poly, San Luis Obispo, under the supervision of Dr. Lynn Hamilton. The purpose of the study is to understand why incoming Agribusiness freshmen were motivated to choose Agribusiness as their major.

You are being asked to take part in this study by completing the online survey hosted on “Survey Monkey,” an online survey provider (www.surveymonkey.com), by the deadline specified by Dr. Hamilton. Your participation will take approximately 5 minutes to complete the survey. Please be aware that you are not required to participate in this research and you may discontinue your participation at any time without penalty; an alternative form of course credit will be given to those students who choose not to participate in the study. You may also omit any items on the questionnaire you prefer not to answer.

The possible risks associated with participation in this study include potential difficulty in answering the survey questions. If you should experience discomfort or emotional distress, please be aware that you may contact Dr. Lynn Hamilton at (805) 756-5032, lhamilto@calpoly.edu for assistance.

Your responses will be provided anonymously to protect your privacy. Potential benefits associated with the study include enhanced enrollment in Agribusiness, improved Agribusiness recruitment strategies, and the contribution of information to the Agribusiness Department. You will also earn course credit for participating. If you chose not to participate, an alternate method of earning credit will be provided.

If you have questions regarding this study or would like to be informed of the results when the study is completed, please feel free to contact Zoe Sanchez and Dr. Lynn Hamilton at zasanche@calpoly.edu, and (805) 756-5032, lhamilto@calpoly.edu. If you have questions or concerns regarding the manner in which the study is conducted, you may contact Dr. Steve Davis, Chair of the Cal Poly Human Subjects Committee, at (805) 756-2754, sdavis@calpoly.edu, or Dr. Dean Wendt, Interim Dean of Research, at (805) 756-1508, dwendt@calpoly.edu.

If you agree to voluntarily participate in this research project as described, please indicate your agreement by completing and returning the attached questionnaire. Please print this form now for your reference, and thank you for your participation in this research.

- Yes, I volunteer ..... 1  
 No, Thanks ..... 2
2. What comes to mind when you think of agricultural business? Please rate each idea on a scale of 1 to 5, 5 being the most prominent idea.
- Farm and Ranch Management \_\_\_\_\_ 1  
 Finance \_\_\_\_\_ 2  
 Food Production \_\_\_\_\_ 3  
 International Food/Global Markets \_\_\_\_\_ 4  
 Government Regulation \_\_\_\_\_ 5  
 Marketing/Sales \_\_\_\_\_ 6  
 Large corporate entities (i.e. Cargill, Tyson) \_\_\_\_\_ 7  
 Livestock Industry \_\_\_\_\_ 8  
 Produce Industry \_\_\_\_\_ 9  
 Small, family farms \_\_\_\_\_ 10  
 Other: please specify \_\_\_\_\_ 11
3. I plan on joining agribusiness/agriculture clubs and/or Greek organizations? (Please check only one.)
- Yes \_\_\_\_\_ 1  
 No (If no, skip to Question 20) \_\_\_\_\_ 2  
 I'm not sure \_\_\_\_\_ 3
4. Which one(s)? (Please check all that apply.)
- Agricultural Communicators of Tomorrow \_\_\_\_\_ 1  
 Alpha Tau Alpha \_\_\_\_\_ 2  
 Collegiate Future Farmers of America \_\_\_\_\_ 3  
 The ABM/NAMA Club \_\_\_\_\_ 4  
 Alpha Zeta \_\_\_\_\_ 5  
 Crops Club \_\_\_\_\_ 6  
 Earth, Soil, and Water Conservation Club \_\_\_\_\_ 7  
 Food Science Club \_\_\_\_\_ 8

- Horticulture Club \_\_\_\_\_ 9
  - Latinos in Agriculture \_\_\_\_\_ 10
  - Nutrition Club \_\_\_\_\_ 11
  - Sierra Student Coalition \_\_\_\_\_ 12
  - Permaculture Club \_\_\_\_\_ 13
  - Vines to Wines Club \_\_\_\_\_ 14
  - Other: \_\_\_\_\_ Rank: \_\_\_\_\_ 15
5. In terms of difficulty, I perceive AGB as a \_\_\_\_\_ major (Please check only one.)

**Easy            Moderate            Somewhat difficult            Difficult**

6. A degree in Agribusiness from Cal Poly will prepare me for my future in agribusiness. (Please check only one.)

**Strongly agree    Agree    Somewhat agree    Somewhat disagree    Disagree    Strongly disagree**

7. I think good career opportunities exist in agricultural business. (Please check only one.)

**Strongly agree    Agree    Somewhat agree    Somewhat disagree    Disagree    Strongly disagree**

8. I plan on working in agricultural business. (Please check only one.)
- Yes ..... 1
  - No (If no, skip to Question 25) ..... 2
  - I'm not sure ..... 3
9. In what career field of agricultural business? (Please check all that apply.)
- Farm and Ranch Management \_\_\_\_\_ 1
  - Finance \_\_\_\_\_ 2
  - Food Production ..... 3
  - Global Food Markets/International Trade \_\_\_\_\_ 4
  - Management \_\_\_\_\_ 5
  - Marketing \_\_\_\_\_ 6
  - Sales \_\_\_\_\_ 7
  - Other: Please specify \_\_\_\_\_
10. I am \_\_\_\_\_. (Please check only one.)
- Male \_\_\_\_\_ 1
  - Female \_\_\_\_\_ 2