

A Sample ASEE GSW Annual Conference Paper

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Abstract

This paper doesn't really say anything important. The only purpose is to illustrate the proper formatting of papers for the 2020 ASEE GSW Annual Conference. Beyond that, this paper also describes a coordinated effort to recruit and retain new students in the Mechanical Engineering Department at the University of Southeastern Texas. Included is a description of the various recruiting programs at the university, college and department level. Of particular interest is a new community outreach program, wherein an Engineering Explorer Post sponsored by the College of Engineering, and affiliated with the Boy Scouts of America, was formed as a way to interest high school students in engineering. Also included is a report on the creation of a new freshman design class in the Mechanical Engineering curriculum in an effort to reduce the high freshman dropout rate, and a program initiated by the student section of the American Society of Mechanical Engineers (ASME) titled "Surviving the Freshman Year."

Introduction

While many of our nation's largest engineering schools have the problem of too many students, which is dealt with by what is termed —enrollment management,“ i.e., how to keep enrollment levels down, many smaller schools which serve a special function due to their geographic location for student accessibility, ethnic population, or unique location near manufacturing or processing industrial complexes, have the reverse problem, viz., how to maintain or increase enrollment at sufficient levels for the engineering program to remain viable. These schools must find ways to recruit students, and various programs to do so have been described^{1,2}, but with this comes the companion problem of student retention, which has also been a topic of discussion^{3,4,5,6,7}, since a lower percentage of these students are outstanding (National Merit Scholars, etc.).

Recruiting Programs

Recruiting and retention programs at the University of Southeast Texas fall into three categories: those at the University level, those of the College of Engineering, and those conducted by the Department of Mechanical Engineering.

Department Level Programs

The retention problem is depicted in Figure 1 below, which illustrates typical dropout rates for many schools as students advance through the program.

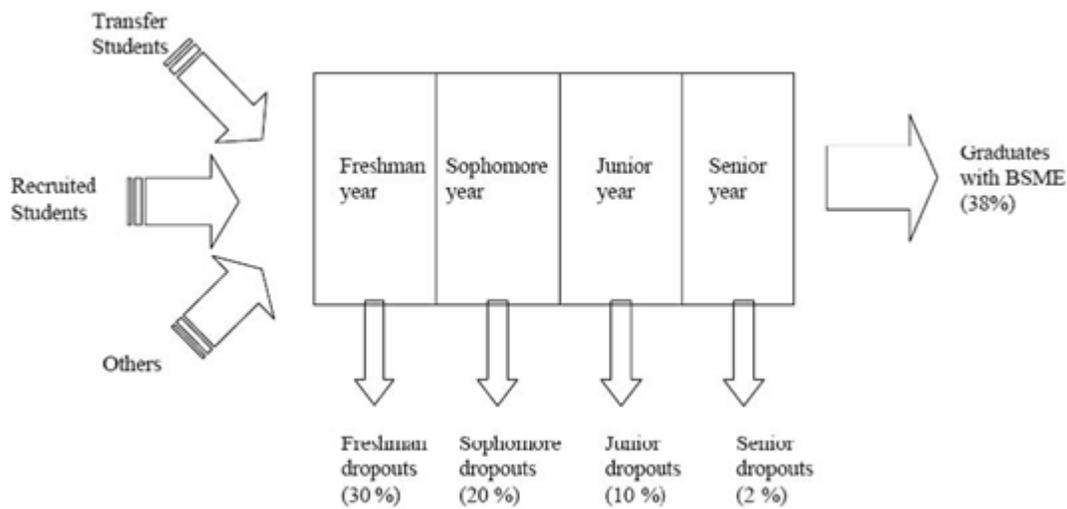


Figure 1. Dropout Rates at Various Levels in the Engineering Program

Summary and Conclusions

In summary, we have described the retention and recruiting efforts at University of Southeast Texas, at the university, college, and department levels. Recent events particularly worthy of note are the university name change, the beginning of selective admissions, the formation of an Engineering Explorer Post, the revision of the Introduction to Engineering course, and the Surviving the Freshman Year program initiated by the ASME student section. It is extremely difficult to quantify the interactions and the overall effect which the integrated recruiting and retention programs have on attracting students to the engineering and technology programs of the College, and on increasing their chances for success in the curriculum. The difficulty of measuring the results is compounded by the fact that enrollment is normally cyclic, and depends to some extent on the state of the local economy.

References

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