8-2013

Agriculture Honors Programs in APLU Member Institutions

Sable A. Sellick
University of Arkansas, Fayetteville

Agriculture Honors Programs in APLU Member Institutions

An Undergraduate Honors Thesis
in the
Department of Agricultural and Extension Education

Submitted in partial fulfillment of the requirements for the
University of Arkansas
Dale Bumpers College of Agricultural, Food and Life Sciences
Honors Program

by

Sable Sellick

September 2013

<

Dr. Curt Rom, Chair

<

Dr. Catherine Shoulders

<

Dr. Don Edgar

<

Dr. Don Johnson

Acknowledgements

I would like to acknowledge my mentor, Dr. Curt Rom, for allowing me to use this idea, for providing feedback on all parts of the study, and, most importantly, instilling a passion for the subject and a clear rationale for the project. I would like to thank my Thesis Committee members Dr. Don Edgar, Dr. Kate Shoulders, and Dr. Don Johnson for also providing valuable feedback and mental support throughout the entire project. I would like to thank Ms. Cassandra Cox, Maggie Jo Pruitt, Andrew Dugan, and the other anonymous students and faculty who tested my survey for me. I would also like to thank the University of Arkansas for providing financial support for the project.

Table of Contents

Abstract

In order to continue to feed and clothe nearly 9 billion people by the year 2050, there is a definite need for innovative agriculturalists to contribute to the field of agricultural research. Land-grant and public universities, established over 100 years ago with a devotion to agricultural research, have begun to develop "honors programs" in order to attract the best and brightest students away from private universities and to their campuses. This study sought to discover how common agricultural honors programs were and what characteristics they shared via a survey administered over the internet and distributed to a database of contacts assembled from the Association of Public and Land Grant Universities member list. These characteristics were derived from standards published by the National Collegiate Honors Council (NCHC). The results showed that having a cross-college honors program and a separate agriculture college honors program was not a common occurrence. Entrance requirements, student learning and community opportunities, and research project requirements were all common factors among the responding institutions. Generally, the responding institutions followed the best practice guidelines outlined by the NCHC.

Introduction

In his annual letter to the Bill and Melinda Gates Foundation, Bill Gates (2012) stated that "innovation is the key to improving the world." With the world population expected to reach nine billion people by the year 2050, innovation in agricultural and life sciences is in high demand (Pardue, 2010). US Citizens spend less than 10% of their disposable income on food while people in less-developed countries often spend upwards of 50% (Pardue, 2010). The focus on innovation in agriculture in the coming years will intensify as the growing population stresses global resources. The world needs ways to produce greater amounts of food, fiber, and fuel with fewer inputs, improving the quality of life for all people.

Innovation in the field of agriculture begins with research and development. The modern push for agricultural research and discovery in the United States began in the midst of the Civil War. The existence of this paper and the presence of Land Grant Universities with state-centered agricultural colleges were due to the work of Abraham Lincoln and the 37th Congress of the United States. In 1862, the Department of Agriculture and the Morrill Land Grant College Act were established. The Department of Agriculture was expected to research and develop new methods and ideas for agricultural production, and to breed, study, and then distribute new and improved plant cultivars to farmers (37th Congress [a]). The Morrill Land Grant College Act would contribute to the success of the new Department of Agriculture by providing funds for states to establish public colleges focused on studying agricultural and industrial sciences (37th Congress [b]). These colleges were tasked with training the next generation of agricultural scientists. Research conducted by faculty and graduate students at these institutions has developed innovations in agricultural production for over a century. Undergraduate students have contributed to new developments in agriculture through research projects, in part of a

requirement for participation in university honors colleges and programs. These programs are vital to educating and training undergraduate students in methods of agricultural research (37th Congress [b]).

Statement of Problem

Honors colleges and programs exist to attract and retain collegiate scholars through unique educational programs and experiences that are beyond the common or average undergraduate program (Howley, Howley, Helfrich, Harrison, Gillam and Safran, 2012). We wanted to find out if there were any honors programs that catered solely to the interests of agricultural honors students and what characteristics these programs shared, if they existed. We also wanted to know if these programs followed a set of similar guidelines.

To date, no research has been found that compares and/or contrasts more than ten honors programs, specifically programs based in agricultural colleges. This might indicate that honors programs based in agricultural colleges and departments are not commonplace. Therefore, there is no ability to compare programs and experiences although they all are considered "honors". There are no standards or metrics which allow a program to determine if it was below average, on par, or highly successful in comparison with agricultural honors programs at universities of similar type. To provide the best educational experiences for agricultural honors students, it would be useful to compare these programs in order to discover pathways of improvement that will create a better program for the honors students.

In maintaining the original goal of the Morrill Act, it was hypothesized that the majority of Land Grant and public universities who were members of the Association of Public and Land-Grant Universities (APLU) had agricultural departments and were research-oriented. In the absence of a national association of agriculture honors programs, we ask: did any of the 1862 Land Grant institutions

or even other APLU member institutions have agricultural honors programs, and what are the characteristics of these programs?

Because of the paucity of data and information on agricultural honors program, there is a need for research in this area in order to foster continuous advancement of opportunities for agricultural honors programs and the participating honors students.

The purpose of this study is to gather and assess characteristics of agricultural honors programs in Land Grant and other public universities in the United States who are members of the APLU, including the structure and management of the program, eligibility and honors completion requirements, the number of students participating in comparison to the number that are eligible, and benefits of participation.

Objectives

The objectives of this study are: to identify Land Grant Universities and other public universities and colleges with agriculture colleges or departments; determine if they have agricultural honors programs; determine if they share similar characteristics; and determine if they follow a similar set of guidelines.

Hypothesis

It was expected that most universities with agricultural colleges and departments would have some type of honors program, either managed as a separate college or contained within a college.

Further, it was assumed that most programs would have a separate honors program within the agricultural college that cooperated with the university-wide honors college in serving the needs of honors students.

It was expected that the majority of agricultural honors programs would have similar characteristics, with special attention paid to the presence of a research project component and special benefits for participation. Additionally, it was hypothesized that there were a set of commonalities, based in the guidelines developed by the National Collegiate Honors Council (NCHC), in the composition, participation, requirements and benefits among agriculture based honors programs.

Literature Review

The field of honors program research is relatively sparse; a fact that reinforces the need for this study. Numerous sources stated that there is a general lack of research dealing with honors programs and related components (Hébert & McBee, 2007; Howley et al., 2012; Long, 2002; Reutter, Paul, Sales, Jerke, Lee, McColl, Stafford, & Visram, 2010; Rinn & Plucker, 2004; Siegfried, 2001; Vessey & DeMarco, 2008). As was expected, it was not possible to discover literature related to agricultural honors programs.

Subjects of articles that were discovered varied. A review of every article detailing an honors program or college revealed that each one contained one or more of the following characteristics: descriptions of building honors programs from the ground up (e.g. Adams, 1990; Howley et al., 2012; Reutter et al., 2010); descriptions of already established (and successful) honors programs (e.g. Black, Grise, Barker, Thomas, & Bollinger, 2008; Fischer, 1996; Mack Jr., 1996; Siegfried, 2001); descriptions of student perceptions of honors programs (Howley et al., 2012); descriptions of honors programs used as tools to attract top students (e.g. Adams, 1990; Hébert & McBee, 2007; Long, 2002; Rinn & Plucker, 2004; Selingo, 2002); and descriptions of honors programs used as tools to build research skills in undergraduates (e.g. Adams, 1990; Black et al., 2008; Fischer, 1996; Howley et al., 2012; Mack Jr., 1996; Reutter et al., 2010; Vessey & DeMarco, 2008). A concern voiced in several papers also called

attention to the inconsistencies of the label of "honors" and its usage in classifying students (e.g. Bratt, 2010; Rinn & Plucker, 2004).

This literature review will define the honors student and the honors program. It will further discuss variations in the purposes served by honors programs, as well as differences in requirements, benefits of participation, and operation of the overall program.

Definition of "Honors"

What constitutes an honors program or college varies from university to university. Outwardly, the goals of an honors program appear to be centered on recruiting and nurturing advanced students so as to "raise the academic profile" of the institution (Bratt, 2010). Others may view programs of these types as ways for public universities to offer the "private school" experience of small class sizes and increased faculty interaction for academically talented students (Fischer, 1996; Howley et al., 2012; Selingo, 2002). More specifically, an honors program is defined as participation by an academically advanced set of students based upon academic qualifications and follows a set of best practice guidelines developed by the National Collegiate Honors Council (NCHC, 1994). In 2005, the NCHC also published a similar set of best practice guidelines for honors colleges that evolve out of honors programs. Both sets of standards focus on ensuring challenging and plentiful coursework and benefits for the honors students and adequate funding, faculty, and supervision for the entire program (NCHC, 1994, 2005). Development of a guiding mission statement and retaining control of admission to the honors program, coursework offered, and participating instructors were also goals emphasized by the NCHC. Construction of the honors program follows a set of common elements which align with the characteristics identified by the NCHC (1994). Specialized honors classes and a senior research project comprised the core of nearly all honors programs reviewed in the literature cited (Adams, 1990; Black, Grise, Barker, Thomas, & Bollinger, 2008; Fischer, 1996; Hébert & McBee 2007; Howley et al., 2012;

Mack Jr., 1996; Rinn & Plucker, 2004; Reutter et al., 2010; Selingo, 2002; and Siegfried, 2001). For the purposes of this study, "honors" was defined as a program that aligns with the majority of these guidelines.

Defining the honors program is a simpler matter than defining the honors student. Rinn and Plucker (2004) recognized that the identification of these students is hampered by the absence of "standardized assessments to differentiate [gifted] students." Common classification and recruitment factors, as identified by several sources, included nationally standardized test (e.g. ACT/SAT) scores, grade point average (GPA), extracurricular activities and community service, recommendations from high school and university faculty, or interviews (Adams, 1990; Rinn & Plucker, 2004; Reutter et al., 2010; and Vessey & DeMarco, 2008). Furthermore, academically talented students may be identified by "creative productivity, relational intelligence, co-cognitive traits, and promotion of social capital" (Bratt, 2010). This means that honors colleges are looking beyond academic benchmarks in order to discover the best students. Beyond these identity points, students must recognize their own status as honors material by applying for admission to an honors program (Rinn & Plucker, 2004). For this study, an "honors student" was defined as a student who showed advanced academic skills in collecting, internalizing, and analyzing information presented to him or her.

Purpose of Honors Programs

The implementation of honors programs may serve a variety of purposes. Adams (1990), Bratt (2010), Fischer (1996), Hébert & McBee (2007), Howley and colleagues (2012), Long (2002), Rinn and Plucker (2004), and Selingo (2002) stated that honors colleges are utilized to attract students of a high academic caliber who might otherwise choose to attend private colleges. In a 2002 thesis, Long repeatedly mentions that honors programs at public universities are a lower-cost alternative to more exclusive and expensive private schools. Long emphasized that these high-achieving students are attracted through the use of financial and curricular rewards (2002). Black and colleagues (2008),

Reutter and colleagues (2010), Siegfried (2001), and Vessey and DeMarco (2008) argued that honors programs served to vastly improve the research skills of undergraduate students. Advanced research skills are highly valued, as Reutter (2010), Adams (1990), Black et al. (2008), and Vessey and DeMarco (2008) stated that such talents provide a more rapid transition from an undergraduate degree program into graduate and professional schools in comparison to students following a normal degree track.

Academic fortification of the entire student body was listed as a long-term goal (Adams, 1990; Hébert & McBee, 2007; Mack Jr., 1996; Selingo, 2002). This usage of an honors program is controversial, as Sperber (2000) argued that the development of an honors college pulled resources away from the remainder of the university. In rebuttal, Long (2002) and Selingo (2002) stated that honors students improve the image of the university and reciprocally attracted high-achieving students and faculty. Hébert & McBee (2007), Fischer (1996), Mack Jr. (1996), and Rinn & Plucker (2004) identified small class sizes and increased contact with faculty as factors considered by students in choosing a university with an honors program. Long said that increases in the amount of merit-based scholarships for honors students available through public universities was also a deciding factor (2002). The program described by Howley and colleagues offered full-tuition scholarships to students who "scored within the top 10^{th} percentile" on the SAT or ACT (2012).

Honors Program Requirements

Nearly all programs analyzed in the research required students to enroll in special honors classes which encourage critical thinking and inquiry skills (Howley et al., 2012; Hébert & McBee, 2007). University of Georgia students typically enrolled in one or two honors sections every semester (Fischer, 1996), while Indiana University of Pennsylvania students attended four seminar-style classes that take the place of regular core classes (Selingo, 2002). Vanderbilt required classes devoted to practicing the development and writing of theses (Siegfried, 2001). University of Maryland-College Park offered honors sections of general classes to freshmen and sophomores and department-specific honors

coursework to juniors and seniors (Mack Jr., 1996); Prairie View A & M University followed a similar model (Adams, 1990). In addition to intensive classes, most honors students were required to maintain a minimum GPA and enroll in a minimum number of course credit hours to remain in the program (Adams, 1990; Siegfried, 2001, Reutter et al., 2010).

The NCHC stated that completion of well-developed honors projects by students is a trademark of a satisfactory honors program (2005). The programs described by Black and colleagues (2008), Fischer (1996), Mack Jr. (1996), and Siegfried (2001) all stipulated that an honors thesis or capstone project was required of students in order to graduate with honors distinction. Black and colleagues (2008) elaborated on the subject, stating that the process begins with the selection of a cooperating faculty member/advisor, development of a thesis, selection of a thesis committee, presentation and defense of the initial idea, and presentation and defense of the finished thesis (2008).

Benefits of Participation

Beyond the promise of smaller class sizes and greater contact between the students and faculty, honors programs offered additional incentives to participating students. The University of Georgia and the Indiana University of Pennsylvania set aside whole floors or even entire dorms for honors students. These honors dorms are credited with enhancing the community inhabited by the students, giving them the opportunity to interact and exchange ideas freely with peers (Fischer, 1996, and Selingo, 2002). The honors community itself promoted "social cohesion" among students in the program described by Howley and colleagues (2012). Howley also mentioned that faculty contributed to the unique honors learning community through informal means in order to support the students (2012).

Reutter and colleagues (2010) listed a lack of financial aid as a major detriment to increasing enrollment at the program being studied. Programs described by Adams (1990), Fischer (1996), and Mack Jr. (1996) attracted prospective students with the incentives of financial aid or funding for research projects. Prairie View A & M renovated several buildings on campus and constructed a $16

million library to attract high-achieving students to the program (Adams, 1990). Several programs relied on the ability of their programs to place students on the fast track to graduate school as a major recruitment factor (Black et al., 2008, Reutter et al., 2010; Vessey & DeMarco, 2008). Work by Hebert and McBee (2007) and Rinn and Plucker (2004) focused on identifying the effects of participation in honors programs on high-achieving students. Both studies concluded that there is an unfortunate absence of research about the subject.

Summary

Quantitative and verifiable descriptions of honors programs in the literature were scant, and varied widely in the type of program described. Most programs were directed at either developing sufficient research skills in undergraduates in preparation for graduate school or attracting gifted students who will improve the overall appearance and academic attitude of the student body. Generally, honors programs offer smaller, in-depth classes that move at a faster pace or special research opportunities to participating students. Supplemental benefits may include honors dorms, increased amounts of financial aid, or funding for a senior research project. Honors students were admitted on a basis of factors such as high school GPA and participation in extracurricular activities. These requirements varied from university to university, as did requirements that enable a student to remain in an honors program. The programs reviewed in this literature generally followed best-practice guidelines set forth by the National Collegiate Honors Council.

Methods

This study was conducted in two steps developed to answer the research objectives presented above.

1. *Identification of Land Grant Universities and other Public Universities with Honors Programs*

The study began with the identification of 1862 and 1890 Land Grant Universities (LGUs) and other public institutions who are members of the Association of Public and Land-Grant Universities through the use of the APLU website. A preliminary survey revealed that every U.S. state had at least one institution belonging to the organization (Association of Public and Land-Grant Universities, 2012). Once identified, each institution's website was examined in order to separate the institutions with agriculture departments or colleges (I-A) from those that did not have an agriculture component. Universities lacking agriculture departments or colleges were not considered. Based on information gathered from each institution's website, the I-A list was divided into two data sets: universities with honors colleges or departments (H-I) and those without such components (NH-I), regardless of whether the honors college/department was a campus-wide component or a component of a single college.

The institution websites were used to identify the persons in charge of the agricultural honors program or qualified honors representatives in H-Is and the Dean of the college or school of agriculture or of academics at institutions without agriculture honors contacts. Their contact information was assembled from the available information published on the website. The developed lists were combined and used as the survey pool for this study. The contacted institutions are listed in Appendix 1.

2. *Survey of Agriculture Honors Programs.* An online survey was developed using a set of specific questions which were developed based upon the recommendations of the NCHC and the literature. The goal was to determine patterns in programs, commonalities among programs, means and standards among programs, and therefore provide a set of comparators for our program and others. The survey

included demographic information about the university and the college, the nature of the honors program, admission requirements, graduation requirements, and other activities. H-Is were evaluated according to the criteria set forth by the National Collegiate Honors Council (NCHC) (NCHC, 1994, 2005). NH-Is were examined for special programs for advanced students. The test survey was submitted to and approved by the Institutional Review Board (IRB) for approval of the study using human sampling via the survey. A copy of the Survey questions and the IRB approval letter are included in Appendix 2.

The sample survey was tested among Bumpers College faculty. Feedback on the test/sample survey resulted in some revision for clarity and to reduce length of the survey. The questions were converted into an electronic survey form using the online survey-development software Survey Monkey. The internet based survey was again examined for face content validity by five selected faculty members and four volunteer students of the Honors Student Board to determine testing completion time, identify any question ambiguities or problems, and to develop a test data set for preliminary analyses. The survey was revised and corrected after the review test to improve clarity and brevity.

Once the survey was created, target study institutions were contacted by email with a form email letter explaining the purpose of the study and its outcomes. The letter contained electronic hyperlinks to the survey. After a 7-day initial survey period, a follow-up email was sent to encourage participation if the survey had not been completed. After an additional 7-day follow-up period, a third "final opportunity" email was sent with a 3 day response period. After the total 27 day testing period passed, the survey was closed and data analyzed. The initial letter sent, the follow-up letters, and the final letter sent is included in Appendix 3.

The number of responses was compared to the initial list of invited participants to determine a participation rate. A table displaying the participation rate by individual question, excluding questions

regarding the method of survey response and follow-up information, is included in Appendix 4. Survey data was reviewed and analyzed to provide frequencies of responses for specific questions.

From the summarized and analyzed data developed above, common and unique requirements for program participation and graduation, the average number and percentage of eligible students and the percentage that actually participate in honors program, and benefits of participation for both UH-Is and CH-Is were identified.

Results

Demographics

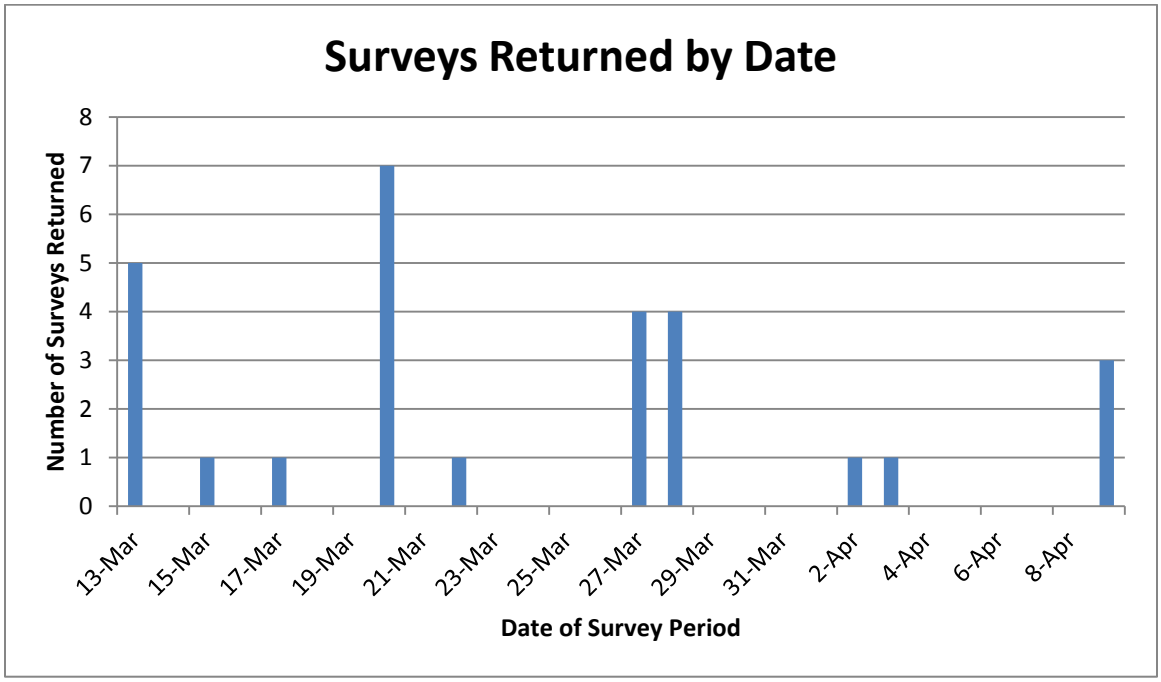
The majority of the institutions that completed the survey (73.68% [n=14]) were 1862 Land Grant Universities. The second largest group (15.79% [n=3]) were public universities, and 10.53% (n=2) were 1890 Land Grant Universities. Six of the responding institutions (31.6%) had an enrollment of over 35,000 students. Another 31.6% reported an enrollment of 24,000 to 34,999, which was still a large number of students. Most respondents (31.6% [n=6]) indicated that they had over 20 majors in their college or department of agriculture, with the next largest percentage (26.3% [n=5]) reporting an availability of 11 to 15 majors. Most of the responding institutions (38.9% [n=7]) did not know the average ACT/SAT score of incoming freshman across the institution, although 27.8% (n=5) reported that the average was a 25 to 27 (ACT)/1150 to 1220 (SAT). Most respondents (38.9% [n=7]) also were not aware of the average freshman's GPA, although 16.7% (n=3) reported it to be 3.00, 3.25, or greater than a 3.75. The average five-year graduation rate was reported as 22.2% (n=4), although 33.3% (n=6) did not know that data. The majority of responses (42.1% [n=8]) indicated that students at these institutions were classified as in-state, and, interestingly, 57.9% (n=11) of students in the agriculture college or department were female.

Survey Response Rate

Seventy-seven schools were initially contacted and only three email addresses failed to deliver. The remaining 74 institutions, which included 63 land-grant universities (1862 and 1890) and 11 public universities with agricultural colleges or departments, were contacted five times over a period of four weeks. Response reception was most common on dates when a reminder email was sent to the survey pool. Five responses (17.85%) were gathered on the first day of the survey; 25% (n=7) were received on the day the second half of the pool of respondents was contacted and the first reminder email was sent;

13.79% (n=4) were received the day when additional email reminders were sent out; and 13.79% (n=4) were received the day the final email reminder was sent (see Figure 1). Therefore 78.5% of the responses were received in the first 2 weeks of the survey and 17.85% were received in the last two weeks of the survey period.

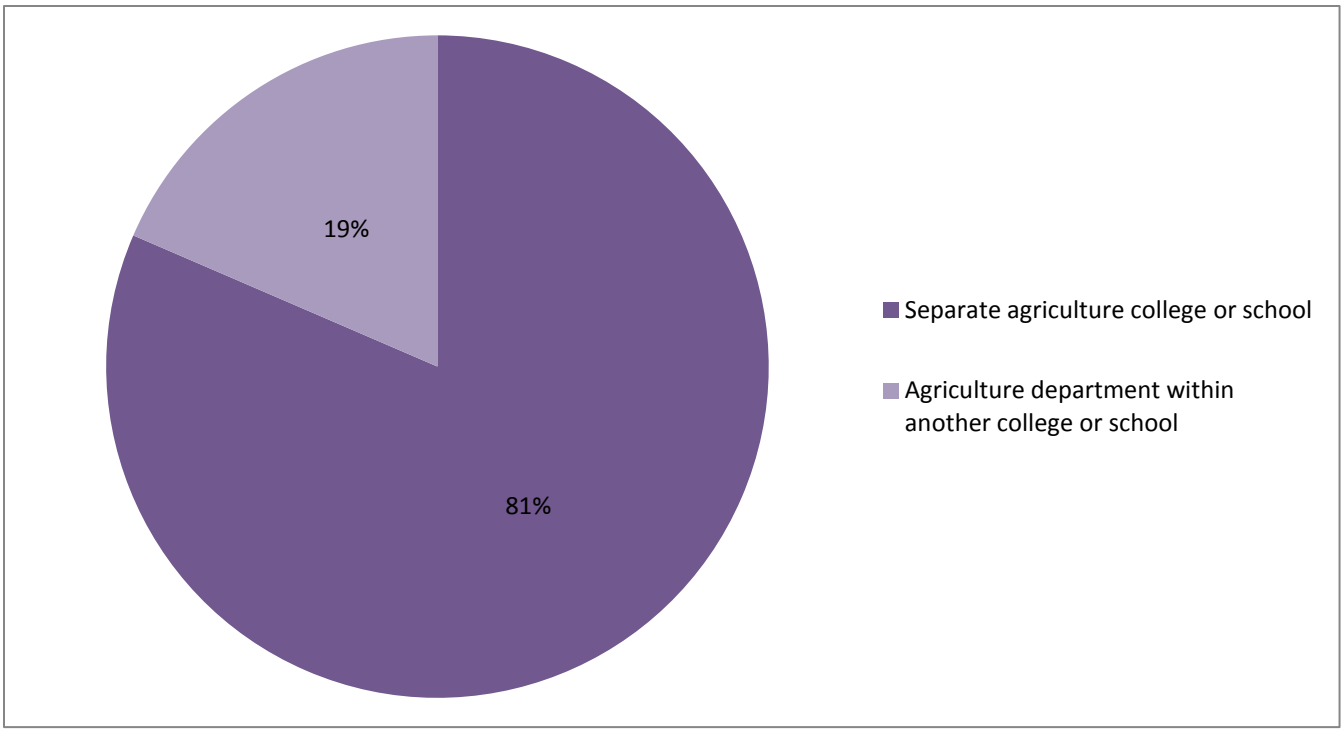
Figure 1. Number of Surveys Returned by Date



Although options were given for either the on-line survey or a mailed paper copy of the survey, only one school requested a paper copy of the survey. The request for that method of survey response was received after completion of the analyses and was not included in the data presented herein. For the 74 schools actually contacted, 28 schools replied for a 37.8% response rate. Excluding non-data collection questions, 9 surveys were 0% to 50% complete, 9 were 51% to 89% complete, and 10 were 90% to 98% complete. Therefore, the response rate for individual questions varied from 0% to 98%.

Institution Characteristics

Figure 2. Description of Agriculture Program at Responding Institution



The majority of respondents (81.48% [n=22]) reported that their institution was a separate agricultural college or school, with 18.52% (n=5) reporting that they were an agriculture department within another college or school, as displayed in Figure 2. Nine survey respondents (33.33%) said that they had 2,000 to 3,999 students enrolled in their agriculture college/department; 29.63% (n=8) reported an enrollment of 1,000 to 1,999 students; and 22.22% (n=6) reported that enrollment was less than 1,000 students.

As summarized in Figure 3, 62.96% (n=17) of respondents said that they did not have an honors program in their agricultural college or department, and in response to a separate question (summarized in Figure 4), 92.59% (n=25) said that the parent institution had a cross-college honors program. Nine respondents (36%) reported that over 140 students in the agricultural college/department were eligible to participate in honors, and 16% (n=4) reported that 81 to 100 students in their college were eligible. When discussing the number that actually participate, however, responses stuck to the extreme ends of

the scale: 22% (n=6) reported that less than 20 students actually participated in the program, while an additional 22% indicated that more than 140 students were active in their program.

Figure 3. Frequency of Agriculture College or Department Honors Programs

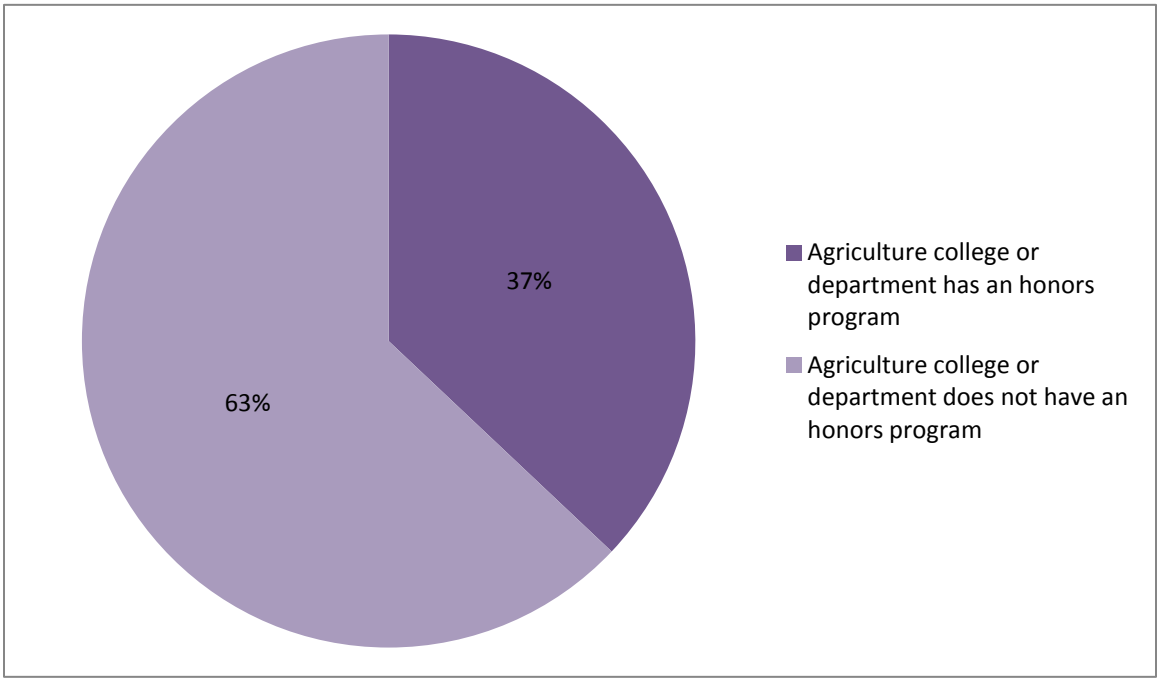
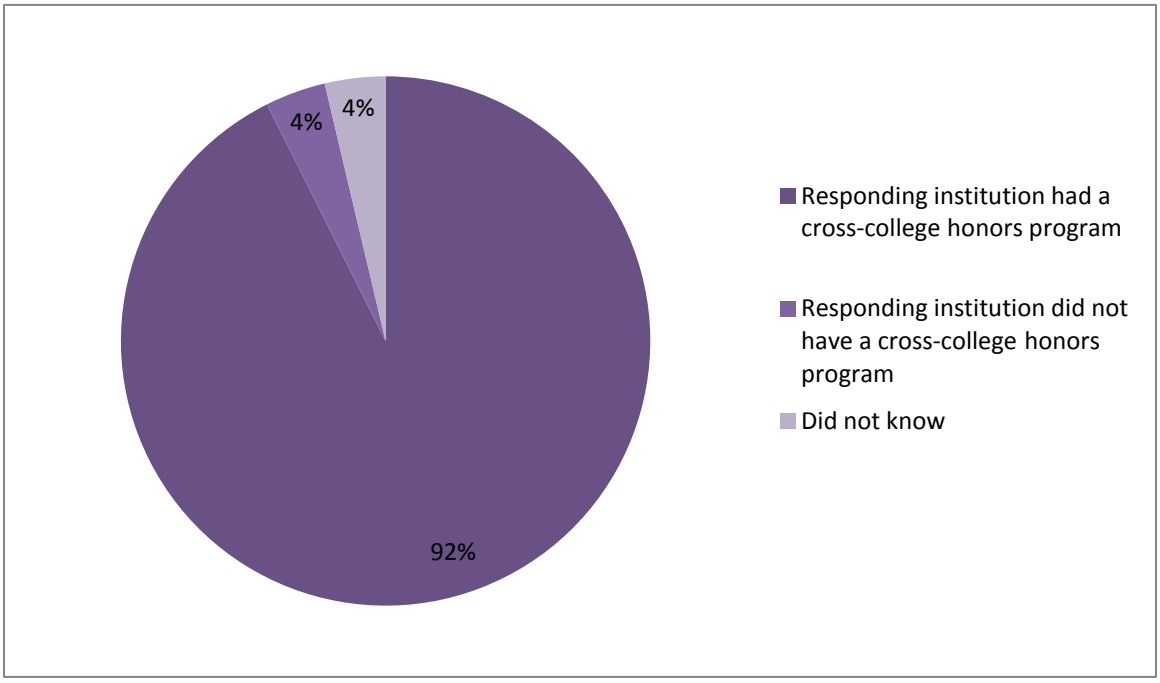


Figure 4. Number of Respondents Reporting a Cross-College Honors Program



This result aligns with the information seen on the potential respondents' websites. Together, the answers to these questions explain why 44.44% (n=12) of respondents reported that a linkage between the two honors components was not applicable in their situation: they simply did not have two separate honors entities. However, over one third (37.04%, n=10) of the respondents reported that they had a college honors program which was linked to the university honors program. The average description of these linkages leans toward an overarching institution-wide honors program that works with the individual colleges and advisors to ensure students are fulfilling honors requirements and degree requirements simultaneously. Surprisingly, 18.52% (n=5) of respondents reported that their college/department honors program was not linked to the institution-wide honors college or program.

Faculty and Administration

Most respondents (72.22% [n=13]) reported that the Director of the Honors Program had direct responsibility for managing the agriculture college or department honors program, and 36.84% (n=7) said that this Director reported to either the Dean or the Provost.

Additionally, most respondents (72.73% [n=16]) respondents said that their program had a mission statement, although 22.73% (n=5) reported not having one. One of the most common themes among the mission statements that were reported by the respondents was challenging and engaging coursework, followed by research.

Only ten respondents (47.62%) reported that their honors students were advised by honors faculty for general academic advising, while 42.86% (n=9) said no. The NCHC stated that a fully developed honors program would allow its students to "receive honors-related academic advising from qualified faculty and/or staff" (1994). Based on that requirement, honors advisors do not specifically have to be honors faculty, but they must be qualified for the honors advising process though qualification requirements were not listed (1994).

Most institutions (55% [n=11]) indicated that honors faculty were selected based upon the quality of instruction, with 20% (n=4) reporting that tenure status in the department and length of time at the institution (10% [n=2]) were also selection factors. Eight institutions (40%) reported that the question was not applicable in their situation. One respondent stated that "faculty can submit honors course proposals which are reviewed by the College's Honors Committee." This simple method of faculty selection was a common theme among the institution websites reviewed. Student reviews were used to evaluate faculty by 45% (n=9) of the responding institutions. Exit interviews from honors students (10% [n=2]) were used as much as no evaluation at all (10% [n=2]). Six institutions (30%) indicated that this question was not applicable to their program. Honors project mentors were also mainly selected on the quality of their instruction (50% [n=10]), although 40% (n=8) reported that this question was not applicable to their situation. Open response answers on this question indicated that honors advisors were selected by the student or were allowed to participate as long as they wanted to do so. Thirty percent of respondents (n=6) indicated that they do not evaluate these project mentors/advisors. If advisor evaluation was conducted, it was done via exit interviews from honors students (20% [n=4]), student reviews (15% [n=3]), or peer reviews (5% [n=1]).

Eighty-nine percent (n=17) of respondents reported that the honors program had a standing faculty committee or council, which aligned with another NCHC basic program standard (1994). Committee or council members are mainly faculty members, either within the agriculture college (80% [n=12]) or outside of the department (60% [n=9]). Interestingly, no institution indicated that community members, such as retired faculty or major institution donors, served on the committee or council. The majority (73.33% [n=11]) of respondents indicated that the committee members were appointed, although 26.67% (n=4) reported that members volunteered for service. No responding institution said that members were elected. Five (33.3%) respondents indicated that members served 3-year terms, while the same number of respondents (n=5) indicated that members could serve terms more than 4

years in length. Twenty percent of respondents (n=3) did not know how long committee members were allowed to serve.

The majority of responding institutions (68.42% [n=13]) of respondents encouraged their honors faculty to use new and experimental pedagogical methods, although 61.54% (n=8) did not know if these new methods had been transferred and successfully used in non-honors classes. On the open response, institutions indicated that instructional methods such as the following had first been used in honors classes and then transferred to non-honors settings: seminar classes, discussion-based teaching, project-based techniques, case studies, student presentations, integration of service projects, computer-aided instruction, guest speakers, broader reading lists, and experiential learning.

Seventy percent (n=14) of respondents reported that their program's administration, faculty, or staff had dedicated administrative space, which is a basic characteristic listed by the NCHC (1994). Of these, 58.33% (n=7) indicated that the administrative space was located with other honors program administrators, and 33.33% (n=4) indicated that it was located within the college's administrative space.

The majority (31.58% [n=6]) of respondents indicated that their honors programs had never been formally evaluated. Four respondents (21.05%) indicated that their program was evaluated every 3 to 5 years or every 5 to 10 years; 15.79% (n=3) reported that the program was evaluated every 1 to 3 years, and 10.53% (n=2) did not know the length of the interval between evaluations. An external review committee was the most commonly selected method of evaluation (45.45% [n=5]), followed by a university-appointed committee (36.36% [n=4]), and an internal college committee (18.18% [n=2]).

Admission and Participation Requirements

The minimum high school grade point average (GPA) for admission into the honors program varied from 3.00 to >3.75. 34.78% (n=8) of the respondents indicated that a minimum GPA of 3.50 and

21.74% (n=5) reported an admission GPA requirement of greater than 3.75. As a point of interest, 21.74% (n=5) of respondents reported having no GPA requirement at all. Most responding institutions (39.13% [n=9]) also said that a 3.50 GPA was required for transfer students, and 45.83% (n=11) required students to maintain a minimum 3.50 GPA to stay in the program. Nearly thirty-five percent (n=8) of respondents said that new freshmen were required to have an SAT score of 1260 to 1340 (ACT score of 28 to 30) to enter the program, while 17.39% (n=4) reported that there was no minimum SAT or ACT requirement.

A majority of respondents (45.83% [n=11]) reported that those students who drop below the minimum GPA requirements are given a semester-long probation period. Only four institutions (16.67%) reported that students were not penalized, and 8.33% (n=2) said that the student would be instantly disqualified from participating in the honors program. No respondent reported having a probation period lasting an entire academic year. However, 52.38% (n=11) reported that the student could rejoin the honors program after dismissal if he/she became eligible again. Of interest is that 29.17% (n=7) of respondents did not know if students were penalized for not maintaining their GPA, and 38.10% (n=8) did not know if students were allowed to rejoin the honors program after being dismissed. One respondent specified that students were allowed to rejoin "as long as they have more than 60 credits remaining in their program."

The majority (86.96% [n=20]) of respondents said that students in the honors program are required to complete a capstone project or thesis as a requirement for graduating with honors. This answer supports the hypothesis that most honors programs have a research project requirement, which is a basic component of a fully developed honors program (NCHC, 1994). As summarized in Figure 5, respondents reported that the theses/projects were evaluated via committee review (78.95% [n=15]), presentation on campus (52.63% [n=10]). Though not as common, 10.53% (n=2) of honors students

were required to present their thesis at a professional conference or publish their finished thesis in a scholarly journal. Alternative methods of evaluation gleaned from the Other/Open Response answer choice included review by: faculty researcher; the Dean and advisor; the research mentor; and all of the above options. Students at these institutions have access to research funding mostly via the university (73.91% [n=17]), but also the college (52.12% [n=12]), the department (34.78% [n=8]), and external sources (21.74% [n=5]) (See Figure 6).

Figure 5. Frequency of Thesis/Project Evaluation Methods

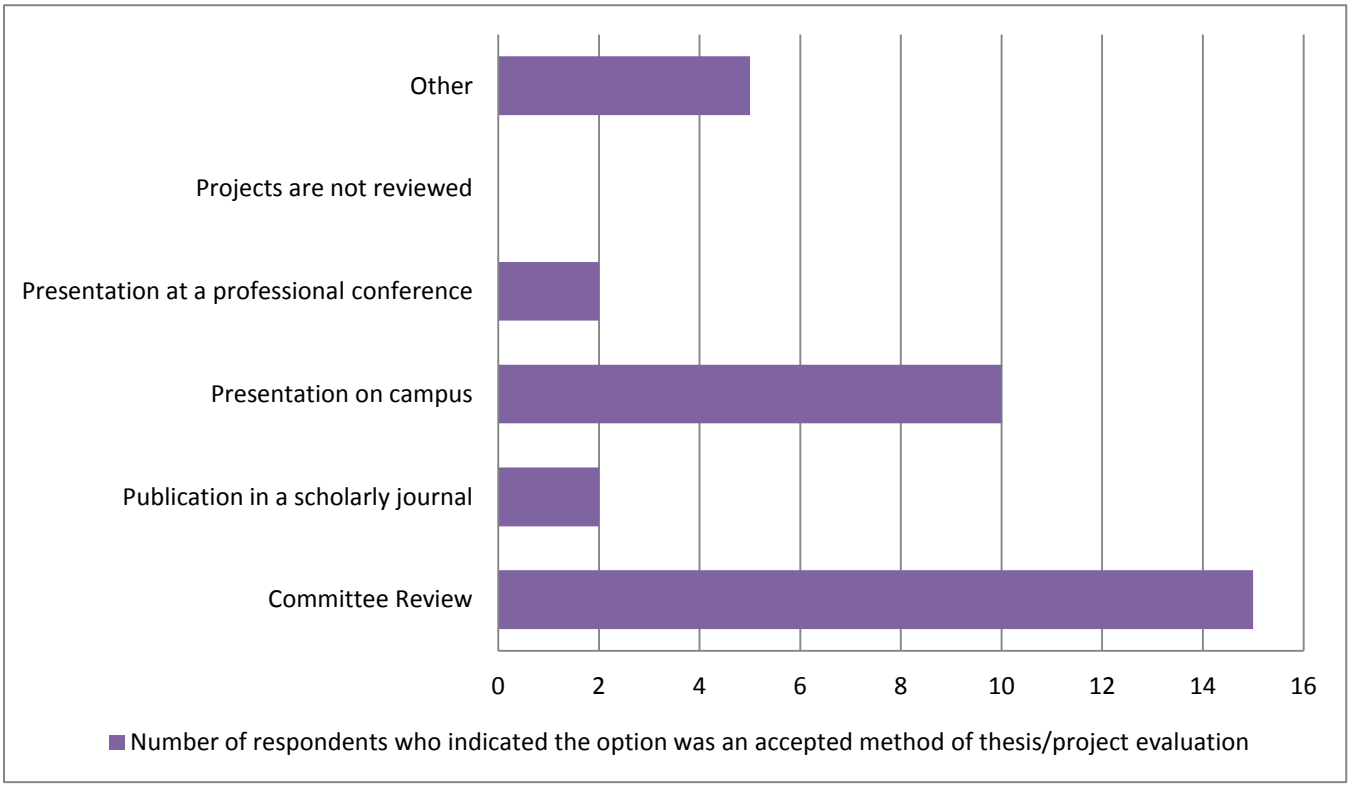
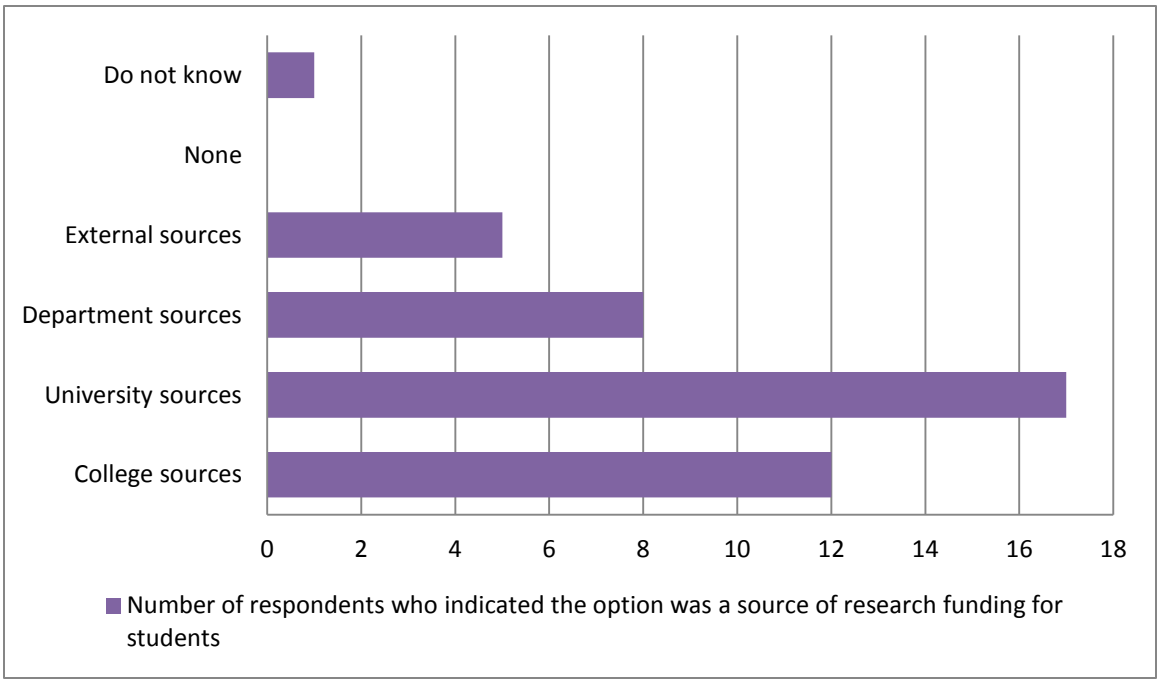


Figure 6. Sources of Research Funding for Honors Students



Most respondents (60.87% [n=14]) of respondents reported that their students were required to take a minimum number of honors or advanced courses per semester. However, 34.78% (n=8) reported that honors students did not have this requirement placed upon them. Of those institutions that required students to enroll in honors credit every semester, 50% (n=7) reported that only 3 credit hours were required. 28.6% (n=4) said that students were required to take at least 6 hours. A majority of respondents (31.8% [n=7]) of the respondents indicated that the total amount of honors credit hours needed to graduate ranged from 21 to 30 hours. The NCHC stipulated that this number should amount to 20% to 25% of the student's total course work but no less than 15% of the total hours required (NCHC, 1994). If based on a 120-credit hour degree plan, that range would meet the NCHC standards.

Ninety-five percent (n=20) of respondents said that these honors courses were counted toward general degree requirements, which directly aligns with the requirements set forth by the National Collegiate Honors Council (1994). However, as one respondent suggested, this can vary based on whether the student is doing general studies honors or department honors. Additionally, 95.45% (n=21)

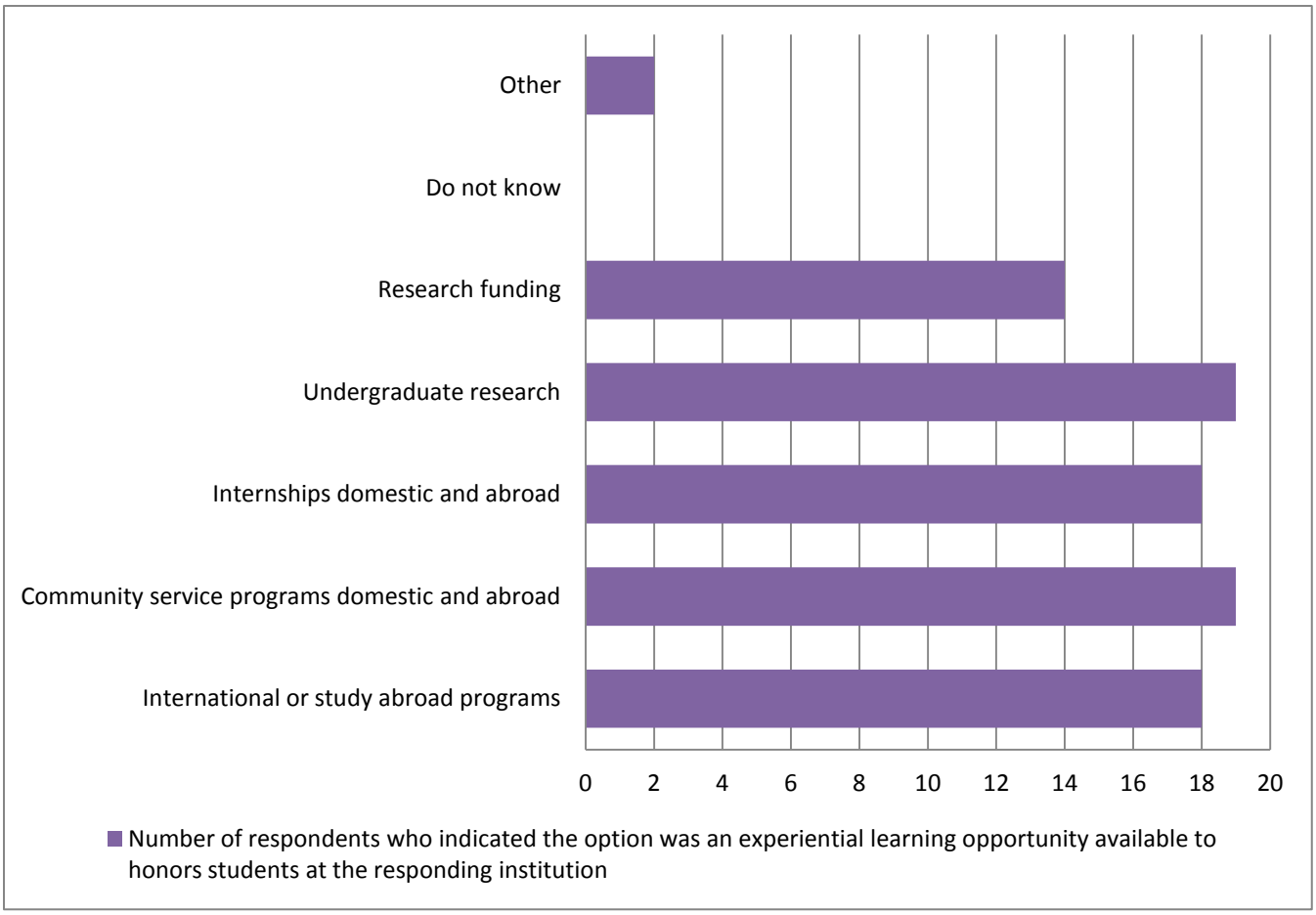
of these students were also allowed to enroll in honors courses outside of the agriculture college/department as well as register for classes intended for non-honors students.

Participation Benefits

Honors-only dorms were a choice for honors students at 68.42% (n=13) of the responding institutions, which is another basic characteristic listed by the NCHC (1994). Five respondents (62.50%) indicated that the question which asked how honors students were grouped together in an "honors-only" dorm did not apply to them. Two institutions (25%) did not know if students were grouped together. No institution reported that students were grouped together by college or by major. The open-response portion returned better information; all six respondents indicated that honors students were grouped together in learning communities regardless of college or major. Most respondents (46.15% [n=6]) did not know what percentage of agriculture honors students lived in the dorms, and 38.46% (n=5) reported that only one to five percent of their student lived in these dorms.

The NCHC stated that a basic characteristic of a fully developed honors program is that it "emphasizes active learning by offering opportunities for students to participate in conferences, international programs, community service, internships, and other types of experiential learning" (1994). Most respondents (89.47% [n=17]) of respondents indicated that honors students were provided with enrichment activities such as distinguished lecturers, workshops, and career fairs. Every respondent who answered the question (n=19) reported that honors students were provided with the opportunity to participate in community service and undergraduate research. Eighteen respondents also indicated that students could also take advantage of international or study abroad programs and internships domestic or abroad. Fourteen respondents (73.68%) stated that honors students had access to funding for research.

Figure 7. Experiential Learning Opportunities for Honors Students



Most of the respondents (78.95% [n=15]) reported that of honors students at the institutions surveyed were provided with opportunities to interact with their peers. Fourteen respondents (93.33%) indicated these opportunities were social in nature, although leadership (73.33% [n=11]) and networking events (66.67% [n=10]) were also provided. Open-response answers also indicated that academic or educational interaction activities were organized for honors students.

Most respondents (47.37% [n=9]) indicated that they had a student committee for oversight or input into the honors program, and 62.5% (n=5) of these committees had six or more members. These committees were allowed to make suggestions regarding social events (87.50% [n=7]) and curriculum changes (87.50% [n=7]). Open-response answers indicated that students were also allowed to make

policy/procedural changes, in a manner similar to the faculty board, and that they collectively serve as an advisor to the honors director on all aspects of the honors program.

Honors students were recognized by 94.74% (n=18) of responding institutions at graduation, as per the NCHC list of best practices, and 94.74% (n=18) of students at these institutions were given special notations on their diploma or final transcript. No institution reported foregoing recognition of honors students. The majority of respondents (78.95% [n=15]) indicated that honors were given at the university level. Only 42.11% (n=8) indicated that they gave honors at the college level. One respondent (5.26%) reported that honors were given at the departmental level.

Discussion and Conclusion

Analysis of the websites of APLU member institutions and responses from the survey showed that most institutions with agriculture colleges or programs did have honors colleges/programs, regardless of whether they were cross-college or located in a single college. This supports the first hypothesis. Attention should be paid to the results (summarized in Figure 3) which indicate that having a separate honors program within the agricultural college or department is not a common occurrence. Cross-college honors programs were the norm, a conclusion supported by the analysis of institutions mentioned in the literature review (Adams, 1990; Fischer, 1996; Mack Jr., 1996; Selingo, 2002; Siegfried, 2001), as well as the data collected by the study and summarized in Figure 4. Results indicated that most programs had a research project requirement like the programs analyzed by Black and colleagues (2008), Fischer (1996), Mack Jr. (1996), and Siegfried (2001), and that honors students were recognized at graduation. Overall, the responding programs met the majority of the NCHC guidelines that were used in constructing the questions for this survey. As per the *Basic Characteristics of a Fully Developed Honors Program* (1994), the majority of responding institutions: reported having a "clearly articulated set of admission criteria [and] requirements needed for retention and satisfactory

completion", as was described by Adams (1990), Siegfried (2001), and Reutter and colleagues (2010); had a clear mission statement; ensured that honors curriculum met the needs of the student; ensured that honors coursework comprised at least 15% of the student's total coursework; ensured that honors coursework can, when appropriate, satisfy general course requirements; reported the presence of a standing committee or council of faculty members; reported the presence of a student committee with a voice in the direction of the program; provided honors-related academic advising; encouraged experimental teaching techniques in honors courses; and offered opportunities for experiential learning. These results confirmed the second half of the hypothesis.

However, due to the limitations of the survey, it cannot be said if the common requirements and features reported by the respondents were for the main honors college or for the honors program within the agriculture college or department, if one existed.

Data Trends

Trends amongst the data were few in number. Larger schools (>15,000 students) generally had larger enrollment numbers in the agriculture program, and thus a larger number of honors-eligible students and participating honors students. Smaller schools (<15,000 students) generally had fewer students in the agriculture program, fewer students eligible for honors, and fewer students participating in an honors program. Size of enrollment and agriculture program designation (department vs. school or college) had no clear effect on the number of agriculture majors offered, available administrative space, number of honors credit hours required, access to honors-only dorm, or presence of a student committee.

University enrollment numbers showed no clear correlation to the classification of the respondent as an agriculture department in a separate school/college or as a stand-alone agriculture school/college. However, smaller enrollment numbers in the agriculture program (<1,000 students) generally indicated that the program was based in a different school or college. Schools with more than

24,000 students were more likely to have a separate agriculture honors program. Interestingly, the number of students enrolled in the agriculture program did not appear to have an effect on the presence or absence of a separate agriculture honors program.

Agriculture programs with a medium number of students (1,000-3,999) were more likely to have never had their honors program evaluated. Of those respondents who indicated that their honors program was regularly evaluated, enrollment figures (university and college/department) did not have an impact on the frequency of evaluation.

Limitations of the Survey

The survey was very in-depth, which is the most likely reason for the low response rate. Unfortunately, it was not constructed to determine from the beginning whether the questions were answered in regard to the institution-wide honors college or the honors program within the agriculture college, if one existed. In retrospect, a simple survey would have had a higher response rate and given a clearer picture of the extent of agricultural honors programs. Promising responses could have been followed up with a more in-depth survey similar to the one distributed in this project.

Recommendations

Although the response rate was low, the survey indicated that separate agricultural honors programs were not common, and that most universities utilized a university-wide honors college. Future research in this area should be directed toward determining what sort of impact these university-wide honors colleges have on agriculture majors who are eligible to participate in such programs.

References

37th Congress [a]. (1862). An act to establish a Department of Agriculture. Retrieved from www.nal.usda.gov/act-establish-department-agriculture

37th Congress [b]. (1862). Morrill Land Grant College Act. Retrieved from www.nal.usda.gov/morrill-land-grant-college-act

Adams, E. (1990). Benjamin Banneker Honors College: Gateway to scientific and technical doctorates. *Journal of Negro Education, 59*(3), 449-462.

Black, C., Grise, K., Barker, J., Thomas, B., & Bollinger, S. (2008). Apparel honors program builds research skills in undergrads. *Journal of Family and Consumer Sciences, 100*(3), 51-55.

Bratt, K. (2010). Hearts and minds: Honors programs in North American Christian institutions. *Journal of Education & Christian Belief, 14*(2), 7-18.

Fischer, D. (1996). The new honors programs. *U. S. News & World Report, 121*(11), 108.

Gates, B. (2011). Bill & Melinda Gates Foundation: 2012. *African Journal of Food, Agriculture, Nutrition & Development, 11*(7), 1-25.

Hébert, T., & McBee, M. (2007). The impact of an undergraduate honors program on gifted university students. *Gifted Child Quarterly, 51*(2), 136-151.

Howley, M., Howley, A. A., Helfrich, S., Harrison, L., Gillam, M., & Safran, J. (2012). A research-focused honors program for high-ability teacher-education students. *Journal for the Education of the Gifted, 35*(4), 319-343.

Long, B. (2002). Attracting the best: The use of honors programs to compete for students.

Mack Jr., M. (1996). These things called honors programs. *Liberal Education, 82*(2), 34.

National Collegiate Honors Council. (1994). Basic Characteristics of a Fully Developed Honors Program. Retrieved from http://nchchonors.org/faculty-directors/basic-characteristics-of-a-fully-developed-honors-program/

National Collegiate Honors Council. (2005). Basic Characteristics of a Fully Developed Honors College. Retrieved from http://nchchonors.org/faculty-directors/basic-characteristics-of-a-fully-developed-honors-college/

Pardue, S. (2010). Symposium: Global views of new agriculture food, energy, and the environment. *Poultry Science, 89*(4), 797-802.

Rinn, A., & Plucker, J. (2004). We recruit them, but then what? The educational and psychological experiences of academically talented undergraduates. *Gifted Child Quarterly, 48*(1), 54-67.

Reutter, L., Paul, P., Sales, A., Jerke, H., Lee, A., McColl, M., Stafford, E., & Visram, A. (2010). Incorporating a research apprenticeship model in a Canadian nursing honors program. *Nurse Education Today, 30*(6), 562-567.

Selingo, J. (2002). Mission creep? More regional state colleges start honors programs to raise their profiles and draw better students. *Chronicle of Higher Education, 48*(38), A19.

Siegfried, J. (2001). Principles for a successful undergraduate economics honors program. *Journal of Economic Education, 32*(2), 169-172.

Sperber, M. (2000). End the mediocrity of our public universities. *Chronicle of Higher Education, 47*(8), B24.

Vessey, J., & DeMarco, R. (2008). The undergraduate research fellows program: A unique model to promote engagement in research. *Journal of Professional Nursing, 24*(6), 358-363.

Appendix 1

Contacted Institutions

Auburn University	**Michigan Technological University**
Tuskegee University	**University of Minnesota**
University of Alabama	**Mississippi State University**
University of Alaska Fairbanks	**Alcorn State University**
University of Arizona	**University of Missouri-Columbia**
Northern Arizona University	**Lincoln University**
University of Arkansas Pine Bluff	**Montana State University**
Arkansas State University	**University of Montana**
University of California	**University of Nebraska-Lincoln**
Berkeley	**University of Nevada, Reno**
Davis	**Rutgers, The State University of New Jersey**
Riverside	**New Mexico State University**
Colorado State University	**Cornell University**
University of Connecticut	**North Carolina State University**
University of Delaware	**North Carolina A & T State University**
Delaware State University	**North Dakota State University**
University of the District of Columbia	**Ohio State University**
University of Florida	**Oklahoma State University**
Florida A & M University	**Langston University**
University of Georgia	**Oregon State University**
University of Guam	**Pennsylvania State University**
University of Hawaii	**University of Rhode Island**
University of Idaho	**Clemson University**
University of Illinois at Urbana-Champaign	**South Dakota State University**
Illinois State University	**University of Tennessee, Knoxville**
Southern Illinois University	**Tennessee State University**
Purdue University	**Texas A & M University**
Iowa State University	**Prairie View A & M University**
Kansas State University	**Texas State University**
University of Kentucky	**Texas Tech University**
Kentucky State University	**Utah State University**
Louisiana State University and Agricultural & Mechanical College	**University of Vermont**
Louisiana Tech University	**Virginia Polytechnic Institute & State University**
University of Maine	**Virginia State University**
University of Maryland, College Park	**Washington State University**
University of Maryland Eastern Shore	**West Virginia University**
University of Massachusetts Amherst	**University of Wisconsin-Madison**
Michigan State University	**University of Wyoming**

Appendix 2

Survey Questions and IRB Approval Letter

These survey questions are being developed as part of undergraduate research project conducted by a student at the University of Arkansas. These questions will be distributed to members of the Association of Public and Land-Grant Universities beginning in January 2013. The data collected will be used to test hypotheses related to best practices for honors programs and colleges. The survey will be open until February, and data will be analyzed in March and April. Participants will have the option to remain anonymous or disclose the name of their institution.

1) Honors programs have clearly defined admission criteria.

- What is your minimum GPA requirement for admission of new freshmen into your honors program?
    - 3.00
    - 3.25
    - 3.50
    - 3.75
    - >3.75
    - No requirement
    - Do not know
    - Other_____
- What SAT/ACT scores are required for admission into your honors program?
    - 1030-1110/22-24
    - 1150-1220/25-27
    - 1260-1340/28-30
    - 1380-1460/31-33
    - No requirement
    - Do not know
    - Other_____
- What are credit hour requirements for transfer students for admission into your honors program?
    - <30 college credits
    - >30 college credits
    - Not eligible
    - No requirement
    - Do not know
    - Other_____
- What is the GPA requirement for transfer students for admission into your honors program?
    - 3.00
    - 3.25
    - 3.50
    - 3.75
    - >3.75
    - No requirement
    - Do not know
    - Other_____

2) Honors programs have clearly defined requirements for retention and satisfactory completion.

- What minimum GPA must students maintain to remain in your honors program?
    - 3.00
    - 3.25
    - 3.50
    - 3.75
    - >3.75
    - No requirement
    - Do not know
    - Other_____
- What penalties are enacted on students who do not meet the GPA requirement for your honors program?
    - One semester of probation
    - One academic year of probation
    - Instant disqualification from the program
    - No penalties
    - Do not know
    - Other _____
- If a student is dismissed, is he/she allowed to rejoin the honors program?
    - Yes
    - No
    - Do not know
    - Other_____
- Are students in your honors program required to complete a capstone project?
    - Yes
    - No
    - Do not know
    - Other_____
- Are students required to take a set number of "honors" or "advanced" courses per semester?
    - Yes
    - No
    - Do not know
    - Other_____
        - If yes, how many?
            - 3 credit hours
            - 6 credit hours
            - 9 credit hours
            - 12 credit hours
            - 15 credit hours

3) Honors programs have a mission statement.

- Please write your mission statement.

4) Honors curriculum comprises 20% to 25% of the total course work, and no less than 15%.

- How many hours are required to obtain a bachelor's degree at your institution?
    - 100 credit hours
    - 101-110 credit hours
    - 111-120 credit hours
    - 121-130 credit hours
    - 131-140 credit hours
    - >140 credit hours
    - Do not know
    - Other_____
- How many hours of honors courses are your students required to take?
    - <10 credit hours
    - 11-20 credit hours
    - 21-30 credit hours
    - 31-40 credit hours
    - 41-50 credit hours
    - >50 credit hours
    - Do not know
    - Other_____

5) Honors programs have curriculum that also satisfies general education requirements.

- Are your honors courses counted toward general degree requirements?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____
- Can students enroll in honors courses outside of the agricultural college or department?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____

7) Honors programs have specific criteria for selecting program faculty.

- What criteria are used to select faculty for your honors program?
    - Tenure status in department
    - Length of time at institution
    - Quality of instruction
    - Do not know
    - Not applicable
    - Other_____
- What criteria are used to select project mentors for your honors program?
    - Tenure status in department
    - Length of time at institution

    - Quality of instruction
    - Do not know
    - Not applicable
    - Other_____
- How do you evaluate your honors program faculty?
    - Student reviews
    - Peer reviews
    - Exit interviews from honors students
    - Do not know
    - Not applicable
    - Other_____
- How do you evaluate your honors program project mentors?
    - Student reviews
    - Peer reviews
    - Exit interviews from honors students
    - Do not know
    - Not applicable
    - Other_____

8) Honors programs have a dedicated space on campus for honors administrators, faculty, support staff, and/or other student supporting resources.

- Do your program's administration, faculty, and staff have dedicated administrative space?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____
- Where is it located?
    - With other honors program administrators
    - Within the college's administrative space
    - Within the department of the program director
    - Do not know
    - Not applicable
    - Other_____

9) Honors programs have dedicated housing or residential life functions for program participants.

- Do honors students have access to an "honors-only" dorm?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____
        - If yes, are honors students grouped by:
            - College

                - Major
                - Honors students are not grouped together
                - Do not know
                - Not applicable
                - Other_____
- What percent of honors students live in the honors dorm?
    - 1 to 5%
    - 6 to 10%
    - 11 to 15%
    - 16 to 20%
    - 21 to 25%
    - 26 to 30%
    - >30%
    - Do not know
    - Not applicable
    - Other_____
- Do honors students have opportunities to interact with each other at gatherings outside of class?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____
        - If yes, what kinds of activities are organized? Check all that apply.
            - Social
            - Leadership
            - Networking
            - Do not know
            - Not applicable
            - Other_____
- Are honors students provided with enrichment activities such as distinguished lecturers or workshops?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____

10) Honors programs have a standing committee or council of faculty members that works with the director in the areas of honors curriculum, governance, policies, development, and evaluation deliberations.

- Does your honors program have a standing committee or council, consisting of faculty members, that guides the development of the honors program?
    - Yes
    - No
    - Do not know
    - Not applicable

    - Other_____
- How are the honors committee members selected?
    - Appointment
    - Elected
    - Volunteer
    - Do not know
    - Not applicable
    - Other_____
- How long are honors committee members allowed to serve?
    - 1 academic year
    - 2 academic years
    - 3 academic years
    - 4 academic years
    - >4 academic years
    - Do not know
    - Not applicable
    - Other_____

11) Honors programs allow students a voice in the governance and direction of the program through a student committee.

- Does your honors program have a student committee?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____
        - If yes, how many students are appointed to the committee?
            - 2
            - 3
            - 4
            - 5
            - 6
            - >6
            - Do not know
            - Other_____
- What type of suggestions are they allowed to make? Check all that apply.
    - Social events
    - Curriculum changes
    - Do not know
    - Other_____

12) Honors programs give their students honors-related academic advising from qualified faculty and/or staff.

- Are honors students advised only by honors faculty for general academic advising?
    - Yes

- No
- Do not know
- Not applicable
- Other_____

13) Honors programs encourage experimentation in curricular and pedagogical development so that such methods, if successful, can be utilized across campus.

- Do you encourage your honors faculty to use new and experimental pedagogical methods?
  - Yes
  - No
  - Do not know
  - Not applicable
  - Other_____
- Have some of these methods been transferred successfully to non-honors classes?
  - Yes
  - No
  - Do not know
  - Not applicable
  - Other_____
    - If yes, please provide an example.

14) Honors programs engage in continuous assessment and evaluation to ensure the program continues to offer enhanced educational opportunities for students.

- How often is your honors program evaluated?
  - 3 years
  - 5 years
  - 10 years
  - Do not know
  - Has not been evaluated
  - Other_____
- What are your criteria for evaluating your program?
  - Write a description
- Who evaluates your program?
  - Internal college committee
  - University-appointed committee
  - External review committee
  - Do not know
  - Not applicable
  - Other_____

15) Honors programs provide active learning opportunities to the students such as international programs, community service, internships, undergraduate research, etc.

- Does your honors program provide opportunities for students to participate in the following:
  - International/study abroad programs?

        - Yes
        - No
        - Do not know
        - Other_____
    - Community service programs both within the community and abroad?
        - Yes
        - No
        - Do not know
        - Other_____
    - Internships both domestic and abroad?
        - Yes
        - No
        - Do not know
        - Other_____
    - Undergraduate research?
        - Yes
        - No
        - Do not know
        - Other_____
    - Research funding?
        - Yes
        - No
        - Do not know
        - Other_____

16) Honors programs provide priority enrollment for active honors students.

- Are your honors students allowed the opportunity to register for classes before non-honors students?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____
- Do your honors students have access to research funding through: (check all that apply)
    - College
    - University
    - Department
    - External
    - None
    - Do not know
    - Other_____

17) Honors colleges exist as an equal collegiate unit within a multi-collegiate university structure.

- Does your university have a cross-college or umbrella honors college?
    - Yes

    - No
    - Do not know
    - Other_____
- Does your college/department have an honors program?
    - Yes
    - No
    - Do not know
    - Other_____
- Are the two related/linked?
    - Yes
    - No
    - Do not know
    - Other_____
        - If yes, briefly describe the linkage_____

18) Honors programs/colleges require the completion of an honors thesis or honors capstone project in order to graduate with honors.

- Do you require honors students to complete an honors thesis or capstone project as a requirement of graduation?
    - Yes
    - No
    - Do not know
    - No applicable
    - Other_____
- How are these theses/projects evaluated?
    - Committee review
    - Publication in scholarly journal
    - Presentation on campus
    - Presentation at a professional conference
    - Projects are not reviewed
    - Do not know
    - Other_____
- Do your students have access to grants to fund these projects?
    - Yes
    - No
    - Do not know
    - Other_____

19) Honors colleges are directed by an honors dean, who reports to the chief academic officer of the institution.

- Who is in charge of your honors program?
    - Dean
    - Associate dean
    - Director of Honors program
    - Honors committee

    - Do not know
    - Other_____
- To whom do they report?
    - Dean
    - Associate dean
    - Provost
    - Do not know
    - Other_____

20) Honors colleges provide proof of honors distinction via recognition at commencement ceremonies, notations on the diploma or final transcript, or other similar actions.

- Do you recognize students with honors distinction at graduation?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____
- Do they receive special notations on their diploma or final transcript?
    - Yes
    - No
    - Do not know
    - Not applicable
    - Other_____
- At what level are honors given?
    - Department
    - College
    - University
    - Do not know
    - Not applicable
    - Other_____

Demographics

1) What type of university is your institution?

- Public
- Private
- 1862 Land Grant University
- 1890 Land Grant University
- Do not know
- Other_____

2) Current approximate full enrollment:

- 10,000-14,999
- 15,000-24,999

- 25,000-34,999
- >35,000
- Do not know
- Other_____

3) Are you a separate agricultural college?

- Yes
- No
- Do not know
- Other_____

4) Are you an agriculture department within another college?

- Yes
- No
- Do not know
- Other_____

5) Current approximate enrollment in agriculture college/departments:

- <1,000
- 1,000-1,999
- 2,000-3,999
- 4,000-5,999
- >6,000
- Do not know
- Other_____

6) Number of academic departments:

- <5
- 6-10
- 11-15
- 16-20
- >20
- Do not know
- Other_____

7) Number of undergraduate majors/programs:

- <5
- 6-10
- 11-15
- 16-20
- 21-25

- 26-30
- >30
- Do not know
- Other_____

7) Types of degrees granted by your institution: (check all that apply)

- Ph.D
- Graduate certificates
- Master of Science
- Undergraduate certificates
- Bachelor of Arts
- Bachelor of Science
- Do not know
- Other_____

8) Average SAT/ACT score of enrolled freshmen:

- <910/<19
- 910-990/19-21
- 1030-1110/22-24
- 1150-1220/25-27
- 1260-1340/28-30
- 1380-1460/31-33
- >1460/>33
- Do not know
- Not applicable
- Other_____

9) Average high school GPA of recent freshman class:

- <2.75
- 2.75
- 3.00
- 3.25
- 3.50
- 3.75
- >3.75
- Do not know
- Not applicable
- Other_____

10) Average five-year graduation rate:

- <10%
- 11-20%

- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- >71%
- Do not know
- Not applicable
- Other_____

11) Number of students in college majors participating in honors:

- <20
- 21-40
- 41-60
- 61-80
- 81-100
- 101-120
- 121-140
- >140
- Do not know
- Not applicable
- Other_____

12) Percentage of female students:

- <10%
- 11-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- 71-80%
- 81-90%
- >90%
- Do not know
- Not applicable
- Other_____

13) What is the approximate graduate (MS and PhD) enrollment of your college?

- <20
- 21-40
- 41-60

- 61-80
- 81-100
- 101-120
- 121-140
- >140
- Do not know
- Not applicable
- Other_____

14) Percentage of in-state students:

- <10%
- 11-20%
- 21-30%
- 31-40%
- 41-50%
- 51-60%
- 61-70%
- 71-80%
- 81-90%
- >90%

15) May we identify these data by your institution?

- Yes
- No
- Other_____

16) If yes, what is the name of your institution?

- _____

17) Do you prefer your data to be anonymous?

- Yes
- No
- Other_____

18) May we contact you for a phone follow-up?

- Yes
- No
- Other_____

January 7, 2013

MEMORANDUM

TO:	Sable Sellick Curt Rom
FROM:	Ro Windwalker IRB Coordinator
RE:	New Protocol Approval
IRB Protocol #:	12-12-351
Protocol Title:	*Best Practices in Agriculture Honors Programs at Land Grant and Public Universities in the US*
Review Type:	☒ EXEMPT ☐ EXPEDITED ☐ FULL IRB
Approved Project Period:	Start Date: 01/07/2013 Expiration Date: 01/06/2014

Your protocol has been approved by the IRB. Protocols are approved for a maximum period of one year. If you wish to continue the project past the approved project period (see above), you must submit a request, using the form *Continuing Review for IRB Approved Projects*, prior to the expiration date. This form is available from the IRB Coordinator or on the Research Compliance website (http://vpred.uark.edu/210.php). As a courtesy, you will be sent a reminder two months in advance of that date. However, failure to receive a reminder does not negate your obligation to make the request in sufficient time for review and approval. Federal regulations prohibit retroactive approval of continuation. Failure to receive approval to continue the project prior to the expiration date will result in Termination of the protocol approval. The IRB Coordinator can give you guidance on submission times.

This protocol has been approved for 50 participants. If you wish to make *any* modifications in the approved protocol, including enrolling more than this number, you must seek approval *prior to* implementing those changes. All modifications should be requested in writing (email is acceptable) and must provide sufficient detail to assess the impact of the change.

If you have questions or need any assistance from the IRB, please contact me at 210 Administration Building, 5-2208, or irb@uark.edu.

Appendix 3

Survey Contact Letters

First Contact (03/13/2013 and 03/27/2013)

Dear Honors Director, Dean, or Representative:

Currently, there are no published studies on the status of collegiate agricultural honors programs in the United States. You are invited to participate in our survey of agricultural honors programs. The purpose of this research is to ascertain common practices of agricultural college honors programs, determine best practices, and then compare these practices to those recommended by the National Collegiate Honors Council. The survey is comprised of around 72 multiple choice and short answer questions and should take 10-15 minutes to complete. This survey is my capstone thesis project.

This survey is meant to be completed by the agriculture school or college Honors Director, the Dean of the agriculture school or college, or knowledgeable representatives of the Honors Program for the agriculture school or college at your institution. Please assist us with this survey by forwarding it to the correct person if you do not fulfill one of the aforementioned roles.

It is requested that only one survey per college be completed and submitted.

You may complete the survey in one of three ways. The survey will be accessible via an online survey, an emailed PDF copy, or a mailed paper copy. Data from the survey will be analyzed and summarized. No individual institution will be identified or revealed in data summaries. Please click the following link to indicate by which method you would like to receive the survey: online, email, or paper.

Agricultural Honors Programs Survey Link: https://www.surveymonkey.com/s/6DSMHZ3

As part of the survey you will have options that your individual institution data remain anonymous or you may provide an identity for your institution. Any data used in summaries will remain anonymous.

You will also have the option of allowing us to contact you for a follow-up phone interview for use in specific case studies within the scope of this project only.

You have the opportunity to help provide data that may discover practices beneficial to the growth and success of your program. Participation is voluntary, and refusal to participate will involve no penalty or loss of benefits.

If you have questions or concerns about this study, you may contact Sable Sellick or Curt Rom at (479) 575-7434 or by e-mail atcrom@uark.edu.

This survey has been reviewed and approved by the University of Arkansas Institutional Review Board for distribution and data collection. For questions or concerns about your rights as a research participant, please contact Ro Windwalker, the University's IRB Coordinator, at (479) 575-2208 or by e-mail at irb@uark.edu.

Thank you,

Sable Sellick
Bumpers College Honors Student

University of Arkansas
Reply to: ssellick@uark.edu

Follow-up (03/20/2013 and 03/27/2013)

Dear Honors Program Director, Dean, or Representative:

This is just a reminder to complete the survey collecting information about collegiate agricultural honors programs.

As the population milestone of 9 billion people approaches us, innovation in the field of agriculture will only become more important. Honors programs help develop and encourage the agricultural scientists and leaders who will eventually solve the problem of feeding the world. It is important that we study these programs in order to find ways to maximize their effectiveness for honors students.

Your participation in this survey is greatly appreciated!

The survey will remain open until March 27th, 2013.

Survey Link: https://www.surveymonkey.com/s/6DSMHZ3

If you have questions or concerns about this study, you may contact Sable Sellick or Curt Rom at (479) 575-7434 or by e-mail at crom@uark.edu.

Thank you,

Sable Sellick

Bumpers College Honors Student

University of Arkansas

reply to: ssellick@uark.edu

Final Follow-Up (04/03/2013)

Dear Honors Director, Dean, or Representative,

This is your final opportunity to participate in our survey assessing the characteristics of agricultural honors programs. Cultivating the next generation of agriculturalists is extremely important in working towards a food- and fiber-secure future. We want to hear about what you are doing now to encourage these young minds and push them to accomplish greater things.

We especially want to pursue your answers as you have Honors Programs in your agriculture college or department.

If you have already completed the survey, we are grateful for your response. If you have not, I encourage you to take advantage of this opportunity before time runs out.

Survey Link: https://www.surveymonkey.com/s/6DSMHZ3

If you have questions or concerns about this study, you may contact Sable Sellick or Curt Rom at (479) 575-7434 or by e-mail at crom@uark.edu.

Thank you,

Sable Sellick
Bumpers College Honors Student

University of Arkansas
Reply to: ssellick@uark.edu

Final Contact (04/09/2013)

Dear Honors Program Director, Dean, or Representative,

I would like to thank you for participating in this survey. Your input is very valuable and will contribute to one of the first studies ever on Agricultural College/Department Honors programs and activities. Thank you for choosing to invest in the next generation of agriculturalists who will soon be leading the push to feed the world.

Once again, thank you very much for participating in my honors thesis. As an agricultural education major, I will do my best to encourage my future students to enter into higher education in agriculture. I trust that you will give them the expertise they need to be successful and world-changing.

If you did not get a chance to complete the survey, today is the very last day to contribute. I will appreciate any input you can give us.

Survey link: https://www.surveymonkey.com/s/6DSMHZ3

If you have questions or concerns about this study, you may contact Sable Sellick or Curt Rom at (479) 575-7434 or by e-mail at crom@uark.edu.

Thank you,

Sable Sellick

Bumpers College Honors Student

University of Arkansas

reply to: ssellick@uark.edu

Appendix 4

Survey Response Rate by Individual Question

Question Number	Question	Number answered	Number skipped
5	What is the current approximate enrollment of students in the agriculture college/departments?^	27	2
6	How many students in your agricultural college or program are eligible to participate in honors?	25	4
7	How many students in your agriculture college or program participate in honors?^	27	2
8	Please select the description that best represents your agriculture program.^	27	2
9	Does your agriculture college or department have an honors program?^	27	2
10	Does your university have a cross-college or umbrella honors program?^	27	2
11	Are the two related/linked?*	27	2
12	If yes, briefly describe the linkage:*	8	21
13	Who has direct responsibility for managing the agriculture college or department honors program?	18	11
14	To whom do they report?	19	10
15	What is your minimum high school GPA requirement for admission of new freshmen into your honors program?	23	6
16	What is the GPA requirement for transfer students for admission into your honors program?	23	6
17	What SAT or ACT scores are required for admission of new freshmen into your honors program?	23	6
18	What minimum GPA must students maintain to remain in your honors program?^	24	5
19	What penalties are enacted on honors students who drop below the minimum GPA requirement for remaining in your honors program?^	24	5
20	If a student is dismissed, is the student allowed to rejoin the honors program if he/she becomes eligible again?	21	8
21	Are students in your honors program required to complete a capstone project or thesis as a requirement for graduating with honors?^	23	6
22	How are these theses/projects evaluated? Check all that apply.*	19	10
23	Do your honors students have access to research	23	6

	funding through any of the following options? Please check all that apply.^		
24	Are students required to take a minimum number of "honors" or "advanced" courses per semester?^	23	6
25	If yes, how many?*	14	15
26	How many total semester hours of honors courses are your students required to take?^	22	7
27	Are your honors courses counted toward general degree requirements?	21	8
28	Can students enroll in honors courses outside of the agricultural college or department?^	22	7
29	Are your honors students allowed the opportunity to register for classes intended for non-honors students?	22	7
30	Are honors students advised by honors faculty for general academic advising?	21	8
31	Does your program have a mission statement?^	22	7
32	Please write your program's mission statement.*	10	19
33	What criteria are used to select faculty for your honors program? Check all that apply.^	20	9
34	How do you evaluate your honors program faculty?	20	9
35	What criteria are used to select project mentors or advisors for your honors program?^	20	9
36	How do you evaluate your honors program project mentors or advisors?^	20	9
37	Do your program's administration, faculty, or staff have dedicated administrative space?^	20	9
38	If yes, where is your administrative space located?*	12	17
39	Do honors students from all disciplines have the choice to live in an "honors-only" dorm?^	19	10
40	If yes, are honors students grouped by:*	8	21
41	If you stated that your institution has honors-exclusive dorms, what percent of agriculture honors students live in the honors dorms?*	13	16
42	Do agriculture honors students have opportunities that encourage them to interact with each other at events or gatherings outside of class?^	19	10
43	If yes, what kinds of activities are organized? Please check all that apply.*	15	14
44	Are honors students provided with enrichment activities such as distinguished lecturers, workshops, peer networking events, career fairs, etc.?^	19	10

45	Does your honors program have a standing faculty committee or faculty council for oversight of the honors program?^	19	10
46	Who serves on this standing committee or council? Check all that apply.*	15	14
47	How are the honors committee members selected?	15	14
48	How long are honors committee members allowed to serve?	15	14
49	Does your honors program have a student committee for oversight or input into the college honors program?^	19	10
50	If yes, how many students are appointed to the committee?*	8	21
51	What type of suggestions is the student committee allowed to make? Please check all that apply.*	8	21
52	Do you encourage your honors faculty to use new and experimental pedagogical methods?^	19	10
53	Have some of these methods been transferred and successfully utilized in non-honors classes?*	13	16
54	If yes, please provide an example of techniques originating in an honors setting being successfully applied in a non-honors setting.*	4	25
55	How often is your honors program evaluated?^	19	10
56	What are the criteria for evaluating your program?*	8	21
57	Who evaluates your program?*	11	18
58	Does your honors program or college provide opportunities for students to participate in any of the following choices? Check all that apply.^	19	10
59	Do you recognize students with honors distinction at graduation?^	19	10
60	Do students receive special notations on their diploma or final transcript?^	19	10
61	At what level are honors given?^	19	10
62	What type of university is your institution?^	19	10
63	Current approximate full enrollment:^	19	10
64	Number of undergraduate majors/programs in your agricultural college or department:	19	10
65	Average SAT or ACT score of enrolled freshmen institution-wide:	18	11
66	Average high school GPA of most recent freshmen class institution-wide:	18	11
67	Average five-year graduation rate at the institution level:	18	11

68	Percentage of female students in the agricultural college or department:^	19	10
69	Percentage of in-state students institution-wide:	19	10

Note: Questions which required an answer could be skipped by the respondent by exiting the survey.

^ *indicates a question which required an answer in order to proceed within the survey.*

** indicates a question which could only be viewed if a certain answer or answers were selected on a previous question (skip logic).*