Engaging Undergraduate Students through Academic Advising

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Abstract

Academic advising is an integral part of the college experience. Outcomes of academic advising may be more critical than realized by either advisors or advisees. Using a census of undergraduate students enrolled in a college of agriculture at a large land-grant institution, the engagement of undergraduate students through academic advising was measured. Findings were that students were generally not engaged in educational experiences with their advisors beyond their assigned coursework. Advisors generally did not discuss ideas from readings or classes with undergraduate students outside of class, nor did they tend to work with undergraduate students on research projects. In addition, students reported they had little support in their personal development. The relationships found between frequency of advisor contact per term and undergraduate students' perceptions of advising, indicated that the more students contacted their advisors, the more they were generally satisfied with the academic advising they received. Recommendations for the college included providing professional development for advisors to address opportunities to engage advisees through academic advising to promote their development as a whole student.

Introduction

Academic advising is an integral component of the college experience. Quality academic advising assists students in life and in career goal clarification, as well as in the short-term goals of course selection and problem-solving (Kozloff, 1985). Studies have been compiled to suggest that meaningful and developmental contact with advisors promotes student success (Johnson and Wang, 2011; Kuh, 2008; Tuttle, 2000) and forms the most critical relationship on campus for students. As Upcraft discussed in his 1995 study of advising, academic advising is a relationship and does not equate to merely scheduling courses. Upcraft advocated that

advisors needed to provide more engaging interaction with advisees beyond registering them for classes if they wished to cultivate positive development in students.

The role of academic advisors has evolved from simplistic beginnings of scheduling courses, to include a wide array of tasks and expectations that meet the growing needs of those being advised in today's higher education environments. "Institutions of higher education are challenged now more than ever to focus on the needs of clients, especially its students" (Jones, 2003) and advisors are the personnel on the frontlines who are frequently challenged to meet new and changing requirements. Faculty members are often engaged in academic advising to fulfill an institutional duty owed to students. Alas, a review of literature revealed that undergraduate students nationally are dissatisfied with their academic advising and an extensive need exists to educate and train academic advisors on methods of effective advising practices for engaging college students.

Theoretical Framework

Chickering's Theory of Student Development has been a prominent theory used in developmental advising over the decades. Grounding his theory of student development in the psychosocial realm, Chickering (1969) examined the content of development, the important issues people face as their lives progress and then identified seven vectors along which students continually develop. The seven vectors represent seven significant areas of challenge, development and growth throughout the college years. The first vector, achieving competence, focuses on students increasing their cognitive, affective and physical skills. Managing emotions is another vector, where students learn to "control impulses and to develop appropriate responses" (Pascarella and Terenzini, 2005, p. 21). Third

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is moving through autonomy toward interdependence. Students learn to be self-sufficient, responsible and make decisions without assistance. Developing matureinterpersonal relationships is the fourth vector. Students create and maintain diverse relationships in respect to others. The fifth vector focuses on developing a sense of self, shared by historical events, social and cultural conditions and issues from ethnic heritage (Pascarella and Terenzini). Development along the sixth vector occurs as an individual answers not only the question: "Who am I?," but also, "Who am I going to be?" and "Where am I going to go?" (Pascarella and Terenzini). The seventh vector focuses on values and beliefs with the emerging identity of the student. Chickering argued that as students progress through the seven vectors, they become less dependent on others and promote their own development. Academic advisors who use developmental advising practices recognize these seven vectors and support students through their advancement of maturity.

Purpose and Objectives

Academic advising is an extension of the teaching role in higher education (Campbell, 2008; Eble, 1988; Hemwall and Trachte, 2003); and when designed, developed and assessed well, advising plays a critical role in connecting students with learning opportunities that support engagement and the attainment of higher student achievement. The National Research Agenda for Agricultural Education supports the need for establishing meaningful, engaged learning in all environments by actively and emotionally engaging students, resulting in high levels of achievement, life and career readiness and professional success (Doerfert, 2011). Engaging undergraduate students in meaningful learning environments will produce positive learner outcomes that are essential to properly educating the citizens of the 21st century (Doerfert).

Therefore, the objectives guiding this research study were to:

- 1. Describe College of Food, Agricultural and Environmental Sciences (CFAES) undergraduate students' participation in engaging educational activities with academic advisors beyond the classroom
- 2. Describe CFAES undergraduate students' perceptions of personal development through academic advising.
- Describe CFAES undergraduate students' communication tendencies in regards to academic advisor contact.

Methods and Procedures

This descriptive census study (N=2294) focused on undergraduate students enrolled in the College of Food, Agricultural and Environmental Sciences at The Ohio State University during the 2012 spring academic term. Data were collected using an electronic survey instrument.

Instrumentation

Undergraduate students were asked to respond to 26 Likert-type scale items related to academic advising in the college. Twenty of the research questions in the survey instrument originated from the National Survey of Student Engagement (NSSE, 2012). NSSE is a nationally recognized assessment tool used by colleges and universities to measure undergraduate student engagement. The United States Department of Education (2006) suggested that the NSSE was a viable instrument for all types of institutions to measure and to demonstrate learning outcomes for all types of students. Therefore, the researchers deemed NSSE an established, valid and reliable instrument to employ for this research study. Standardized instruments come with the advantages of having already-established reliability and validity (Cuseo, 2008). Reliability and validity of the constructs were established by the NSSE instrument-design team. Cronbach's alpha coefficients were reported for all constructs and ranged between .54 and .81 (NSSE, 2005).

Procedures

The researchers complied with the established protocol set-forth by NSSE and The Ohio State University to obtain the required approvals to use twenty identified NSSE items in the research study. Six demographic items were researcher-designed. The researchers modified the appearance of the original NSSE items based on the options provided through the online survey provider. The Ohio State University Institutional Review Board (IRB) approved the study protocol prior to implementation. The subjects were administered the survey via their university-provided email accounts during the spring academic term

Data Collection and Analysis

Data were collected using Dillman's (2000) Tailored Design Method, which was modified to fit the situation as follows. The study used three of the five parts of the tailored design method: (1) respondent-friendly questionnaire, (2) up to five contacts with the recipient and (3) personalized correspondence.

A pre-notice correspondence email was sent by the Associate Dean and Director of Academic Affairs for

the College of Food, Agricultural and Environmental Sciences to undergraduate students enrolled in the college. The email informed students that an electronic survey would be arriving in their university-provided email accounts and encouraged them to participate. The researchers sent five emails through the online survey provider to students, encouraging them to complete the questionnaire. At the end of the data collection, a thank you email was sent to participants in the study. The researchers received a 30% response rate to the survey (n=685).

Descriptive statistics were used to analyze the data using SPSS. Population means and population standard deviations were rounded to the nearest 1/100th.

Controlling Nonresponse Error

The researchers were not attempting to generalize beyond the target population; however, the researchers wanted to ensure with confidence that the sample of students who responded to the survey were representative of all students in the college. To minimize nonresponse error, initially, the researchers utilized a modification of Dillman's (2000) Tailored Design Method to increase survey responses. Although Dillman's design was implemented throughout the study, the researchers wanted to minimize the concern of nonresponse error, the concept that those who did not complete the survey may be different in some dimension than those who did respond.

Miller and Smith (1983), suggested specific techniques for handling nonresponse issues. Among those techniques was the comparison of early to late respondents. "Research findings suggest that late respondents are often similar to nonrespondents. Thus, one way to estimate the nature of the replies of nonrespondents is through late respondents" (Miller and Smith, p. 48). The researchers randomly selected ten early respondents and ten late respondents who were compared statistically to determine differences, with late respondents assumed to be representative of nonrespondents. The researchers, a priori, set a 90% confidence band around response means to compare the two groups. No differences were found between characteristics of early and late respondents, thus the data were generalizable to the population of current undergraduate students in the College of Food, Agricultural and Environmental Sciences at The Ohio State University.

Limitations of the Study

The researchers acknowledged limitations in this study resulting from the methodologies and procedures employed. The first limitation recognized by the researchers was that the subjects used in this study were

a population of students in a college of food, agricultural and environmental sciences at a large, Midwestern land grant institution. It should be conceded that this limitation affects how the conclusions can be generalized to other populations.

Additionally, data were collected during the last quarter-based academic term in the university's history. Students were asked their perceptions of academic advising at the college and institutional levels, while preparing to make this significant academic transition. Some students may have felt apprehensive about the change from quarter-based terms to semester-based terms and their anxiety may not have reflected an accurate perception of their overall advising experiences. It should be acknowledged that the context and conditions of the academic environment during the data collection were unique to this monumental university transition. It should be disclosed that this limitation may have also affected the response rate of the survey.

The survey instrument provided an additional limitation for this study. Twenty items in the survey instrument were used verbatim from the National Survey of Student Engagement (NSSE). NSSE is a standardized instrument used nationally and globally to gather data on student engagement at institutions of higher education. The questions derived from NSSE are worded in general terms to accommodate the differences across a multitude of institutions. Thus, the wording in the survey instrument was not specific to The Ohio State University, nor the College of Food, Agricultural and Environmental Sciences.

Lastly, this study served as the foundation piece to propel future research investigations of academic advising practices in the College of Food, Agricultural and Environmental Sciences. Administrators in the college needed an up-to-date analysis of current academic advising practices in order to establish a basis for identifying target areas needed for additional research. The findings of this study were intended to be merely descriptive and allowed room for further investigation in order to successfully engage students through the seven vectors of Chickering's Theory of Student Development.

Results/Findings

Objective 1: Describe CFAES undergraduate students' participation in engaging educational activities with academic advisors beyond the classroom.

Students enrolled in CFAES reported that they never (42.8%) or sometimes (48.6%) discussed ideas from readings or classes with academic advisors outside of class (Table 1). Additionally, 7.4% of undergraduate students often discussed ideas from readings or classes

with academic advisors outside of class, while 1.2% of students did so very often. The mean score for occurrence level of discussing ideas from readings or classes with academic advisors outside of class (n=685) was 1.67 (SD=.66) on a 4-point Likert scale. The mode was 2.00 and the median was 2.00.

		n	Percent (%)
Discuss ideas from readings or classes outside of class with advisors ¹	Never	293	42.8%
	Sometimes	333	48.6%
	Often	51	7.4%
	Very often	8	1.2%
Work with advisors on activities other than coursework ¹	Never	300	44.0%
	Sometimes	251	36.8%
	Often	86	12.6%
	Very often	45	6.6%
Intent to work on a research project with an advisor outside of course or program requirements ²	Not decided	182	26.9%
	Do not plan to do	277	41.0%
	Plan to do	162	24.0%
	Done	55	8.1%

Concerning the occurrence level of students working with academic advisors on activities other than coursework (i.e. committees, orientations, student life activities), 44% of students reported they never work with academic advisors in this capacity (Table 1). Thirty-six percent (36.8%) of students reported that they sometimes work with academic advisors on activities other than coursework, while 12.6% reported they often work with academic advisors on activities other than coursework. In addition, 6.6% of students reported that they very often work with academic advisors on activities other than coursework. The mean score for how often students worked with academic advisors on activities other than coursework (n=682) was 1.82 (SD=.89) on a 4-point Likert scale. The mode was 1.00 and the median was 2.00.

Students enrolled in CFAES reported they have not decided if they will complete a research project with academic advisors outside of course or program requirements (26.9%). Forty-one percent of students reported that they do not plan to work on a research project with an academic advisor outside of course or program requirements (Table 1), while 24.0% do plan to work on a research project outside of course or program requirements with an academic advisor. Eight percent of undergraduate students (8.1%) reported that they have already completed a research project with an academic advisor outside of course or program requirements. The mean score for level of intent to work on a research project with an academic advisor outside of course or program requirements (n=676) was 2.13 (SD=.90) on a 4-point Likert scale. The mode was 2.00 and the median was 2.00.

Objective 2: Describe CFAES undergraduate students' perceptions of personal development through academic advising.

Fourteen percent of undergraduates reported that the institution provided very little support for students to thrive socially (Table 2). Nearly thirty-eight percent (37.9%) of students acknowledged that the institution provided some support needed for students to thrive socially, while 28.7% of students perceived that the institution provided quite a bit of support for students to thrive socially. Additionally, 19.3% of students reported that the institution provided very much support for students to thrive socially. The mean score for institutional support to thrive socially (n=662) was 2.53 (SD=.96) on a 4-point Likert scale. The mode was 2.00 and the median was also 2.00.

Table 2. Undergraduate Students' Perceptions of Personal Development through Academic Advising				
		n	Percent (%)	
Level of support the institution provides students to thrive	Very little	93	14.0%	
	Some	251	37.9%	
	Quite a bit	190	28.7%	
socially ¹	Very much	128	19.3%	
Level of assistance the institution provides to develop a personal code of values and ethics ¹	Very little	125	18.8%	
	Some	252	38.0%	
	Quite a bit	196	29.5%	
	Very much	91	13.7%	
Level of help provided by the institution to cope with non-academic responsibilities ¹	Very little	251	37.9%	
	Some	243	36.7%	
	Quite a bit	118	17.8%	
	Very much	50	7.6%	
¹ Scores ranged from 1 (very little) to 4 (very much).				

When asked if the institution provided assistance to students to develop a personal code of values and ethics, 18.8% of students reported they received very little assistance (Table 2). Thirty-eight percent of students reported that they received some assistance, while 29.5% of students received quite a bit of assistance. Additionally, 13.7% communicated that they received very much assistance to develop a personal code of values and ethics. The mean score for assistance to develop a code of values and ethics (n=664) was 2.38 (SD=.94) on a 4-point Likert scale. The mode was 2.00 and the median was 2.00.

When asked if the institution helped students cope with non-academic responsibilities, including work and family, 37.9% of undergraduate students reported that the institution did very little, while 36.7% of students reported that the institution did some to help students (Table 2). Furthermore, 17.8% of students reported that the institution did quite a bit to help students cope with non-academic responsibilities and 7.6% of students reported the institution did very much to help students cope with non-academic responsibilities. The mean score for perceptions of institutional help with non-academic responsibilities (n=662) was 1.95 (SD=.93) on

a 4-point Likert scale. The mode was 1.00, while the median was 2.00.

Objective 3: Describe CFAES undergraduate students' communication tendencies in regards to academic advisor contact.

Nearly eleven percent (10.8%) of students reported they contacted their academic advisor zero times per quarter (Table 3). Over half of undergraduate students (57.2%) contacted their academic advisor either one or two times per quarter. Over twenty percent (20.7%) of students contacted their academic advisor either three or four times per quarter. In addition, 5.3% of students contacted their academic advisor five or six times per quarter, while 6.0% of students contacted their academic advisor seven or more times per quarter.

Table 3. Undergraduate Student Contact with Academic Advisors per Quarter				
Number of contacts per quarter	Frequency	Percentage (%)		
0	70	10.8%		
1-2	370	57.2%		
3-4	134	20.7%		
5-6	34	5.3%		
7+	39	6.0%		
	n= 647	100.0%		

As seen in Table 4, undergraduate students enrolled in CFAES indicated that of the eight methods of communication listed on the questionnaire, email was the most frequently used method of communication students used to contact their academic advisor (91.8%). Over three-fourths (79.6%) of respondents reported they scheduled an appointment to communicate with their academic advisor. Thirty-eight percent (38.1%) of students communicated with their academic advisor during unscheduled appointments in the advisor's office and 30.5% of students communicated with their academic advisor during unscheduled, informal visits outside the advisor's office. Students also reported using phone calls (18.5%), texts (5.8%) and social media (2.8%) to communicate with their academic advisors. Of the methods of communication listed, hand-written correspondence was the least used by undergraduate students in CFAES (1.2%).

Table 4. Methods of Academic Advisor Communication Used by Undergraduate Students			
Method of communication	Frequency	Percentage	
Email	590	91.8%	
Scheduled appointment	512	79.6%	
Unscheduled appointment in advisor's office	245	38.1%	
Unscheduled, informal communication outside advisor's office	196	30.5%	
Phone call	119	18.5%	
Text	37	5.8%	
Social media	18	2.8%	
Handwritten correspondence	8	1.2%	

Moderate relationships were found between frequency of contacts per quarter and discussion of career plans with faculty members, relationships with faculty members, overall advising received from the institution and overall quality of advising received from the college (Table 5).

Table 5. Relationships between Frequency of Advisor Contact per Quarter and Undergraduate Students' Perceptions of Academic Advising		
	Pearson's Product Moment Correlation Coefficient with frequency of advisor	
Discuss career plans	contact per quarter .45**	
Overall quality of institution advising	.35**	
Quality of advising in college	.34**	
Relationships with faculty	.31**	
	.5 1	

Conclusion/Recommendations/ Implications

Objective 1: Describe CFAES undergraduate students' participation in engaging educational activities with academic advisors beyond the classroom.

Faculty members generally did not discuss ideas from readings or classes with undergraduate students outside of class, nor did they tend to work with undergraduate students on activities other than coursework. In addition, undergraduate students did not intend to work on research projects with faculty members outside of course or program requirements. The researchers recommended further investigation using focus groups to delve deeper into why faculty members choose not to discuss readings or classes with students, or work with students on activities other than coursework. It is hypothesized that faculty members do not recognize these items as part of an academic advisor's responsibility.

Under the notion that advising is teaching (Crookston, 1972), advisors should engage and advocate for student educational achievement to the highest attainable standard both inside and outside of the classroom. Faculty members may not realize that when they accept a faculty position, they will be expected to advise students, formally and nonformally (Hunter and White, 2004). Often, teachable moments can arise when faculty members or advisors talk with students about their favorite classes or interests (Foushee, 2008). Encouraging faculty members to engage in conversations about classes and readings with students beyond the classroom can facilitate student development in all educational environments.

A lack of student-faculty interaction outside the classroom may affect what is going on inside the classroom. O'Banion (1972) found that when instructors volunteered for out-of-class activities with students,

they were likely to be better advisors and better instructors. Developing valuable relationships between teachers and students becomes an important form of teaching and advising (Gale Encyclopedia of Education, 2011). Engaging with students on activities other than coursework, provides opportunities to foster working relationships in all types of learning environments.

Advisors can provide a great service to their students and institutions by encouraging their advisees to engage in educationally purposeful activities, such as student-faculty research (Kuh, 2008). Expanding the opportunities for students to participate in educationally enriching experiences, such as working with faculty members on research projects, can mutually benefit both students and faculty members. If students do not plan to complete research projects with faculty members, then advisors need to encourage their students to get involved in these activities. Students are able to develop cognitive skills, acquire work-related skills and build professional connections by completing research projects with faculty members from whom they can learn.

Objective 2: Describe CFAES undergraduate students' perceptions of personal development through academic advising.

Over half of undergraduates perceived that the institution lacked in providing support for students to thrive socially. Chickering (1970) purported that academic goals, decisions and learning cannot be isolated from students' career goals, nor their social characteristics and environments. Chickering's Theory of Student Development amplified the importance of social skills in the growth of college students by including the vector, developing mature interpersonal relationships, as a critical area of development. The opportunity to interact with peers professionally and socially can play an important role in developing a well-rounded student. Academic advising is intended to enhance students' academic and social integration into the institution (Hale et al., 2009). Perhaps students in the college lack awareness of the many opportunities to become socially involved around campus. Students may simply need encouragement to become actively involved in social activities and organizations. Advisors should begin by asking guiding questions to determine students' strengths and interests (Bigger, 2005) and then urge students to join clubs and organizations that embrace their interest areas.

The institution also lacked assistance for a majority of undergraduate students to develop a personal code of values and ethics. Institutional academic advising programs must have an articulated vision for advising, promoting student learning and development and prescribing and practicing ethical behavior (King, 2008). When advisors assist students in developing their own code of values and ethics, it aligns academic advising to concepts of student engagement (Campbell, 2008). Development in higher education usually implies growth, or potential for growth, toward maturity or greater complexity (Pascarella and Terenzini, 2005). If students indicated that the institution provided only some assistance in developing a more complex sense of self through a personal code of values and ethics, then the institution has room for growth. Chickering's Theory of Student Development (1969) indicated that the final vector of student development was the area of creating one's own values, beliefs and integrity. This area of student development is critical, especially for upperclassmen that are more likely to be at this final vector of development before transitioning into the realworld. If students have a want or a need to develop a code of values and ethics, then the advisors should foster discussions with advisees to promote this area of development. Advisors should also practice using a code of values and ethics while interacting with students to provide an example of such behavior. The institution should consider providing professional development opportunities for advisors that addresses this area of development so that advisors can provide resources to promote this aspect of developing the whole student.

Lastly, the institution provided little help to undergraduate students to cope with non-academic responsibilities. The nature of academic advising and the knowledge necessary to address a wide-range of complex advising areas is challenging and training advisors to handle all situations is a significant concern (Tuttle, 2000). Academic advisors may be uninformed, untrained, or uncomfortable discussing topics with advisees outside the realm of academics. Rather than suggesting that faculty simply need to do better advising, institutions might ask whether it is even reasonable to expect that one individual can provide the full complement of functions that is suggested of quality academic advising (Allen and Smith, 2008). If students indicated that the institution provided little support with non-academic responsibilities, then the institution should provide and promote services that are offered on-and off-campus to students through academic advisors. If advisors have the knowledge of institutional resources to pass along to students, then students can take the initiative to followup with the necessary services.

Objective 3: Describe CFAES undergraduate students' communication tendencies in regards to academic advisor contact.

Undergraduate students were most likely to contact their academic advisors one or two times per quarter.

A large majority of students used email or a scheduled appointment to communicate with their advisors. In addition, the relationships between frequency of advisor contact and undergraduate students' perceptions of academic advising indicated that students who had more frequent contact with advisors generally were more satisfied with the quality of advising received. These findings were consistent with the research literature (Hale et al., 2009; Kuh, 2008; O'Banion, 1972). Students who are encouraged to visit their advisors more frequently in college will have a higher likelihood of being more satisfied with advising services and will benefit from a quality advisor-advisee relationship.

Educational environments play an enormous role in the student's ability to progress from one area of development to the next. Academic advisors who have meaningful and engaged interactions with students, contribute to students' advancement. By acknowledging, appreciating and working with the unique phases of psychosocial development that students bring to the advisor-advisee relationships, advisors can enhance advising practices and can promote higher achievement among all students. Providing meaningful learning in all environments to promote student engagement, including academic advising environments, can result in high levels of student achievement, life and career readiness and professional success.

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