

SUCCESS WEEK: A FRESHMEN ORIENTATION PROGRAM AT SOUTHERN ILLINOIS UNIVERSITY CARBONDALE COLLEGE OF ENGINEERING

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Abstract *¾ In 1996, the College of Engineering at Southern Illinois University Carbondale began offering a freshmen orientation program, appropriately named SUCCESS Week. In this voluntary orientation program, new freshmen engineering students pay a small fee to attend a three-day program during the week before the start of fall classes. About 60% of the freshmen participate in this program. Fifteen to twenty-five upper class mentors are hired to host the new freshmen. As with other orientation programs, activities include guided tours for class locations, a group photo, a pizza party, a session on establishing campus computer and internet access, and a movie night. A unique aspect of this freshmen orientation is the Team's Initiative Course at the Touch of Nature Environmental Center. Professional group facilitators conduct icebreakers and team games so that freshmen and mentors get to know each other. After five years, an assessment of the program's impact on retention is presented.*

Index Terms *¾ Freshmen Orientation, Freshmen Engineering Activities*

INTRODUCTION

Nationally, over 24 percent of freshmen engineering students do not return to the engineering major in their sophomore year [1]. High freshmen attrition rates in engineering negatively influence both enrollments and graduation rates. Astin reported only 47 percent of the freshmen starting in the engineering major graduated in the engineering major [2]. From a survey of 118 institutions, Campbell reported 36 percent of minority freshmen engineering majors eventually graduated in engineering compared to a 68 percent graduation rate for non-minority freshmen³. Current data places the freshmen graduation rate in engineering at about 40 percent. On average, at least 45 percent of the total attrition among freshmen engineering students occurs by the beginning of the sophomore year. It is logical to focus retention efforts on the freshmen year where the loss of engineering majors is the greatest. Therefore, retention is the primary driving force underlying

the practices in the freshmen engineering program at Southern Illinois University Carbondale (SIUC).

At SIUC, the freshmen orientation program is called SUCCESS Week. Our main focus is to provide freshmen with a solid footing in the academic and social activities within the College of Engineering and among their peers. The intent is to build peer and faculty relationships that enhance the students' experience, and inevitably contribute to their personal success in completing our program.

SUCCESS Week at SIUC began in 1996. Activities are scheduled for the week prior to classes starting. Beginning Monday with residence hall check-in, day and evening activities are planned through Thursday afternoon. It is a voluntary program supported by the College of Engineering. There is a \$50 fee, which can be waived. In the first year, 78 of 163 students (48%) participated in this voluntary program. Since then, the participation rate has ranged between 54% - 63%. It is estimated that participation is largely drawn from the mailings sent to students, although word of mouth is a contributing factor. Surveys of the participants have indicated strong approval of the program. Furthermore, numerous participants return to the program as mentors. Each year, between 15-25 upper class mentors and a graduate student are involved, assisting in various aspects of the program from helping freshmen move into the residence halls to serving ice cream at the Ice Cream Social.

OVERVIEW OF ACTIVITIES

As with other orientation programs, our activities over the years have included:

- Welcoming Program
- Pizza Party (with parents, families and faculty)
- Bowling and Billiards night at the Student Center
- Ice Cream Social
- Campus Tours
- Campus Scavenger Hunt
- Setting up computer accounts and residence hall access to the internet
- Hands-on engineering projects
- Demonstration of engineering activities of registered student organizations (i.e. race car, hovercraft, steel bridge)
- Movie night

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In addition, the mentors and faculty meet with the students in the residence hall cafeteria for meals not scheduled into the daily activities. The unique highpoint of the week however has been the team initiative course at SIUC's Touch of Nature Facility.

TOUCH OF NATURE TEAM INITIATIVE ACTIVITIES

Touch of Nature is a 3,100 acre wooded retreat on Little Grassy Lake. It is approximately eight miles south of campus and is bordered by the Crab Orchard National Wildlife Refuge, the Shawnee National Forest and Giant City State Park. The Shawnee National Forest is approximately 240,000 acres. Giant City State Park is known for its striking sandstone bluffs. In addition to providing an ideal setting for the activities associated with Success Week, many of the participants are introduced for the first time to the recreational and educational activities of the surrounding area that compliment the University experience.

The main objective of the team initiative activities is to break down communication barriers through active problem solving. A typical exercise may be to move your entire team across a series of progressively smaller platforms using a plank board. By the time the team reaches the smaller platform they can barely fit and must hold each other on. Another activity may involve moving your entire team across a sand pit with only three swings of a rope hanging from a tall tree. Another activity may involve lining up your team by age without using words or hand motions. Several of these activities are shown in Figures 1-3.

In our surveys of student participants, the activities at Touch of Nature are consistently ranked high. They serve as more than just ice-breakers. We have seen evidence of study groups built from these early relationships among the freshmen.



FIGURE. 1
TEAM INITIATIVE ACTIVITY : CROSSING A WALL



FIGURE. 2
TEAM INITIATIVE ACTIVITY : ROPE AND CABLE CROSSING



FIGURE. 3
TEAM INITIATIVE ACTIVITY : TUBULAR BRIDGE FOR MOVING A BALL

ASSESSMENT

Our main assessment tool to date has been to monitor the retention of SUCCESS Week participants versus non-participants. Granted, the participants potentially have stronger commitments to their engineering education. However, this data can still provide some degree of evidence of the impact of SUCCESS Week.

In Table 1, the data indicates the number of first year students enrolled in the program starting in 1996. This data is subdivided into participants and non-participants. As the students advance into the second through fifth year, the number of students retained in each group is reported. 1996 is the only year that includes 5th year data. During the fourth year of this group, 7 students from the participant group and 6 students from the nonparticipant group graduated. These numbers are shown in parenthesis, and included in the % retained during the fifth year. In the 1996 group, the retention of the participant group is consistently higher, although it does decline.

In 1996, the non-participant group was larger than the participant group. In subsequent years, the participant group is larger. This is due to word-of-mouth as well as experience in organizing the event. More importantly, the trend toward higher retention rates within the participant group remains consistent.

Of note, the enrollment numbers do not include transfer students, which have a significant impact on enrollment in the third year.

TABLE I
ENROLLMENT FIGURES FOR PARTICIPANTS AND NON-PARTICIPANTS

	1st Year		2nd Year		3rd Year		4th Year		5th Year	
	P	NP	P	NP	P	NP	P	NP	P	NP
1996	# 78	85	49	43	38	29	36	23	24(7)	15(6)
	% 100	100	63	51	49	34	46	27	40	25
1997	# 92	52	59	26	44	21	39	19		
	% 100	100	64	50	48	40	42	37		
1998	# 80	68	58	44	38	28				
	% 100	100	73	65	48	41				
1999	# 85	57	61	34						
	% 100	100	72	60						
2000	# 81	59								
	% 100	100								

In addition to the retention data, our secondary assessment tool has been student surveys. The students have overwhelmingly enjoyed the program, with the strongest enthusiasm attributed to the team initiative program at SIUC Touch of Nature. Each year, a number of mentees return to the program as mentors, which adds to an additional level of encouragement toward this activity.

SUMMARY

As with other freshmen orientation programs designed to increase engineering retention, SUCCESS Week at SIUC offers a wide range of activities. Since this program only began in 1996, it is difficult to measure the impact this program may have on engineering retention. Many factors need to be considered, including a drop in engineering enrollment nationwide, the ACT/SAT scores of the students, and the overall university retention rate. However, one cannot overlook the evidence of a positive impact from the program. Additional information on the program is available from the SUCCESS Week link on the SIUC College of Engineering homepage at <http://www.engr.siu.edu/>.

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