

Informal Learning in Academic Student Organizations: An Exploratory Examination of Student-Faculty Interactions and the Relationship to Leadership

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Abstract

This exploratory study examined informal learning opportunities that exist within student organizations. The researchers specifically isolated academic organizations and the interactions between students and faculty that may occur in this context. Findings indicate that 81% of participants experienced interactions with faculty within the context of their academic organizations and students who hold leadership positions are more likely to experience interactions with faculty compared to general members. The results suggest that informal learning opportunities do exist and can be identified by using the Informal and Incidental Learning Model (Marsick & Watkins, 2001). By identifying these opportunities leadership educators can design purposeful activities within student organizations to better promote development and growth.

Introduction

Early American colleges such as Harvard and Yale educated young men from wealthy families so they could either enter the religious life and become a leader in their community or serve as a political leader for the broader society (Cohen, 1998). While our campuses have grown more diverse and the college student population has increased dramatically since the early days of higher education, the basic purpose of higher education remains unchanged. Today, we still prepare our students to be leaders in their workplace and in our communities.

Leadership educators provide some of this preparation in the co-curricular environment. Activities such as workshops and seminars are conducted to help students develop and learn through short-term opportunities. Other leadership development activities are embedded in long-term opportunities such as being involved in a student organization. In the Multi-Institutional Study of Leadership, Dugan and Komives (2007) found that students who reported involvement with student organizations had higher

scores across all Social Change Model values, with a greater impact in the areas of Collaboration, Common Purpose, and Citizenship. Their finding supported existing research (Astin, 1993; Ewing, Bruce, & Ricketts, 2009; Kuh, 2005; Pascarella & Terenzini, 2005), yet only gives an overview of what is happening to our college students.

As Kuh, Kinzie, Schuh, and Whitt (2005) stated, “Good things go together. Once students engage in a meaningful way with something that excites them, doors to other educationally purposeful activities often open up” (p. 269). It is imperative that we ask the right questions when trying to identify what purposeful activities we are actually providing in these situations. We often look to the big picture rather than focusing our gaze on the smaller environments in which students engage. For example, when determining the benefits of student organization involvement researchers are quick to combine every opportunity into one variable. Students are “involved” if they participate in any organization. However, the organizations on our campuses are rich in diversity. What students gain in a recreational organization may be very different than what they gain in a service group. It is impossible to examine what students gain through their involvement activities without isolating specific environments and discovering what benefits are provided within that context.

In an effort to identify informal learning activities already occurring on our college campuses, the following study isolates student organizations with an academic mission and examines them a little closer. Specifically, we asked students involved in these organizations if they experienced any interactions with faculty, which is an informal activity determined to have learning benefits (Astin, 1993; Cotten & Wilson, 2006; Endo & Harpel, 1982; Kuh & Hu, 2001; Pascarella & Terenzini, 2005). Further, we measured the quantity and quality of these interactions and compared the experiences of leaders to the experiences of members. This research serves as a guide to what leadership educators may find if they examine specific environments for informal opportunities for growth and development. Once these informal activities are identified, leadership educators can create additional structures to help turn these opportunities into purposeful and meaningful learning experiences.

Literature Review

As noted by Fincher and Shalka (2009) in their discussion of co-curricular leadership education, the “strain on human and monetary resources creates the need for prioritizing what is important and how to reach the greatest number of students with the available resources” (p. 229). When creating activities for leadership development, educators may naturally turn to formal activities such as workshops and retreats as a way of bolstering students’ growth and development in a short amount of time. Unfortunately, these formal activities place the most strain on the dwindling resources of higher education. It may be more beneficial to identify more informal opportunities on our campuses that can provide a different type of learning and conserve our resources.

So how do we find the informal learning opportunities? The Informal and Incidental Learning Model (Marsick & Watkins, 2001) explains that informal learning may occur when people interact through activities within a specific environment. The learner receives new information, compares that information to previous knowledge, then makes meaning of anything not matching what is stored in memory. This process which learners may not even know is occurring has three conditions that must be met. First, the

environment needs to be structured to allow meaningful activities to happen. Second, learners should be encouraged to participate in the meaningful activities. And third, learners should reflect on how the activities may have provided them with new information. Some examples of this may be when the learner attempts a task through trial and error, or when a new relationship is formed.

A specific environment known to provide a number of informal learning benefits is any student organization a student chooses to join. Researchers have consistently demonstrated that involvement in these organizations positively impacts areas such as interpersonal relationships, critical thinking, communication, and workforce preparation (Astin, 1993; Foubert & Grainger, 2006; Kuh, 1995; Pascarella & Terenzini, 2005). Unfortunately, researchers normally measure involvement as one concept. There is no focus on the mission of individual student organizations so it is difficult to understand how the environments are structured and what meaningful activities may occur. Other researchers recognized this problem and suggested that it is necessary to examine different categories of organizations in order to fully understand what learning activities may be available to students (Beeny, 2003; Gellin, 2003).

According to the Informal and Incidental Learning Model (Marsick & Watkins, 2001), student organizations can serve as a specific environment where informal learning could occur. They are structured around a particular purpose and offer numerous activities where people interact with each other and their environment. However, this is still a broad concept. There are many types of organizations and the activities they offer are diverse and numerous. In order to precisely evaluate whether informal learning may be available to students within the context of their organizations, we must first select a specific interaction that is known to be beneficial and examine it in-depth.

One such interaction concerns students engaging faculty outside of the classroom environment. Although students report minimal interactions with faculty (Einarson & Clarkberg, 2004; Nadler & Nadler, 2001), most will have at least one interaction with a faculty member outside of the classroom during their college experience (Jaasma & Koper, 1999; Lewallen, 1995). Research identifies even these minimal interactions as significant for growth in critical thinking, intellectual development, emotional maturity, and vocational competencies (Astin, 1993; Cotten & Wilson, 2006; Endo & Harpel, 1982; Pascarella & Terenzini, 2005).

Kuh et al. (1991), in their study of the characteristics that enhance student learning on a college campus, recommended that institutions search for opportunities to bring students and faculty together outside of the classroom. Some researchers established that students who join campus organizations have more interactions with faculty than students who do not become involved (Bean & Kuh, 1984; Pike, 1999). In addition, these interactions are likely to focus on career development (Alderman, 2008).

One specific student organization environment that provides a focus on career development and may also include the participation of faculty is an academic student organization. Holzweiss, Rahn, and Wickline (2008) found that students join academic student organizations because they can access learning activities and networking opportunities designed to enhance vocational learning. Interactions between students and faculty that are informal and outside of the academic environment, yet still associated with the major field of study, are a highly beneficial activity for student learning and development (Alderman, 2008; Endo & Harpel, 1982; Iverson, Pascarella, & Terenzini, 1984). The shared purpose of learning more about their

chosen profession may naturally bring students and faculty together for informal learning opportunities that can benefit the growth and development of students.

Purpose and Objectives

The study examined academic student organizations and the student-faculty interactions already occurring in the organizational context. If the interactions existed, the purpose expanded to how positional student leadership roles in the organizations may impact the occurrence of interactions. For comparison purposes, participants indicated if the interactions occurred in other campus activities besides academic student organizations (ASOs). Three research questions formed the basis of this study:

- Describe any informal interactions occurring between students and faculty within the context of ASOs.
- Describe any differences between positional leaders and members of the organization regarding interactions with faculty in this context.
- Describe any differences between quantity and quality of interactions as it relates to positional leaders and member status in both ASOs and other college activities.

The project sought to discover what informal interaction opportunities with faculty may exist for students who participate in ASOs. Understanding what occurs in specific types of student organizations can assist leadership educators with developing the strategies needed to enhance what is already occurring and attract more students to these purposeful activities.

Methods

The study used survey methodology to collect data. The instrument, designed on the web-based software QuestionPro, provided a comprehensive list of 24 student-faculty interactions used in 22 previous studies on the topic (Anaya & Cole, 2001; Astin, 1993; Einarson & Clarkberg, 2004; Pascarella & Terenzini, 1979, 1980, 1981). The statements included options for whether the specific interaction occurred, if it occurred in the ASO and if they occurred in any other campus activities outside of their ASO, how many times the interaction occurred (quantity), and how long the interaction lasted (quality). Other questions asked participants to verify active status in the organization and as undergraduate students, indicate if their organizational advisor had faculty status, identify their gender, and specify whether they held any official leadership position in the ASO such as committee chair or president.

Members of two ASOs not selected for the study piloted the instrument for test-retest reliability, which resulted in a coefficient alpha of .912. Pilot participants also provided written feedback for the purpose of improving the instrument.

A process designed to control for the non-random nature of the study helped identify study participants. First, four institutions in the southern United States were pre-selected to represent collegiate environments as identified by Carnegie classifications (Carnegie Foundation for the Advancement of Teaching, 2009) –

small versus large four-year institutions, with residential versus non-residential populations. Two of the institutions were located in rural areas and two were located in major cities.

Second, student organization lists at each institution provided potential target organizations. For the purposes of this study, ASOs were defined as those associated with an academic unit and having a mission statement focused on a specific academic discipline. Using this definition, we selected five ASOs from the disciplines of chemistry, psychology, English, health, and education on each campus. After obtaining review board approval from our home institution, two of the target institutions required additional human subject reviews before participant recruitment could proceed.

When we received approval, the third step in the selection process involved contacting student leaders from the five organizations on each campus, explaining the project, and requesting their assistance with recruiting members of their organization to participate in the study. Out of the 20 organizations contacted, 19 had members who were willing to participate and provide their email addresses. Participants received the initial survey link and three reminders to help encourage survey completion.

After an initial review of the data, we removed several participants from the study due to incomplete responses or failure to meet the criteria of being an active, undergraduate student in the target organization. As a result, 104 usable responses were available for analysis.

Existing literature indicates that both quantity and quality measures contribute to the understanding of student-faculty interactions. Quantity is defined as how frequently the interaction occurs (Endo & Harpel, 1982; Pascarella & Terenzini, 1975), while length of the interaction defines quality (Nadler & Nadler, 2001; Terenzini & Pascarella, 1980; Volkwein, King, & Terenzini, 1986). To obtain these measures, we categorized responses as low quantity (one to two interactions) and high quantity (three or more interactions), as well as low quality (less than 10 minutes) and high quality (more than 10 minutes).

To finalize the preparation for analysis, each student was classified as a leader or a member based on the response to the leadership question. In addition, participants who indicated they had not experienced a specific interaction were removed from the analysis for the quantity, quality, and leadership status measures.

Statistics such as frequency percentages, means, and standard deviations provided the descriptive foundation for the data. For comparing groups, we selected the chi-square statistic for its ability to account for small cell sizes (Spatz, 2005). Further, we did not conduct analysis when less than five participants contributed to the cell size (Isaac & Michaels, 1990).

Findings

Approximately 86% of the participants held a junior or senior classification. While this may seem high, existing literature does support the upper classifications being more focused on vocational activities compared to the lower classifications (Arminio & Loflin, 2003; Chickering & Reisser, 1993; Terenzini & Wright, 1987). In addition, the few studies highlighting ASOs did find that the membership contained mostly juniors and seniors (Arminio & Loflin, 2003; Holzweiss, Rahn, & Wickline, 2008).

For gender, 86% indicated they were female. Females responding to surveys in greater numbers than males is a common challenge in research conducted with college students (Sax, Gilmartin, & Bryant, 2003; Underwood, Kim, & Matier, 2000).

The two remaining demographic questions revealed that 94% of the participants had a faculty advisor for their ASO and 41% held a positional leadership role.

For the first research question, 99% of participants reported at least one interaction with a faculty member during their college experience. For the specific ASO environment, 81% experienced at least one interaction within that context. Table 1 illustrates the frequency of responses from all participants for each interaction contained in the instrument. Results reveal that within the ASO context, participants primarily experienced interactions when faculty members attended group meetings, actively participated in group meetings, or shared a presentation for a group meeting.

Table 1

Overall Occurrence of SFIs for All Study Participants

Student-Faculty Interaction	n	Occurred in ASOs	Occurred in Other College Activities	Occurred in Both ASOs and Other College Activities	Did not occur
Asked a faculty member for comments or criticisms about your work (tests, papers, etc.)	104	6%	81%	6%	8%
Asked a faculty member for information or guidance related to a course you were taking (grades, make-up work, assignments, etc.)	104	10%	79%	7%	5%
Assisted a faculty member in teaching a class	103	3%	12%	1%	85%
Discussed ideas for a term paper or other class project with a faculty member	103	7%	70%	3%	20%
Had a faculty member advise or supervise you on a faculty research project	102	11%	31%	2%	56%
Had a faculty member advise or supervise you on a student research project (e.g., Honors thesis, independent study, etc.)	102	7%	40%	2%	51%
Had coffee, sodas, snacks, or meals with a professor (either in on-campus dining	104	26%	19%	19%	36%

locations or off-campus at restaurants)					
Met informally with faculty to discuss a campus issue or problem	103	16%	24%	6%	54%
Met informally with faculty to discuss matters related to my future career such as career plans and ambitions	103	22%	52%	15%	12%
Met informally with faculty to get basic information and advice about my academic program	102	17%	59%	13%	12%
Met informally with faculty to help resolve a personal problem	101	3%	32%	2%	63%
Talked informally (and outside of class) with an instructor about current events, campus activities, or other common interests	103	18%	38%	19%	25%
Was a guest in a professor's home for a meal or social function	103	11%	13%	3%	74%
Worked with a faculty member outside of class on a committee or project	102	12%	8%	3%	78%
Had a faculty member accompany you to an athletic competition or event (this could include other people as well)	102	2%	7%	--	91%
Had a faculty member attend an arts or cultural event with you (this could include other people as well)	101	7%	11%	2%	80%
Had a faculty member supervise a student social function (e.g., party) that you attended	100	27%	18%	6%	49%
Personally invited a faculty member to speak at an event sponsored by a group you were affiliated with	102	27%	7%	2%	65%
Had a faculty member help organize or attend a field trip with a group you were affiliated with	103	29%	15%	2%	54%
Had a faculty member assist in organizing a	100	35%	11%	3%	51%

presentation/workshop sponsored by a group were affiliated with					
Had a faculty member speak at a presentation or workshop sponsored by a group you were affiliated with	102	42%	11%	4%	43%
Had a faculty member attend meetings for a group you were affiliated with	101	60%	14%	4%	22%
Had a faculty member actively participate in meetings for a group you were affiliated with	103	62%	11%	4%	23%
Worked with a faculty member outside of class on a committee or project sponsored by a group you were affiliated with	101	18%	7%	1%	74%

For the second research question, analysis focused on organizational role. As Table 2 demonstrates, the first set of analyses revealed significant differences for three interactions – requesting feedback for academic work, meeting informally to discuss campus issues, and having a faculty member speak at a group meeting. In all three interactions, leaders were more likely to experience these interactions within the ASO context while members were more likely to experience them through other college activities.

Table 2

Occurrence of SFIs for ASOs and Other College Activities by Organizational Role

Student-Faculty Interaction	ASOs			Other College Activities			χ^2
	Member	Leader	n	Member	Leader	n	
Asked a faculty member for comments or criticisms about your work (tests, papers, etc.)	25%	75%	12	58%	42%	90	4.58*
Met informally with faculty to discuss a campus issue or problem	14%	86%	22	55%	45%	31	9.30**
Had a faculty member speak at a presentation or workshop sponsored by a group you were affiliated with	47%	54%	43	91%	9%	11	6.99**

df=1, * =p<0.05; ** =p<0.01

Another set of analyses viewed the data from the larger perspective of how positional leadership is related to the overall occurrence of student-faculty interactions (SFIs). Responses for all interactions were grouped into four categories: occurring in any context, occurring within the ASO environment, occurring within other college activities, and occurring in both the ASO and other college activity environments.

Table 3 indicates that leaders are more likely than members to experience interactions with faculty within the ASO environment. However, both groups were similar in their interactions with faculty for activities occurring in other contexts. Thus, there appears to be a relationship between holding a leadership position in an academic student organization and having more opportunities to interact with faculty than would be available in other environments.

Table 3

Frequency of SFIs by Organizational Role

Student-Faculty Interaction	Members	n	Leaders	n	χ^2
Experienced any SFI	100%	61	98%	43	1.43
Experienced any SFI in the ASO context	71%	61	95%	43	10.03**
Experienced any SFI in the Other College Activities context	97%	61	95%	43	.13
Experienced SFIs in both the ASO context and the Other College Activities context	67%	61	93%	43	9.75**

df=1, * =p<0.05; ** =p<0.01

For the final research question, comparisons were made between members and leaders for low quantity/low quality and high quantity/high quality interactions. As Table 4 reveals, leaders were significantly more likely than members to experience some interactions with faculty at a high quantity/quality level, not only in the ASO context but also in other college activities. In other words, leaders had an opportunity to meet with faculty over a meal or a soda more frequently and for a longer length than did members. They also experienced more interactions for a longer duration regarding academic guidance than did members.

Table 4

Combined Quantity and Quality of SFIs by Organizational Role

ASO Environment							
	Members			Leaders			χ^2
	Low Quantity/ Quality	High Quantity/ Quality	n	Low Quantity/ Quality	High Quantity/ Quality	n	
Had coffee, sodas, snacks, meals with a professor (either in on-campus dining locations or off-campus at restaurants)	55%	46%	11	21%	79%	29	4.35*
Met informally with faculty to get basic information and advice about my academic program	46%	54%	13	7%	93%	14	5.34*
Other College Activities							
Asked a faculty member for information or guidance related to a course you were taking (grades, make-up work, assignments, etc.)	51%	49%	47	27%	74%	34	4.94*
Discussed ideas for a term paper or other class project with a faculty member	55%	46%	33	28%	72%	32	4.67*
Had coffee, sodas, snacks, or meals with a professor (either in on-campus dining locations or off-campus at restaurants)	73%	27%	15	20%	80%	20	9.96**

df=1, * =p<0.05; ** =p<0.01

As these findings reveal, a majority of students participating in ASOs experience interactions with faculty in the organizational environment. Holding a leadership position in these organizations increases the likelihood of specific interactions occurring that are more frequent and have longer durations than those experienced by members.

Recommendations and Implications

This study explored academic student organizations and the interactions with faculty experienced by students within the organization. It also considered the relationship that positional leadership roles may have to these interactions since positional roles have been demonstrated to have an impact on student development (Dugan & Komives, 2007). Findings indicate that the majority of the participants did experience interactions with faculty within the context of academic student organizations. In addition, positional leaders were more likely to experience these interactions than members.

Results support previous research that most students will interact with a faculty member outside of class at least once during their college years (Lewallen, 1995; Rosenthal et al., 2000). Yet, the findings of this study also extend previous research by identifying where these interactions are occurring and that they may be more available to student leaders rather than members of organizations.

One interesting finding that can explain why student leaders have more interactions with faculty members in the ASO context is that most of the study participants indicated their organizational advisor had faculty status. In order to perform organizational responsibilities, student leaders must interact with their advisors on a regular basis. If their advisors are faculty members, it follows that student leaders will have greater access to faculty interactions than regular members. Once the relationship is established, student leaders may feel more comfortable engaging their faculty advisors in topics beyond the organizational context. The findings also revealed that student leaders may have additional opportunities for interacting with faculty outside of their organizational environment. As other researchers noted, campus officials often turn to student leaders when they need advice, input, or representation for various institutional activities (Shertzer & Schuh, 2004).

Based on our findings, leadership educators should spend more time exploring what current campus opportunities may offer to students in terms of informal learning and development. Once educators understand what learning activities are available in the various environments, they are better able to create structures to promote development and growth outside of the formal classroom environment. For instance, merely having a faculty advisor for student organizations may increase the likelihood of students engaging in valuable interactions. Educators could spend more time encouraging faculty to accept formal advisor roles in organizations with which they have shared interests. This could be academically-oriented or could be based on some other interest such as a recreational hobby.

When faculty advisors are identified, educators could go one step further and create specific interventions to help the members of these organizations reflect on their interactions with faculty. This step would fulfill the final element of the Informal and Incidental Learning Model (Marsick & Watkins, 2001) and learning would be more likely to occur.

Limitations

Before we can conclusively assert that ASOs are a critical learning environment, we must first explore the limitations of this study. First, the project was designed to be descriptive in nature and identified a small participant population that matched the purpose of the study. For that reason, results should not be

generalized unless more studies verify the findings. Second, females were overrepresented in the study population. While it is more common for females to participate in survey research when compared to males (Sax, Gilmartin, & Bryant, 2003; Underwood, Kim, & Matier, 2000), it still leaves a deficiency regarding the male experience in ASOs and whether there are differences with what females experience. More research conducted with a male population is necessary to determine if differences do exist. The final limitation concerns the inherent variances within student organizations. Although the organizations selected for the study were identified by mission and purpose to help ensure similarity within the participant population, it is possible that organizations differed more than their mission statements described. Additional research is necessary to determine if the results remain consistent when other student organizations with similar missions are examined.

Future Research

As study illustrates, it is worthwhile for leadership educators to explore what possibilities already exist for informal learning. The first step in that exploration is to replicate this study. If the results remain consistent, the second step in future research should be to examine what long-term benefits may be provided for students who are members and leaders of these academic student organizations. It is clear that both being involved in organizations and having a positional leadership role can have an impact on a student's growth in all of the Social Change Model values (Dugan & Komives, 2007). Using the Social Change Model as the framework, a case study analysis could be conducted by following specific students in these organizations throughout their college years and into the first few years of their chosen career. The students could be interviewed at different points during the study to discover what specific experiences they have within their organizations including interactions with faculty within the context of their organizations, what experiences they obtain if they accept a formal leadership role, what they learn from each of their experiences, and how that learning impacts the development of competencies needed for their career.

A third recommendation for future research is to explore more about the advisors for these organizations. Since most of the participants in this study reported having a faculty advisor, academic student organizations may be one type of environment that naturally attracts more faculty given the connection to their academic discipline. Understanding where the advisors come from, what attracts them to the advising role, what rewards they may receive for serving in the advising role, what relationships they form with members and leaders, and how those relationships evolve over time can assist leadership educators with identifying appropriate faculty advisors for organizations.

A final recommendation is to move beyond the focus of this study and expand to other types of student organizations. To begin, the same SFIs could be examined in the context of service organizations. Faculty members may connect with these organizations if they are using a service learning project in their teaching. Another example is student government associations. These groups have the purpose of addressing important institutional issues and members may seek faculty input before decisions are made.

Conclusion

This study illustrates that within the context of ASOs, members and leaders experience important interactions with faculty members. While more research is necessary to generate meaningful conclusions, it is possible that these interactions may provide long-term benefits to students such as better career preparation or increased skill building.

By following the Informal and Incidental Learning Model (Marsick & Watkins, 2001), leadership educators can better isolate additional opportunities for student learning and development that may already exist on their campuses. Focusing on these opportunities would assist in identifying what students can gain from each and every activity they engage in outside of the classroom. As Ewing, Bruce, and Ricketts (2009) suggest, leadership educators need to emphasize opportunities to match students with activities that promote personal and professional goals. This study highlights one possible path to ensure that purposeful engagement can be identified for both student members and student leaders in our campus organizations.

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