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IMPROVING STUDENT RETENTION WITH THE CREATION OF A STUDENT CHAPTER OF A PROFESSIONAL ORGANIZATION

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Significant research demonstrating the connection between student retention and student-peer interaction is extant. Such interaction is facilitated by the creation and growth of a student chapter of a professional organization that welcomes students who might not be otherwise engaged on campus and encourages their involvement in the organization. Benefits are multiplied when the organization is located at a joint facility which houses a lower two-year program feeding an upper two-year completion program, as it can be shown that the students groups who benefit the most from student-peer interaction are students indigenous to the institution and transfer students from two-year institutions. We will discuss how a student chapter of the American Association of Airport Executives was created at our facility, and the benefits in terms of both student retention and opportunities for career advancement that have resulted at both the two-year and four-year institutions that are located therein.

According to data from ACT, Inc., national first- to second-year retention rates among students enrolled in public universities in the U.S. average 55.4% for two-year institutions and 65.6% for four-year institutions (ACT, 2011). In addition, approximately half of all undergraduate students who enter public universities fail to graduate within six years. While many colleges and universities have instituted intervention programs in an effort to improve retention rates, such programs have met with only marginal success (Seidman, 2005). Therefore, it is clear that both academic institutions and the students they serve will benefit from a coordinated effort to improve these retention rates.

Identification of an Appropriate Engagement Mechanism

There has been a considerable effort by educational researchers over the past twenty-five years to understand the factors that influence student success in academic programs and to find means of positively influencing those factors. Astin (1984) has proposed a student development theory based on student involvement, defined as “the quantity and quality of the physical and psychological energy that students invest in the college experience,” and suggests that “the greater a student’s involvement in college, the greater will be the amount of student learning and personal development.” According to Astin, the student involvement theory explains most of the empirical data assimilated by researchers about environmental influences on student development. An important corollary to this theory, then, is that the educational policies that are most effective are those that are directed toward increasing student involvement.

Kinzie (2010) asserts that a positive correlation exists between student engagement and student persistence from the first to the second year of college, the transition point in the undergraduate experience where the attrition rate is typically the highest (ACT, 2011). This assertion is supported by Kuh, et al (2007), who also indicate that, “while exposure to educationally effective practices is associated with desired outcomes for all students, historically underserved students benefit more from engaging in these activities than white students in terms of earning higher grades and persisting to the second year of college.” It is therefore perhaps even more critical to ensure that effective policies that allow and encourage the involvement of underserved students in campus programs be implemented.

Bennett, et al. (2011) determined that 30% of students surveyed in the 2011 National Survey of Student Engagement conducted by the Indiana University Center for Postsecondary research spent at least 6 hours per week participating in co-curricular activities, including activities of campus organizations.

Chickering and Gamson (1987) provide seven principles that comprise good practices in higher education. Among these principles are the encouragement of student-faculty contact, the encouragement of cooperation among students, and the respecting of diverse talents. Such principles may be considered inherent in the creation and the continued development of student chapters of professional organizations, as these chapters require the involvement of a faculty advisor, thereby facilitating student-faculty contact, and require interaction and cooperation between the student members themselves. Therefore, it stands to reason that a student chapter of a professional organization fulfills several of the attributes suggested as good higher education practices by Chickering and Gamson.

Program Background

Roberts and McNeese (2010) showed that educational origin influences the degree of involvement of students in programs. According to that study, students indigenous to programs tend to be most involved in those programs, while students who have transferred from two-year community colleges tend to have the next highest level of involvement. Transfer students from four-year colleges tend to be the least involved of the student groups.

Economic realities are causing some educational institutions to reevaluate their provision of all four years of a traditional Bachelor's degree program in Technology. In locations where such programs are in close collaboration with two-year partner institutions, it makes sense, based on the research of Roberts and McNeese (2010) described previously, to facilitate a much higher level of curriculum integration between programs than has previously occurred. The Aviation Technology Department at Purdue University has successfully made recent efforts to strengthen its relationship with its partner institution in Indianapolis, Vincennes University. The aviation technology programs of both programs in Indianapolis are housed in a single facility located at the Indianapolis International Airport, the Aviation Technology Center.

Students matriculating in the Vincennes Indianapolis program may pursue Aviation Maintenance, Professional Flight, or General Studies options. Upon completion of an Associate's degree, these students can apply for admission into the Purdue Aviation Technology program, where they can finish the two years remaining toward their Bachelor's degree in Aviation Technology. Processes and systems at the Indianapolis facility shared by Purdue and Vincennes are being redeveloped to provide as seamless a transition between the two programs as possible. This is planned to include the future articulation of courses between programs.

The Purdue portion of the Aviation Technology Center offers the Aviation Operations Technology (AOT) major. This major is a plus-two management-focused degree program designed specifically to serve as a convenient opportunity for degree completion for students and working professionals who have not attained their desired educational goals. The program is intended to provide leadership education at the baccalaureate level to students with technical backgrounds in aviation.

Graduates in Aviation Operations Technology are responsible for the management of many different types of financial, capital, human, and information resources in the aerospace industry. They manage engineers and technologists who design, test, and build new aircraft and components. They may be responsible for managing the support of production aircraft, an area that includes product support, modification, and accident investigation. They may also serve as managers at airlines, airports, or general aviation operations around the world.

Matriculation channels, which are sufficiently diverse to ensure a higher level of opportunity for those students with prior college credit who wish to continue their college education, include the acceptance of students with associate degrees in aviation and in other fields, as well as the acceptance of transfer students with appropriate transfer credit or equivalent experiential credit. The AOT program consists of 124 credit hours, approximately 60 hours of which is delivered in the AOT program, with the remaining 64 hours generally considered to be either credit from other institutions, experiential credit, or both.

Courses leading to the completion of this degree are delivered through a variety of means, including traditional, hybrid, and distance (both synchronous and asynchronous) delivery methods, and are made available to

traditional aviation technology students in Indianapolis and West Lafayette, and to distance students in many other locations.

Development of a Student Professional Organization Chapter

At the Aviation Technology Center, the commuter college atmosphere and short-term tenure of the students associated with each of the collocated state universities' two-year degree programs resulted in limited opportunities for student engagement. Because this engagement is an integral piece of many college students' education, the need for an all-inclusive student organization to provide such opportunities outside of the classroom was perceived by both administrators and students in the Aviation Operations Technology program. Shortly thereafter, in the summer months of 2010, a group of students interested in helping to improve opportunities for student engagement and guided by location administrators organized its ideas and broke new ground by successfully applying for and establishing the Aviation Technology Center's first student organization, a student chapter of the American Association of Airport Executives (AAAE). This organization has continued to grow since it was established in October of 2010.

In launching the organization, many resources were needed; among them were a student membership, officers, a faculty advisor, organizational structure, and chapter bylaws. A significant amount of student initiative and effort was exerted in the successful establishment of the organization. In the subsequent weeks, a membership call-out, chapter meetings and officer elections were held. At these initial meetings, the organization's executive committee effectively instituted a professional atmosphere, using standard parliamentary procedure to maintain order. The active participation of student members, involvement and guidance provided by the faculty advisor, and high degree of professionalism present throughout the development phase were key factors in the organization's initial and continuing success.

Methods Used to Get Students Involved in the Chapter

One of the unique aspects of the student organization in this example is that it is jointly sponsored by both collocated institutions. Joint sponsorship leads to an increase in the inherent complexity of the organization, and this translates to recruiting and membership functions. However, the most successful methods of student membership recruitment the organization was able to implement were also the simplest. These included exhibit tables at Vincennes University and Purdue University Open House events, student volunteers working at local air shows, and other similar methods. The marketing techniques utilized were also relatively simple, but effective. For example, student members explained to prospects the nature of the AAAE professional organization and how joining it would specifically benefit the prospects. Some of those benefits include both professional and community volunteering opportunities, development of their personal networks, and improvement of their individual professional skills, including communication, project development, professionalism, and more.

Various other methods of membership recruitment and retention have been utilized over several semesters. This student chapter is currently one of the few AAAE student chapters to utilize social networking, and manages both Facebook and Twitter pages. The organization delegates responsibilities of maintaining the pages, running advertisements, and promoting events and tours to the chair of the publicity committee, one of four committees. This specific position requires planning and development of brochures, posters, pictures, and video in order to successfully reach the 170+ students that AAAE regularly contacts through email.

The AAAE student organization has employed a variety of methods to engage student members, including Internet-based tools such as ProBoards, a discussion forum, and SurveyMonkey, a survey tool, to pose questions to members and solicit feedback. However, the group's leaders have found that the most effective method for getting students truly involved and interested is face-to-face communication. Current members have given classroom PowerPoint presentations to many students at the Aviation Technology Center to improve organizational visibility and recruit new members. In addition, the student chapter has taken advantage of multiple opportunities to present to and network with high school students attending local area career centers in aviation-oriented programs at the junior and senior levels. In its participation with these experiences, the AAAE leadership have noted that virtually all of these high school students have requested inclusion on the member e-mail list and have contacted the organization wanting to be further involved. In addition, the Federal Aviation Administration (FAA) held the first annual ACE Academy, a week-long aviation summer camp intended for high school students with an interest in

aviation, at the Aviation Technology Center in 2011. The AAAE student chapter was heavily involved in the camp, with members serving as student volunteers at the event to promote aviation and serve lunches. The event was a success, and led to many young adults signing up for the AAAE member e-mail list and “liking” the organization on Facebook. AAAE continues to maintain e-mail communication with these students as they move closer to making their college choices.

Although getting under-motivated college students, many of whom work part-time jobs, enroll in maximum credit hours per semester, and commute to campus, to become involved with a student professional organization and to make positive strides in improving their lives is difficult, the challenge has been aptly met by AAAE. The organization initially faced various difficulties one would expect with any new group, but with dedicated leadership by the executive committee, interested and committed members, an excellent faculty advisor and a welcoming aviation community in Indianapolis, AAAE has accomplished many of its goals; most importantly, it has achieved a significant level of student member involvement.

Measures of Student and Program Success

While it is difficult to quantitatively measure student and program success after only a year and a half of operation, one may empirically judge the relative success of the organization’s members, with some portion of that success directly attributable to involvement in AAAE. For example, the first president of the chapter established connections with industry and received an internship with a major aviation MRO facility in Indianapolis; that internship subsequently developed into a full-time position upon the student’s graduation. Similarly, another charter member, having been heavily involved with the student chapter in an executive capacity, was offered an internship with a general aviation company in which he excelled. Student matriculation from the lower two-year program into the upper has improved, as well, increasing from 5.5% of the completion program’s composition at the initiation of the student organization to 20.9% in the most recent semester for which enrollment data is available.

There are numerous benefits of belonging to an organization of AAAE’s stature. Such membership can clearly lead to opportunities not otherwise available in an individual’s career. For example, half of the chapter’s current executive members will be attending graduate school upon graduation. Those individuals might not have otherwise considered post-baccalaureate educational opportunities had it not been for their positive contributions and successes resulting from their membership in AAAE.

One of the initial goals of the student AAAE chapter was to establish opportunities for students to “get out of the classroom,” allowing them to make contact with industry professionals and experience elements of the aviation industry that they might not otherwise be able to experience in a traditional classroom setting. These networking and industry experiences are critical to students’ continuous growth as they enter careers in the aviation industry. With over 20 active members and additional involvement from 170 high school students, college students and college graduates, the AAAE student chapter at the Aviation Technology Center is well-positioned to function as an important tool for student engagement and success in the future.

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