

Perceptions of Influence on College Choice by Students Enrolled in a College of Agricultural Sciences and Natural Resources

Cathy D. Herren¹
University of Missouri
Columbia, MO



D. Dwayne Cartmell II² and J. Tanner Robertson³
Oklahoma State University
Stillwater, OK

Abstract

A study was conducted to determine specific student characteristics and external influences affecting the undergraduate choice of students enrolled in the College of Agricultural Sciences and Natural Resources (CASNR) at Oklahoma State University (OSU). A 39-question survey instrument was used to assess the relative importance of sources of information available during recruiting, institutional characteristics (e.g., placement rate and degree program requirements), and personal influences on the timing of a student's decision to attend CASNR at OSU. Nearly 93% of participants agreed the recruiting materials were satisfactory in providing enough information to make a college choice. Survey respondents indicated campus visits were the most useful source of information. Career opportunities after graduation and academic reputation were the two most influential institutional characteristics influencing college choice, while parents or guardians were the people providing the strongest influence during the decision process. More than 60% of students made their decision to attend CASNR at OSU during their senior year of high school or during their enrollment at another post-baccalaureate institution. Collectively, these results suggest the current recruitment practices are effective.

Introduction

Agriculture by nature is a vast and complex industry. It encompasses professions ranging from production to law. With technological developments, consumer interest, governmental policies, and the threat to U.S. food systems increasing, this industry will see more employment opportunities for U.S. graduates, specifically those graduating from the fields of food, agriculture, and natural resources (Goeker et al., 2004). A national study conducted by the Cooperative State Research, Education, and Extension service of the U.S. Department of Agriculture and the Purdue University College of

Agriculture (Goeker et al., 2004) found there will be approximately 52,000 employment opportunities for students graduating between 2005 and 2010 and about 49,300 expected qualified graduates to enter the workforce during the same time frame. As academic institutions struggle to educate students with the tools that ensure their success in industry, so must these institutions ensure their own successes by continuing to recruit students. To enhance recruitment efforts, academic institutions must understand what influences students' decisions to attend college (DesJardins et al., 1999; Martin, 1996; Chapman, 1981).

Chapman (1981) found specific student characteristics and a series of external influences that guide college choice of traditional age (18-21) students. This model was the theoretical basis for this study. The influencing factors of students to attend college are continually changing (DesJardins et al., 1999; Martin, 1996; Boatwright and Ching, 1992); therefore, it is imperative for institutions, colleges, and departments to continue to understand these factors and how their own identities affect enrollment.

Chapman's (1981) model of influence on college choice suggests there are student characteristics and external influences that affect the college choice decision. Chapman identified student characteristics as socioeconomic status, aptitude, level of educational aspiration, and high school performance. External factors were separated into three distinct categories: significant persons, fixed college characteristics such as location, and college effort to communicate with prospective students.

Influence of significant persons

A study by Rocca, Washburn, and Sperling (2003) found a significant person in a student's college decision-making process may include friends, parents, guardians, other relatives, alumni, teachers, and counselors. A significant person may influence a student's college choice by helping shape a student's expectations of a particular college, providing direct

¹Marketing Coordinator

²Associate Professor

³Assistant Professor

advice about a college, or by already attending or having attended a particular institution (Chapman, 1981).

Most agree that parents or guardians are influential in a student's college choice (Rocca et al., 2004; Reis and Kahler, 1997; Scofield, 1995; Donnermeyer and Kreps, 1995). Schuster, Constantino, and Klein (1988) and Trent and Medsker (1968) found parents or guardians as influential to college choice. Boatwright and Ching (1992) suggested that peers are more influential than parents or guardians today compared to ten years ago. Rocca et al. (2004) and Reis and Kahler (1997) found students' friends ranked high in influence when choosing a college. Other persons of influence found in the literature were relatives who attended the university (Washburn, 2002), agricultural teachers (Reis and Kahler, 1997), and students attending a potential university (Greer, 1991).

Influence of institutional characteristics

Institutional characteristics include academic reputation, quality of facilities, class size, student reputation, cost, financial aid/scholarship availability, variety of majors, and location (Rocca et al., 2003).

Donnermeyer and Kreps (1994) and Washburn (2002) found financial incentives such as scholarships, good job opportunities, and potential income to be the second most influential factor in influencing freshman enrollment. St. John (2000) found "student aid offers have an immediate and direct effect on whether students enroll. They also have an influence on whether students can afford to continue their enrollment (pg. 72)." Cole and Fanno (1999) found that 20% of students from Oregon State University who transferred out of the College of Agricultural Sciences said they entered the college because of financial support.

Academic reputation may be one of the most influential institutional characteristics in determining student college choice (Rocca et al., 2004; Washburn, 2002; Schuster et al., 1988; Gorman, 1974). Gorman (1974) and Washburn (2002) both found academic reputation to be the most influential institutional characteristic. In addition to financial incentives and academic reputation, cost and location (Schuster et al., 1988) and preparation for employment (Washburn, 2002) are influential institutional characteristics.

Influence of college efforts to communicate with students

Chapman (1981) found that one of the first ways a college responds about enrollment concerns is to evaluate how it finds and recruits prospective students. This is one of the initial ways a college responds because efforts to communicate with students can be changed more quickly than fixed characteristics (Chapman, 1981).

Kealy and Rockel (1987) discovered campus visits

have the greatest effect on student perception of college quality. Washburn (2002) found campus visits to be the most useful source of information prospective students used to choose a college. More than half of matriculants used information from campus visits to make their college choice (Washburn, 2002). Gorman (1974) found campus visits and personal contacts with the institution or with current students to be influential. Rocca et al. (2004) found printed materials to be the most influential source of information in the early stages of the college-choice process, and campus visits and personal contacts to be the most important sources of information in the later stage.

Washburn (2002) found non-matriculants used personal contact the least to influence their college choice, in fact 11.5% of non-matriculants used college-specific information to assist their college choice (Washburn, 2002).

Purpose

The purpose of this study was to identify the recruitment efforts and external influences affecting the undergraduate college-choice process when enrolling in the College of Agricultural Sciences and Natural Resources at Oklahoma State University.

Research Questions

The specific research questions guiding this study were:

1. How useful were sources of recruitment information in helping students make the decision to enroll in the College of Agricultural Sciences and Natural Resources at Oklahoma State University?
2. How influential were characteristics of the institution, selected individuals, degree program characteristics, and social interaction opportunities in helping students make the decision to enroll in the College of Agricultural Sciences and Natural Resources at Oklahoma State University?
3. When did students begin the decision-making process in selecting a college or university, selecting a major, and finalizing the decision to attend Oklahoma State University?

Materials and Methods

This study used an internet survey developed based on previous research related to influencing factors of college choice decisions (Washburn, 2002; Rocca et al., 2003) to identify the recruitment efforts affecting undergraduate college-choice for students enrolling in the College of Agricultural Sciences and Natural Resources at Oklahoma State University. The 39-question instrument was created using FreeOnlineSurveys.com. This service provided the researcher the ability to use an unlimited number of questions per survey, download individual responses, and offered password protection (<http://www.FreeOnlineSurveys.com>). The instrument was tested for

Perceptions of Influence

validity and reliability. A panel of experts consisting of personnel representing the College of Agricultural Sciences and Natural Resources academic programs office, Oklahoma State University's high school and college relations office, and the Department of Agricultural Education, Communications, and 4-H Youth Development reviewed the instrument establishing face and content validity. Reliability was tested using a Chronbach's Alpha reliability analysis. The overall reliability coefficient was .962 for the final data.

The study used a random sample of full-time (registered for at least 12 credit hours) undergraduate students enrolled in the College of Agricultural Sciences and Natural Resources at Oklahoma State University during the spring 2005 semester. The size of the total population was 1,744 students, and a random sample of 1,035 students was sent a pre-notice e-mail on February 11, 2005. After removing 51 students due to invalid e-mail addresses, the sample was reduced to 984 students. The researcher used an adapted form of Dillman's Tailored Design method (2000) to encourage participation. Three initial rounds of e-mail were sent out in one-week intervals. After the three weeks, 229 had responded. The process was repeated a second time and reached a 95% confidence level (Krejcie and Morgan, 1970). An additional 500 students were randomly selected and 110 responded, totaling 339 responses (22.8% response rate). Non-response error was controlled by comparing the age, gender, and academic classification of early participants and late participants.

Frequencies, percentages, means, and standard deviations were used to describe the influence of recruitment information sources, institutional characteristics, influential people, degree program characteristics, and social interaction opportunities. Descriptive statistics were tested using the Statistical Package for Social Sciences 12.0 for Windows (2004) to interpret the data.

Results

This study surveyed students from all majors within the College of Agricultural Sciences and Natural Resources.

Selected Demographic Characteristics of Respondents

Participants in the study were 38.1% ($n=129$) male and 61.1% ($n=207$) female with 82.3% ($n=279$) being of white or non-Hispanic ethnicity. Three students did not indicate their gender. Age of participants ranged from 18 to 55

with more than 94.8% ($n=309$) falling within the age range of 18 to 24. The mean age was 21.3 with a standard deviation of 3.94. Academic classification of the participants were 36.0% ($n=122$) seniors, 27.1% ($n=92$) juniors, 15.6% ($n=53$) sophomores, 20.1% ($n=68$) freshmen, and 1.2% ($n=4$) did not respond.

More than one-fourth (85) of the participants were animal science majors. According to the Oklahoma State University Division of Enrollment Management and Marketing and Institutional Research and Information Management (2004), animal science is the largest major in the university (Table 1).

Because of the population, students may have entered the university as freshmen or transferred from another university. Nearly one-third (32.7%) of participants ($n=111$) entered Oklahoma State University from another university or junior college. The majority (63.7%, $n=216$) entered the university as freshmen. Twelve did not respond.

Agricultural association was measured in several ways, including group or club involvement, immediate family's agricultural involvement, and immediate family's income from production agriculture. Participants denoted that 53.1% ($n=180$) were involved in 4-H; 59.3% ($n=201$) were involved in FFA; 51.9% ($n=176$) were not involved in production agriculture, and 47.2% ($n=160$) was involved in production agriculture.

Information Sources

The first research question was to determine the usefulness of recruitment materials in aiding students' decision to enroll in the College of Agricultural Sciences and Natural Resources at Oklahoma State University.

Participants were given 28 information sources and asked to indicate the usefulness of these resources in aiding their decision to enroll, using a scale of 1 to 5, with 1 indicating "not useful" and 5

Table 1. Distribution of Participants by Major¹

Major	Frequency	Percent (%)
Animal science	85	25.1
Pre-veterinary science	50	14.7
Agricultural communications	32	9.4
Agricultural education	31	9.1
Agribusiness	30	8.8
Biochemistry and molecular biology	28	8.3
Agricultural economics	16	4.7
Horticulture	15	4.4
Plant and soil science	15	4.4
Landscape architecture	12	3.5
Environmental science	10	2.9
Forestry	5	1.5
Entomology	3	0.9
No response	3	0.9
Biosystems and agricultural engineering	2	0.6
Landscape contracting	2	0.6

¹The study used a random sample of full-time (registered for at least 12 credit hours) undergraduate students enrolled in the College of Agricultural Sciences and Natural Resources at Oklahoma State University during the spring 2005 semester.

indicating “very useful.” If an information source was not used, participants were asked not to select a level of usefulness. The most useful and most used source of information was visiting campus with a mean usefulness of 3.95 and a standard deviation of 1.24. A majority (87.6%) of participants indicated that they had visited the campus. Information sources with a mean usefulness level of 3.00 or better were considered important in the recruitment process. Other sources of information with mean usefulness levels of more than 3.00 were personal conversation with a professor, 71.7%; degree program information on a web site, 77.3%; printed university publications, 72.3%; College of Agricultural Sciences and Natural Resources publications, 71.0%; and the university web site information, 71.7%. The least used and least useful information source was the Noble Foundation's Ag Venture program, 43.4%. The Noble Foundation's Ag Venture program had the lowest mean level of usefulness, 1.45 and a standard deviation of 0.96. A list of all information sources is in Table 2. In addition to determining what information sources were used and their usefulness, information was sought about student satisfaction with the information sources. Participants were asked if the information needed to make an informed decision was present during the decision-making process.

The participants who responded “not satisfied” were asked to identify what additional information would have been helpful. Two ideas that were mentioned frequently was to provide more information on transfer credit from junior college or other universities to Oklahoma State University and more information directly from the College of Agricultural Sciences and Natural Resources.

Influences

Participants ranked the level of influence of institutional characteristics, selected individuals, degree program characteristics, and influence of social interaction using a scale from 1 to 5, 1 indicating “not influential” and 5 indicating “very influential.”

Opportunities after graduation were the most influential institutional characteristic with a mean

level of influence of 4.03. Academic reputation, quality of facilities, campus environment, and scholarships awarded were influential characteristics participants sought in choosing a college.

Fourteen total institutional characteristics had a mean level of influence greater than 3.00. Influential individuals were measured by giving the participants a list of 15 potentially influential individuals, and they were asked to rank the level of influence for each of the individuals in terms of college-choice decisions. To determine the individuals used for input, the participants were asked not to select a level of influence if they did not consult that particular individual on college-choice decisions.

The most used and most influential individual in university selection was a parent or guardian. This individual received a mean level of influence of 3.31 and was used by 93.8% of participants (Table 3). More than 70% of participants used all individuals except community college counselors in the university selection process.

Seven degree program characteristics were used to measure participants' influence of the degree program. Participants were asked to rank the influence of degree program characteristics in making college-choice decisions using a scale of 1 to 5,

Table 2. Information Sources Used and Usefulness¹

Source of Information	Used Percent	Usefulness \bar{x} (rank)	SD
Visit to campus	87.6	3.95 (1)	1.24
Personal conversation with a professor	71.7	3.43 (2)	1.50
Degree program information on a Web site	77.3	3.36 (3)	1.41
Printed OSU publications	72.3	3.23 (4)	1.39
Printed CASNR publications	71.0	3.15 (5)	1.50
OSU Web site information	71.7	3.07 (6)	1.41
CASNR Web site information	63.1	2.81 (7)	1.49
Personal conversation with a CASNR representative	65.2	2.80 (8)	1.49
Personal conversation with an OSU admissions or high school and college relations representative	67.6	2.72 (9)	1.45
Letter and/or information mailed from a CASNR representative	63.4	2.58 (10)	1.46
Information obtained at a CASNR recruitment booth at FFA events	62.5	2.53 (11)	1.50
Participation in FFA events on OSU campus	57.8	2.53 (11)	1.59
Letter and/ or information mailed from an admissions representative	64.0	2.46 (13)	1.39
Participation in an OSU on-campus recruitment program	58.4	2.38 (14)	1.49
Letter and/ or information mailed from a professor	50.4	2.18 (15)	1.49
Participation in Animal Science “Big Three” Judging Field Days	51.6	2.15 (16)	1.55
Visits by OSU representative to your school	56.6	2.13 (17)	1.43
Participation in athletic events on OSU campus	51.9	2.09 (18)	1.43
Participation in other student events on OSU campus	52.5	2.03 (19)	1.41
Phone call from an a CASNR representative	53.4	2.02 (20)	1.35
Phone call from an OSU admissions or high school and college relations representative	51.3	1.94 (21)	1.33
TV, radio, newspaper, or magazine advertisements	51.6	1.77 (22)	1.12
Participation in an CASNR on-campus recruitment program (Future Ag Leaders Conference)	47.8	1.75 (23)	1.34
Participation in 4-H events on campus	47.5	1.73 (24)	1.29
Participation in an OSU promotion event sponsored by OSU alumni in your area	49.0	1.72 (25)	1.17
Visit by CASNR representative to your school	46.6	1.63 (26)	1.10
Information obtained at an on-campus multicultural event through participation in REAP program	44.2	1.51 (27)	1.04
Participation in the Noble Foundation’s Ag Venture program	43.4	1.45 (28)	.96

¹The study used a random sample of full-time (registered for at least 12 credit hours) undergraduate students enrolled in the College of Agricultural Sciences and Natural Resources at Oklahoma State University during the spring 2005 semester.

Perceptions of Influence

1 indicating “not influential” and 5 indicating “very influential.” The most influential degree characteristic was career opportunities after graduation with a mean level of influence of 4.18 and a standard deviation of .99. Quality of facilities (3.84) as well as quality and reputation of courses (3.76) and faculty (3.71) influenced student decisions.

Decision making

Participants were asked when they began the process of selecting a college and were asked to choose one of five categories based on grade classification. More than one-fourth (26.8%) of the participants began their decision-making process before the ninth grade. By the time participants had finished the eleventh grade, 78.3% (266) had begun the decision-making process.

Participants were asked to determine when they finalized their decision to attend Oklahoma State University. Eight response options were given for participants. About one-fourth (26.6%) of participants had made the decision to attend this university before their senior year of high school. The majority (60.4%) made their decision to attend this university during the twelfth grade or while attending community college (18%) (Table 4).

Discussion

Information sources

Campus visits were the most useful source of information. This is consistent with the literature in that others found campus visits to be useful (Boyer, 1987; Gorman, 1974; Kealy and Rockel, 1987; Washburn, 2002; and Rocca et al., 2004). Printed publications and letters from an admissions representative were used by more than half of the participants. Washburn (2002) found more than half used printed publications as an information source. Sources of information considered useful were campus visits, personal conversation with a professor, degree information from a Web site, and printed publications from the university, college or department. Nearly 93% of participants agreed the information they used was satisfactory.

Influences

Participants in this study noted the two most influential institutional characteristics were opportunities after graduation and the academic reputation of the university. Rocca et al. (2004) identified these characteristics to be the most influential. Gorman (1974), Shuster et

al. (1988), and Washburn (2002) found academic reputation to be influential in student college choice. Donnermeyer and Kreps (1994) found scholarships and incentives to be one of the most important factors. Cole and Fanno (1999) found financial incentives to be key in college choice, while financial incentive ranked fifth in this study. The least influential institutional characteristic in this study was prominence of university athletic teams, which is consistent with previous research (Rocca et al., 2004; Washburn, 2002).

In reference to significant individuals, participants noted a parent or guardian was the most influential. This was consistent with the majority of the literature (Broekemier and Seshadri, 1999; Donnermeyer and Kreps, 1994; Rocca et al., 2004; Washburn, 2002). According to Greer (1991) agricultural teachers were the fourth most influential individual in this study despite their mean level of influence being below 3.00 on a 1 to 5 scale, 1 indicating “not influential” and with 5 indicating “very influential.”

Career opportunities was the most influential degree program characteristic in this study and being the most influential in the Washburn (2002) and Rocca et al. (2004) studies. Of the seven degree program characteristics listed, the number of students in the major fell below a mean influence of 3.00 based on a 5-point scale, with 1 indicating “not influential” and 5 indicating “very influential.”

Decision Making

This study found 78% of students who participated had begun the process of choosing a college by the time they started the 12th grade (senior year) of high school. This was representative of the findings in the Rocca et al. (2004) and the Washburn (2002) studies. More than 60% of participants had finalized their decision to attend this university during the 12th grade (senior year) of high school or while attending community college.

Table 3. Influence of People in Selection of University¹

People	Used	Level of Influence	
	Percent	(rank)	SD
Parent or guardian	87.6	3.41 (1)	1.24
OSU graduate	71.7	2.94 (2)	1.50
Relative who attended OSU	77.3	2.70 (3)	1.41
High school agriculture teacher	72.3	2.63 (4)	1.39
Friend in college	71.0	2.61 (5)	1.50
CASNR faculty and/or staff	71.7	2.40 (6)	1.41
Agriculture or 4-H extension Educator	63.1	2.38 (7)	1.49
Current CASNR student	65.2	2.38 (8)	1.49
Other high school teacher	67.6	2.16 (9)	1.45
OSU high school and college relations representative	63.4	2.13(10)	1.46
Friend in high school	62.5	2.12 (11)	1.50
High school guidance counselor	57.8	1.98 (11)	1.59
Community college instructor	64.0	1.84 (13)	1.39
High school science teacher	58.4	1.49 (14)	1.49

¹The study used a random sample of full-time (registered for at least 12 credit hours) undergraduate students enrolled in the College of Agricultural Sciences and Natural Resources at Oklahoma State University during the spring 2005 semester.

Table 4. Final Decision to Attend University¹

Grade	Frequency (rank)	Percent (%)
During 12th grade, 1st semester	74 (1)	21.8
During 12th grade, 2 nd semester	70 (2)	20.6
Community college	61 (3)	18.0
No response	44 (4)	13.0
During 11th grade	43 (5)	12.7
Before 9th grade	29 (6)	8.6
During 10th grade	12 (7)	3.5
During 9th grade	6 (8)	1.8

¹The study used a random sample of full-time (registered for at least 12 credit hours) undergraduate students enrolled in the College of Agricultural Sciences and Natural Resources at Oklahoma State University during the spring 2005 semester.

Since the college student is ever changing, it is important to continue to research the factors that influence college choice. As the research indicates, significant persons, institutional characteristics, and communication efforts influence the college-choice process. Considering that parents or guardians tend to be the most influential person in a student's college choice, more research needs to be conducted to identify background information of these individuals and what factors they use to influence the college-choice process. More recruitment efforts need to be made to include significant persons in the recruitment process. Materials may need to be developed to educate this group as well as the prospective students about institutional characteristics. With institutional characteristics such as academic reputation being identified as influential in a students' decision to attend a particular college, it is imperative that each institution identify and understand its unique positive and negative traits. With academic reputation being so influential, it is important to maintain a strong and positive academic image. Efforts to increase this reputation must be made. Research should be conducted to determine the attributes of academic reputations a prospective student finds to be the best marks of a prestigious institution. This may help an institution improve its own image and prevent negative perceptions.

As indicated, campus visits are one of the most influential sources of information used by prospective college students. Institutions need to continue to increase opportunities to attract prospective students onto their campuses and strive to provide a positive experience. Whether an informal or a formal visit, a professor should be available to assist in the presentation. Printed materials are important sources of information. Although printed materials are influential, it is important to note that more and more prospective students are using web sites as sources of information. In this study, both the university web site and the college web site ranked directly under printed materials as the most useful source of information. Research should be done with prospective students to assist in the development of information presented on university web sites. Research should focus on the ease of use of university web sites.

Considering when students are beginning the college-choice process, recruitment efforts should focus on prospective students earlier than high school. It is important to note that a large majority of prospective students finalize their decision in the 12th grade or final year of high school. Rocca et al. (2004) said that campus visits are most influential

during the final stages of choosing a college. Therefore, it is important to study if campus visits are occurring more often during a students' senior year.

Literature Cited

- Boatwright, M. and M. Ching. 1992. Factors that influence students' decisions to attend college. *Jour. of Instructional Psychology* 19(2): 79-86.
- Broekemier, G.M. and S. Seshadri. 1999. Differences in college-choice criteria between deciding students and their parents. *Jour. of Marketing for Higher Education* 9(3): 1-13.
- Chapman, D.W. 1981. A model of college student choice. *Jour. of Higher Education* 52: 490-505.
- Cole, L. and W. Fanno. 1999. Survey of early leavers: Implications for recruitment and retention. *NACTA Jour.* 43(1): 53-56.
- DesJardins, S.L., H. Dundar, and D.D. Hendel. 1999. Modeling the college application decision process in a land-grant university. *Economics of Education Review* 18: 117-132.
- Dillman, D.A. 2000. *Mail and internet surveys: The tailored design method*. 2nd ed. New York, NY: John Wiley & Sons, Inc.
- Donnermeyer, J.F. and G.M. Kreps. 1994. Assessing college of agriculture freshmen. *NACTA Jour.* 38(1): 45-38.
- Goeker, A.D., J.L. Gilmore, E. Smith, and P.G. Smith. 2004. Employment opportunities for college graduates in the U.S. food, agricultural, and natural resources system, 2005-2010.
- Food and Agricultural Education Information System Web site: <http://faeis.usda.gov/supplydemand/2005-2010>. Accessed September 30, 2006.
- Gorman, W. P. 1974. An evaluation of student-attracting methods and university features by attending students. *College and University* 51(2): 220-225.
- Greer, W. 1991. Choosing the invisible college. *Currents* 17: 44-48.
- Herren, C. 2005. Survey of factors influencing the college-choice decisions of students enrolled in CASNR at OSU: Oklahoma State University.
- Kealey, M. J. and M.L. Rockel. 1987. Student perceptions of college quality: The influence of college

Perceptions of Influence

- recruitment policies. *Jour. of Higher Education* 58(6): 683-703.
- Krejcie, M.V. and D.W. Morgan. 1970. Determining sample size for research activities. *Educ. Psych. Measurement* 30(30): 607-610.
- Martin, C. 1996. Institutional research and student recruitment or how do institutions of higher education know what attracts students to their doors? *Australian Association for Institutional Research* 5(2).
- Oklahoma State University Office of Institutional Research. 2000-2004. New students on campus by college and type of admission. Stillwater, OK.
- Oklahoma State University Office of Institutional Research. 2004. Five-year academic report card: University summary. Stillwater, OK.
- Reis, R. and A.A. Kahler. 1997. Factors influencing enrollment in agricultural education programs as expressed by Iowa secondary agricultural education students. *Jour. of Agricultural Education* 38(2): 38-48.
- Rocca, S.J., S.G. Washburn, and E. Spring. 2003. Survey of factors influencing the matriculation decisions of college of agricultural and life sciences students: University of Florida.
- Rocca, S.J., S.G. Washburn, and E. Spring. 2004. Factors influencing the matriculation decisions of college of agricultural and life sciences students. In: *Proc. of the National Agricultural Alumni and Development Association Conference*, Mobile, Alabama.
- Scofield, G.G. 1995. College of agriculture new student profile. In: *Proceedings of the Central Region 49th Annual Research Conference in Agricultural Education*, 1-10.
- Schuster, C.P., P. Constantino, N.M. Klein. 1988. The process of choosing institutions of higher learning. *Jour. of Marketing for Higher Education* 1(2): 37-54.
- St. John, E.P. 2000. The impact of student aid on recruitment and relation: What the research indicates. *New Directions for Student Services* 89: 51-75.
- Trent, J.W. and L.L. Medsker. 1968. *Beyond high school: A psychological study of 10,000 high school graduates*. San Francisco, CA: Jossey-Bass.
- Washburn, S.G. 2002. Factors influencing college choice for matriculates and non-matriculants into a college of agriculture. Unpublished Dissertation, University of Missouri-Columbia.

