



Creating a student organization to engage female students better

Dr. Malini Natarajarathinam, Texas A&M University

Dr. Malini Natarajarathinam is an Associate professor with Department of Engineering Technology and Industrial Distribution. She teaches classes on strategic relationships for industrial distribution, distribution information systems and new directions in Industrial Distribution. She is also the founding faculty and advisor for the Society of Women in Industrial Distribution (SWID). She works on many service learning projects with her students where they work with many local community agencies.

Creating a student organization to engage female students in Industrial Distribution

Introduction

Industrial distribution (ID) is the process of providing products, parts, related services and solutions to industrial users either for Maintenance, repair and operations (MRO) of their production facilities, or to be used in the manufacture of equipment, machinery, goods and products (OEM , Original equipment manufacturer). The Industrial Distribution (ID) program at Texas A&M University has about 500 students; twenty percent of this population is female. The majority of the students graduating from this program choose Technical Sales as their career. The diverse curriculum of this engineering major causes students to be well sought out by the industry. However, a career in Technical Sales is not a traditional choice for women, thus leaving the female undergraduates apprehensive about their career goals. So, a group of students and the ID faculty decided to found an organization that catered to the needs of the female Industrial Distribution Engineer and resolve this concern. This new organization was named Society of Women in Industrial Distribution (SWID).

SWID was established with the intention of stimulating and catapulting female Industrial Distribution students into high power careers by creating a space that consistently exhibits the achievements and perspectives of Industrial Distribution alumna, as well as cultivates soft skills to create meaningful impact and interactions. These skills can vary from proper interviewing skills, work life balance, contract negotiations, changing career paths, etc.

The idea of SWID came about after a student attended a guest lecture, wherein a male executive shared his career path. The student felt that this presentation was overwhelmingly the same as the majority of the guest speakers that present their experiences to the student body. There was no female perspective. The speakers did not seem to realize that these discourses target a very specific number of students – males that were interested in Sales. It seemed to perpetuate limited career choices and portray a very one-sided glimpse into Corporate America. With the establishment of SWID, it was important to reach out to professionals that were in various occupations and levels so that students would begin to proactively seek opportunities and expand their experiences.

Fields that are traditionally male dominated have to understand how to engage women into their corporate environment. Women often feel that there is a lack of formal support and inclusion. If companies are to thrive, action must be taken to create workforces that fully understand the needs and challenges of women in industry. In a society that has a strong history of patriarchy, we must begin to fiercely foster environments that battle the unconscious gender barriers that still cause women to undervalue their potential and SWID is a small first step in that direction.

Challenges with establishing SWID

The main challenge was to exhibit the need for another student organization, specifically for women, when more established organizations such as the Society of Women Engineers (SWE) already exist. The activities that SWE performs are similar, but the focus of its activities is on traditional engineering careers. Industrial Distribution students typically obtain jobs that have both technical and business nuances. Hence, the careers that mainstream engineering organizations promote offer little guidance to our student body. Students needed to see successful role models in Industrial Distribution. SWID offers that, along with lots of opportunities for networking through the different industry speakers and mentors that are brought in to help the students succeed.

Once the vision and mission of the organization were finalized, the next obstacle was to get members motivated enough to spread the details of the organization. A core group of students were identified and they agreed to become executive members. They created a website, made flyers, created a Facebook page, presented SWID's mission and objective to groups of students in various classrooms. The most effective method to get the message about SWID was through classroom presentations. The officers asked each of the professors in the department if they have five minutes to talk about SWID and the entire faculty concurred. This was the sure-fire method that exposed SWID to all academic classification (freshman, sophomore, junior and senior) of ID students. To keep the momentum going, and to advertise events on an ongoing basis, the SWID Facebook page was created. Figure 1 shows a snapshot of the SWID Facebook page.



Figure 1: SWID Facebook Page

Activities

When SWID was started in 2013, members were asked how they would like to see SWID help them develop. The members and the officers brainstormed and came up with the following topics that they wanted to discuss during the semester:

1. Career paths in ID
2. Challenges faced by Women in the workforce
3. The power of LinkedIn
4. Social life and the workforce
5. Millennials in the workforce
6. Work Life balance
7. Philanthropy
8. Communication and Influence

Various men and women within industry were invited to be guest speakers. The first year there was business meeting every month in which a guest speaker led a discussion about one of the above topics. The attendance started suffering. To drive membership and participation, SWID began hosting joint events with ID's other student organizations and began attending local events and conferences as a group. After seeing the success of these endeavors, the officers decided to alternate between a social and business meeting. The socials not only made SWID attractive to students, but also created an atmosphere of comradery. Figure 2 shows some statistics about the membership.

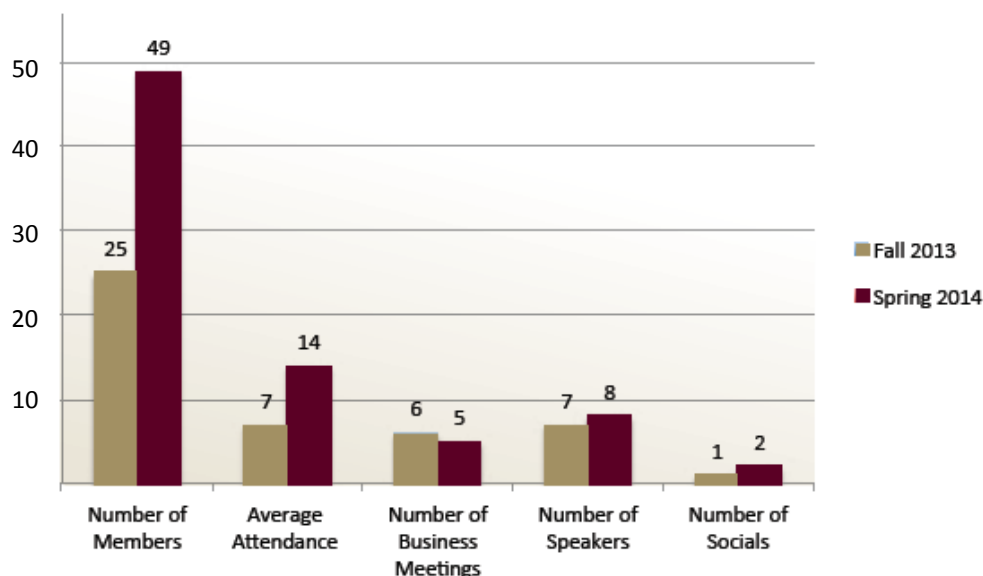


Figure 2: Membership Statistics

Mentoring

In 2014, SWID embarked on two initiatives in an effort to further address the concerns of its members. The first initiative was to set a mentoring program in place. SWID's mentoring program pairs undergraduate students with students in the Department's two-year- Executive Masters Program. The students in the Masters program are working professionals that come on campus for a week for class while they are taking 2-3 completely online classes for the rest of the year. The undergraduate students interact

with mentors to see perspective on navigating the workforce and work-life integration. The undergraduate students are also able to ask for help from their mentors on their career options and resume review. This is a unique opportunity for SWID that the officers have capitalized on to differentiate SWID. This opportunity is possible only because of the existence of the executive Masters program. SWID supports women and students academically, personally, and professionally through bonds formed with the members. The graduate students enjoy being mentors because they assist in clarifying and establishing goals - it is one way of giving back. They are helping other women in ID enter the workforce more informed and prepared to take challenges head on. More importantly, these efforts help make the graduate students feel connected to the campus. Their involvement helps both, under and post grad students, be more engaged with school and in turn helps with retention and graduation on time.

Community Engagement

The second initiative that SWID has taken on is offering students a hands on experience where they can apply the skills that they have learned in class. By engaging students in community service projects, members of SWID apply knowledge from the classroom to projects with community agencies (non-profits, government agencies, etc.) This initiative has gained a lot of traction and has bolstered participants understanding and involvement with class assignments After SWID had been in existence for a year, students wanted to create a philanthropic event for the organization. The students and the faculty involved were thinking of options such as a 5K run, canned food drive, bake sale and raffles, but during the discussions, it became evident that the students wanted to do something enriching and fulfilling to the community as a way to impart their skills.

It was decided that the best way to their experience was to begin small business process improvement projects for local community agencies (mostly non-profits). The majorities of these organizations are working with limited resources that do not allow a budget for a consultant to look at their business processes, nor devoted personnel to head up such initiatives. Mostly, non-profits are run by people who are invested in the cause; they may not necessarily have the educational background to integrate various tools and practices to their way of “doing business.” The SWID faculty advisor seeks out projects from local community agencies and oversees the student teams’ efforts on these projects.

The students working on the community projects do not receive any course credit for their philanthropic effort. This service-learning experience rewards students with a “Golden Heart award” for working on these projects. The award consists of an exclusively designed plaque and \$1000 scholarship. Overall, this initiative allows students to implement skills learned and also lessens the financial burden that comes along with attending university.

There are 2 community projects underway now. 2 groups of three SWID members are currently working on these projects. The projects are focused on process flow optimization and increasing capital resource utilization. The teams will be completing their projects by May 2015.



Figure 3: Golden Heart Awards

Benefits to Students

Being engaged in student organizations provide significant leadership, problem solving, and communication skills that are transferred to the workforce. SWID allows students the opportunity to hone those professional soft skills and creates a forum that opens and encourages dialogue between students and industry. Having access to varying perspectives and mentors allows members to build a stronger network that will serve as great resources and sounding boards throughout their career. SWID's newest consulting initiative for non-profits excellently merges occupational skills and service to the community. Participants are fully engaged in projects that utilize lessons from the classroom to create a lasting impact in the community.

For majors that are cross-functional, special efforts have to be made to ensure that students understand their career options. From our experience with Industrial Distribution, we have learned that existing organizations do not cater to the needs of our students- especially females--ng which leads to frustration and attrition due to lack of exposure, practical experience opportunities, and at the most basic level, as strong support system.

Future Directions

SWID is still very much in its growth phase. Once SWID stabilizes itself as an organization, the intent is to do the activities through a college or university center rather than through a student organization. This will increase the number of people that are impacted. If all these efforts seem successful and sustainable, this SWID chapter will remain its alpha chapter and it will be expanded to other schools that have similar programs.

Bibliography

1. Adelman, C. and U.S. Dept. of Education (1998), *Women and men of the engineering path: a model for analyses of undergraduate careers*. Washington, DC: U.S. Dept. of Education: National Institute for Science Education.
2. Astin, A. (1993). *What matters in college: Four critical years revisited*. San Francisco: Jossey-Bass.
3. Astin, A. W. (1993). *Assessments for excellence: The philosophy of assessment and evaluation in higher education*. Phoenix, AZ: Oryx.
4. Astin, A.W., Vogelgesang, L.J., Ikeda, E.K., & Yee, J.A. (2000). *How service learning affects students*. Higher Education Research Institute, University of California Los Angeles.
5. Billig, S.H. & Waterman, A.S. (2003). *Studying service learning*. Mahwah, NJ: Lawrence Erlbaum Associates.
6. Blum, L. & Frieze, C. & Hazzan, O. & Dias, M. B. (2006) “A Cultural Perspective on Gender Diversity in Computing” *Proceedings of ACM Special Interest Group on Computer Science Education 2006*
7. Brainard, S.G. and L. Carlin (1998), “A six year longitudinal study of undergraduate women in engineering and science,” *Journal of Engineering Education*, 87: 369-376.
8. Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). *Understanding and reducing college student departure*. ASHE-ERIC Higher Education Report, Vol. 30, No. 3. San Francisco: Jossey-Bass.
9. Eyler, J. (2000). *What do we most need to know about the impact of service-learning on student learning?* *Michigan Journal of Community Service Learning*, 7, 11-17.
10. Feldman, K. A., & Newcomb, T. M. (1969). *The impact of college on students*. San Francisco: JosseyBass.
11. Industrial Career Pathways, “What is Industrial Distribution?”, last accessed March 14, 2015 <<http://www.industrialcareerspathway.org/work/discover/what-is-industrial-distribution.aspx>>
12. Noel, L., Levitz, R., Saluri, D., and Associates. (1985). *Increasing student retention*. San Francisco: Jossey-Bass.
13. Pascarella, E. T., and Terenzini, P.T. (1991). *How college affects students: Findings and insights from twenty years of research*. San Francisco: Jossey-Bass.
14. Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition* (2nd Edition). Chicago: The University of Chicago Press.
15. Tinto, V. (2006-2007). *Research and practice of student retention: What next?* *Journal of College Student Retention: Research, Theory, and Practice*, 8(1), 1-19.