

New Student Orientation Assessment: A Student Council/Dean's Office Partnership at the College of Engineering at Kansas State University

Tom C. Roberts, P. E. & Samira Hasan
Kansas State University

Abstract

The Kansas State University (KSU) Engineering Student Council (ESC) and the College of Engineering Dean's office established DEN 015: New Student Orientation Seminar Series (NSOS) in 1994. (The course identifier DEN is assigned to all Dean of Engineering courses). Emphasis is on new student (freshman and transfer) transition to college life. Students obtain administrative, academic, and professional development information, and receive guidance on how to become a successful student. New students discuss this information in small groups with mentors (older engineering students are trained and assigned to lead discussion). Homework assignments are reviewed and discussed. Students are introduced to their assigned departments, department assemblies are explained, and advising information is provided in an effort to connect new students to their college and departments.

The NSOS process has been a positive improvement for new students and several important administrative changes have been accomplished. The Student Council / Dean's Office partnership has produced a focused effort by students, faculty, and administration to share limited resources and to effectively implement needed change. Assessment and continuous quality improvement methods are being used to focus on future improvements.

The NSOS Process

The need to assist new students in the transition to college life is well documented.^{1,2,3,7} The Kansas State University Engineering Student Council/Dean's Office partnership emphasis is on new student (freshman and transfer) transition to college life.

The NSOS program involves student mentor training, five one hour session the first 5-6 weeks of the semester, administrative controls, cooperative efforts with the College of Arts & Sciences dean's office, residence hall and Greek Affairs office staff, program evaluation, & assessment of new student perception of life style and academic issues. Proactive communication from residence hall staff to the Dean's Office is encouraged. Intervention early in the semester is essential.

Mentor Recruitment and Training

The first step in the NSOS process is student mentor recruitment and training. The goal is to have a mentor with a group of new students from his or her respective department. This gives the new student an opportunity to learn about their department from an upperclassman.

The NSOS Committee is responsible for recruiting mentors. Recruiting is accomplished through email, visits to engineering group meetings, and telephone calls to mentors from previous years.

*Proceedings of the 2002 American Society for Engineering Education Annual Conference & Exposition
 Copyright ©2002, American Society for Engineering Education*

After the mentors are recruited, the NSOS listserv must be updated and notification about training events, reminders about session times/locations, and instructions for roll sheets and administrative tasks are e-mailed. This communication between mentors and the NSOS committee is vital for a successful program.

The first mentor training is held prior to the end of the spring semester. During this training sessions mentors receive information on group leading and group interactions, the needs of freshmen, and how to be an effective mentor.

A second mentor training session is held the afternoon prior to the first NSOS session. During this training mentors receive all of the materials that will be given out at the session, their group assignment, and reminders are given about facilitating group discussion.

Groups are made up of 12 or fewer students with each mentor. The goal has been to keep groups under 10 students in order for more effective group discussions to occur. Clustering of female, honors and minority engineering students is done to build more effective support groups for these students.

Setting the Agenda

Entering students are divided into two activity periods with one period meeting at 6 p.m. and one meeting at 7:30 p.m. NSOS consists of five sessions (see agenda - Figure 1). Each of the first three sessions consists of time for small groups to discuss homework and questions from the previous session. An invited speaker provides a welcome from some different aspect of the University. The welcome is followed by brief presentations to introduce the scheduled session material. Finally, there is a discussion period during the last few minutes for mentors to address the material covered and to answer any additional new student questions. NSOS sessions 4 & 5 follow a different format, are facilitated entirely by the mentor, and are designed to connect the new student to their department.

Effective and timely communication is a key component of the NSOS program. Class schedules are made six months in advance requiring advanced communication about NSOS with the Student Union room reservations office and the University Registrar. The enrollment process in June requires communication between University and College enrollment staff and the NSOS program coordinators to get students enrolled and into the proper activity period. Ads are placed in the enrollment addition of the student newspaper informing students and parents about NSOS. These ads also provide information about NSOS to other colleges on campus. Proactive communication from residence hall staff to the Dean's Office is encouraged during the semester to assure that student academic problems are managed in timely manner.

Implementing the First Session: Welcome and Administrative Information

Two days prior to the first NSOS session, signage is placed in engineering and key campus buildings, residence halls, and Greek houses to remind new students of the time and location of the first session. Signs are placed in the Student Union to direct students to the Main Ballroom where the sessions are held. Group assignments and alphabetical lists are posted at the Ballroom entrances and committee members assist in getting new students to the right groups and assigned small group discussion tables. The agenda, the *New Student Orientation Handbook*⁴, and

information about computer labs and Career & Employment Services are distributed as students enter.

Students are welcomed into their groups, complete an attitude survey, and participate in warm-up exercise designed to acquaint group members. Students are welcomed to the College by the Dean and the Chairman of the Student Council NSOS Committee. The material covered in the first session is administrative information including; the University Honor Code, a calendar of events, course drop/add procedures, information about campus/college computer systems, and class schedules. College of Engineering computer id's are also given out by mentors at this session.

Session Two: Personal Development and Getting Organized

The second session covers academic and employment information. The session begins with a welcome from the University's Student Body President. Career and Employment Services (CES) staff presents information about resumes and interview workshops, internships and the upcoming career fair. Transfer students then move to a separate room and additional information about CES is presented to them. Freshmen remain in the Main Ballroom and are provided information about study skills, time management, and goal setting. Twenty to thirty minutes are provided to mentors to facilitate small group discussion and to answer questions.

Session Three: Professional Development and Getting Involved

The third session begins with twenty minutes of small group discussion facilitated by mentors. A welcome from the President of Engineering Student Council follows. This session covers professional development information (including learning styles) and information about the Freshman Leadership Council.

A team building exercise serves as a fun activity and to illustrate the importance of study teams. A duct tape competition (tape your mentor to a concrete wall) and paper towers are two examples of activities used. Between the two periods, an activities fair is held, giving new students an opportunity to see what groups and activities are available in the College (Solar car, mini-baja, formula car, Toastmasters, concrete canoe, etc).

Sessions Four and Five: Connecting with Your Department and The First Round of Tests

The fourth NSOS session is the departmental session. The agenda and format is under the discretion of the department. The session provides an introduction of the new students into their respective departments. Some departments use their regular assembly for this meeting and others set aside a separate time to meet only with new students. Nearly half of the departments have initiated their own orientation since the inception of NSOS and make a seamless transition from the "global" sessions to department specific topics. Materials covered in department sessions include advising, an introduction to the faculty, information about departmental assemblies, and explaining opportunities and steps to take to become involved in the department.

The fifth session is a follow-up session with the mentor. This session is used to check on the students' progress. Discussion includes enrollment for next semester, test taking, advising, and answering any question new students have about the up coming semester.

Improvements Made to NSOS Since 1997

There have been several improvements made over the past few years to NSOS⁸. The earlier distribution of campus computing id's and the distribution of College of Engineering computer id's at the first session has been accomplished. Groups of new students have been kept to 12 or fewer students with an ideal group being less than 10 students. A new student handbook has been created. The NSOS sessions are covering information about learning styles and time management more effectively. Clustering of students by the multicultural engineering program has been implemented (This is in addition to gender and honors clustering which has been done since 1995). The team building activity has been improved and is more fun.

These improvements have been made by surveying new students, mentor evaluations, input from the Freshman Leadership Council, and work by the NSOS Committee. Continuous process improvement is the key. Student leaders learn what is and isn't possible, new students change, university policy's and procedures change, and Arts and Science Departments make improvements to their courses. The evaluation and discussion of any proposed changes serve as an effective leadership development tool for older students.

Conclusions

- The Engineering Student Council / Dean's Office partnership has effectively implemented positive change in freshman student behavior and performance. (Figure 2)
- All 8 College of Engineering departments have improved first semester contact with new students. Six degree programs have added an orientation course to their curriculum.
- The *New Student Orientation Handbook* is an excellent summary of materials, is updated semi-annually, and provides information to new students in a timely manner.
- A *Student Organizations Handbook*⁶ has been developed to explain student organizations and to provide up-to-date contact information. This information has also been added to the College's web pages.
- Residence Life Coordinators report that engineering students have a better understanding of university processes than other students on campus.
- The number of students with study plans at the end of the first semester has increased 25% since 1995. (Figure 2)

Recommendations for Future Improvements

- Work with department heads and faculty to enhance their understanding of freshmen and to improve departmental advising.
- Use the mentoring groups to form study groups.
- Use the mentoring groups to fully implement upcoming changes to the Honors program.
- Cluster groups by secondary interest or by enrollment in key classes.
- Create a full semester orientation program with every department and add DEN 015: New Student Orientation as a requirement to the remaining department curricula.
- Integrate individual learning styles and brain dominance factors into mentor discussions.
- Provide course credit or scholarships to mentors.

References

1. Roberts P.E., Tom C., Arheart, Thane A., **New Student Orientation: A Student Council/Dean's Office Partnership at the College of Engineering at Kansas State University**, ASEE Midwest Section Conference, April 8-10, 1998.
2. Anderson-Rowland, Mary, et.al, **Off to a Good Start: A Short, Comprehensive Orientation Program**, Arizona State University, 1996 ASEE Annual Conference Proceedings.
3. Gregg, Michael H. Et.al, **Student Retention Strategies Gender Clustering, Virginia Polytechnic Institute and State University**, 1996 ASEE Annual Conference Proceedings.
4. Roberts P.E., Tom C., Hasan, Samira, **New Student Orientation Handbook**, College of Engineering, Kansas State University, 2001.
5. Roberts P.E., Tom C., **New Employee Orientation Program**, Black & Veatch Engineers-Architects, Kansas City MO, 1982.
6. Hasan, Samira, Tinkler, Kristen, **Student Organizations Handbook**, College of Engineering, Kansas State University, 2001.
7. Martinazzi, Robert, Samples, Jerry W., **The Freshman Seminar: When Another Course Just Won't Fit**, University of Pittsburgh at Johnstown, 1997 ASEE Annual Conference Proceedings.
8. Walton, Mary, **The Deming Management Method**, ISBN 0-399-55000-3, 1986.

TOM C. ROBERTS, P.E., CMC

Assistant Dean, Recruitment and Leadership Development, College of Engineering, Kansas State University
Tom has more than 25 years experience in planning, organizational development, and leadership training programs. He worked for Black & Veatch for 16 years, formed Upward Consulting in 1989 and has served as a total quality management (TQM) consultant for a number of manufacturing and service companies, and educational institutions.

SAMIRA M. HASAN

Director of Engineering Student Council, New Student Orientation Seminar Committee
Samira is a senior in Biological and Agricultural Engineering and Biology at Kansas State University. She has been a member of Engineering Student Council for three years and the Director of the NSOS Committee for two years. As a Director she has helped plan, organize, and run three NSOS sessions. She will graduate in May 2002.

Figure 1: New Student Orientation Seminar Series Agenda College of Engineering-Kansas State University

Session 1: Administrative Information

Session 2: Personal Development

Session 3: Professional Development

Session 4: Meeting with Your Department

Session 5: Meeting with Your Mentor

Contact Tom C. Roberts for a full agenda. tcr@ksu.edu

*Proceedings of the 2002 American Society for Engineering Education Annual Conference & Exposition
Copyright ©2002, American Society for Engineering Education*

Figure 2: New Student Survey
College of Engineering – Kansas State University

To assist the University in a long-term project to improve advising and to smooth the transition from high school to college, we ask that you take 2-3 minutes to respond to this survey. Please circle your response below. **The answers will remain anonymous – therefore we want your honest response.**

1. Are you a A) Male or B) Female
 2. Which type of student are you? Transfer B) Non-traditional C) Freshman
 3. Approximately how many students were in your high school graduating class?
A) Under 50 B) 50 – 99 C) 100 – 199 D) 200 - 299 E) 300+
 4. Have your parents attended college? A) Yes B) No
 5. Are you worried about financing college? A) Yes B) No
 6. Are you concerned about making friends? A) Yes B) No
 7. How many hours do you expect to work this fall? A) 0 B) 1 – 8 C) 9 – 15 D) 15+
 8. Are you worried about your family situation, i.e. health problems, divorce, unemployment?
A) Yes B) No
 9. How much alcohol (beer, etc.) do you consume a week?
A) 0 B) 1 - 4 C) 5 – 10 D) 10+
- | How confident are you | <u>Very</u> | <u>Somewhat</u> | <u>Not At All</u> |
|---|-------------|-----------------|-------------------|
| 10. About being successful in college? | A | B | C |
| 11. About your abilities in mathematics? | A | B | C |
| 12. About your abilities in science (chem., phys., etc.)? | A | B | C |
| 13. About your writing abilities? | A | B | C |
14. How many hours a week do you expect to study your coursework?
A) 5 B) 10 C) 15 D) 20+
 15. Do you have a plan for managing your class time, study, leisure, costs, etc.?
A) Yes B) No
 16. How well do you think your high school academic experience prepared you for college?
A) Poor B)Below Average C) Average D)Above Average E) Well Prepared
 17. What grades do you expect to earn this semester?
A) 2.0 – 2.49 B) 2.5 – 2.99 C) 3.0 – 3.49 D) 3.5+
 18. Did you bring a computer to K-State to use this Fall? A) Yes B) No
 19. Did you transfer credits to K-State?
A) 0 – 6 B) 7 – 12 C) 13 – 19 D) 20 – 29 E) 30+

FIGURE 3: New Student Survey Summary Results
College of Engineering-Kansas State University

Student Life Style

STUDENT CONCERNS		Before Fall Classes				End of Fall Classes		
		% 1995	% 1996	% 1997	% 2001	% 1995	% 1997	% 2001
Worried about financing college?	Y	53	54	46	45	60	51	
	N	47	46	54	55	40	49	
Concerned about making friends?	Y	28	30	28	26	15	19	
	N	72	70	72	74	85	81	
Worried about family situations?	Y	11	10	8	8	30	16	
	N	89	90	92	92	70	84	

Hours Expected To Work Per Week

Hours	Before Fall Classes				End of Fall Classes	
	% 1995	% 1996	% 1997	% 2001	% 1995	% 1997
None	48	47	53	50	62	61
1 - 8	12	13	19	14	12	14
9 - 15	25	26	14	23	12	13
15 +	15	14	14	13	14	12

How Much Alcohol Consumed Per Week

Drinks	Before Fall Classes				End of Fall Classes	
	% 1995	% 1996	% 1997	% 2001	% 1995	% 1997
None	49	55	53	50	35	41
2 - 4	23	21	19	26	38	20
5 - 10	14	10	14	9	13	14
10 +	14	14	14	15	14	25

Academics

Student Confidence		Before Fall Classes				End of Fall Classes		
		% 1995	% 1996	% 1997	% 2001	% 1995	% 1997	% 2001
About being successful in college?	Very	60	54	59	60	42	46	
	Somewhat	39	45	40	39	56	49	
	Not	1	4	1	1	1	5	
About mathematics abilities?	Very	60	55	57	55	32	40	
	Somewhat	38	43	41	43	48	52	
	Not	2	2	2	2	20	8	
About science abilities?	Very	52	44	44	48	19	37	
	Somewhat	46	53	54	50	68	59	
	Not	2	3	2	2	13	4	
About writing abilities?	Very	30	32	31	32	56	39	
	Somewhat	60	59	61	55	42	53	
	Not	10	9	8.6	13	2	8	

Hours Per Week Expect To Study

Hours	Before Fall Classes				End of Fall Classes		
	% 1995	% 1996	% 1997	% 2001	% 1995	% 1997	% 2001
5	2	2	2	4	21	5	
10	17	17	15	23	31	19	
15	36	29	44	47	24	39	
20+	45	42	39	26	24	37	

Plan for Managing Class Time, Leisure, Costs, Etc.

	Before Fall Classes				End of Fall Classes		
	% 1995	% 1996	% 1997	% 2001	% 1995	% 1997	% 2001
Yes	67	72	69	66	34	59	
No	33	28	31	34	64	41	

