

COUNSELING PROSPECTIVE ENGINEERING CO-OPS

David R. Opperman

*Assistant Dean,
College of Engineering
University of Illinois
Urbana, Illinois*

John Alden recently commented on the advising of engineering students and pointed to the counseling gap that currently exists in engineering colleges. Though counseling procedures in high schools are adequately developed for identifying students who should enroll as engineering freshmen, and adequate counseling for professional training and growth is available from employers after graduation, who is responsible for counseling during the four-year gap between entering freshmen and graduating seniors?

The cooperative education office, if properly staffed with well trained personnel, can be the vital link assisting freshmen in identifying their skills, interests, values, objectives, and the possibilities for a challenging and rewarding career in engineering. But the opportunity to assist our students, and perhaps retain the marginally committed student, can be lost if engineering faculties assume that enrollment in a specific engineering curriculum means that final career choices have been made and that the student needs no further information, guidance, or help in identifying career options. Unfortunately, all too frequently it seems, faculties

do assume that no further help is needed, adequate counseling is not provided, and engineering students lose the opportunity to become fully informed and committed to the engineering profession.

If the proposition is accepted that engineering students can benefit from career guidance and counseling, what kind of program will yield the desired results? Perhaps insight can be gained by noting the results when a program is lacking. All too many students, left to drift for themselves, will go to their placement office during their final semester and announce, "I'm a graduating senior but I don't know what I want to do." Therefore, the goal for a career guidance and counseling program is to help engineering students determine what may be a stimulating, interesting, and fulfilling career for them. The goal of the co-op office should be to assist students to find experiences that will test and corroborate the conclusions gleaned from counseling; and the goal of the placement office should be to facilitate employment in the chosen field, if the student and the co-op employer do not wish to continue their relationship after graduation.

On some campuses career guidance and counseling(1) is an independent office; on others it is a function of the placement office; on still others it is part of the co-op office. If it already exists on campus, the problem is to make sure the students take advantage of it. If it doesn't exist, the co-op office has a golden opportunity to assist students and should step into the vacuum and provide the missing services.

Suggested steps in co-op counseling may be summarized as:

- a. Initial In-Depth Interview
- b. Personal Inventory of the Prospective Co-op
- c. Matching Student Curriculum With Co-op Opportunities
- d. Feedback

Considerable attention is usually given to steps a, c, and d in co-op offices. The student's statements about his interests are combined with curricular possibilities and co-op referrals are made on this basis. Often, however, many of the individual's abilities, personality traits, and latent talents are ignored. Important considerations that can be ignored in limiting co-op advising to a, c, and d are student preferences and strengths for working with words, numbers, shapes, ideas, tangible things, people, etc. Also ignored are abilities to lead, organize, persuade, perform,

speak, perceive, investigate, compute, and teach. In addition, since many students are concerned with morals and values as well as geographic and cultural preferences, and educational and recreational opportunities, it becomes apparent that we need to know more about a student than his curriculum if he is to be placed intelligently on a co-op assignment.

Many texts and tools are available to aid the co-op coordinator in helping the prospective co-op assemble his personal inventory. Recent texts receiving much attention are *What Color is Your Parachute?* by Richard Bolles and *Career Satisfaction and Success* by Bernard Halldane. John C. Crystall collaborated with Bolles in producing a workbook entitled, "Where Do I Go From Here With My Life?" which is being widely adopted in college counseling courses. Dr. John L. Holland has developed a counseling test which he calls the "Self-Directed Search." Available in single copies for only a dollar, the "Self-Directed Search" is designed so that the student can administer and interpret the test himself. Thus, he creates insights and answers to his career choices and possibilities through taking the test on his own terms.

Employers in increasing numbers are recognizing the long-range value in matching employees' skills and abilities with the jobs they perform. New employees are more carefully screened. Transfers within organizations are being considered in a new light, with attempts to improve job placement with each internal move. A few organizations are even using these techniques in exit interviews, for they feel they have a social responsibility to the employee when he or she is being terminated.

As a result of this employer interest, one of the most useful company publications to appear on the college recruiting scene in recent years is the Atlantic Richfield, "Career Planning Workbook." Incorporating many features of good career planning programs, the booklet provides check lists and worksheets on which the student may record his answers. He is led progressively from self-analysis to formulation of his own career goals. The booklet ends with illustrative examples of actual career paths at Atlantic Richfield. Atlantic Richfield has offered to make quantities available for use at colleges and universities.

If the co-op office is to serve its clientele fully, one or more of the above aids to career planning and counseling should be chosen for use in the office. As a routine procedure, students should be exposed to the deeper facets of total self-analysis regardless of how well informed and commit-

ted they might be to a particular goal. Confirmation of a chosen career can be as important to the budding engineer as the discovery of new career possibilities.

“But what,” you may ask, “can I do specifically to help the freshman identify what he may be best suited to do if he wants to co-op?” As in all human relationships, there is no one easy answer. However, in addition to the texts mentioned above, tools exist which can help. The “Self-Directed Search” is a very good one. It gives the student an opportunity to express his daydreams, interests, past accomplishments, and present skills. These are summarized and coded into a system that relates to the Federal Government’s *Dictionary of Occupational Titles*. Thus, ideally, the student arrives at a code that will direct him to all the occupations in which people of similar backgrounds have enjoyed success.

Bernard Halldane has approached the problem in a similar, but less specific fashion. He chooses to analyze past success to identify the skills that should be strengthened and pursued. According to his method, the student writes a lengthy essay on his past successs. These successes are then “dissected” to identify specific skills that contributed to them. The skills, thus identified, will point the way to intelligent career selection.

Most colleges and universities have some counseling services available for students that often include ACT, CEEB, Strong Interest Tests, etc. These tests, used in conjunction with the more comprehensive and specific tests of Holland and Halldane, can provide a valuable overall insight for the prospective Co-op that will help him find the “perfect” assignment to match his individual traits.

REFERENCES

1. It is assumed that all students receive adequate “academic” advising toward their curricular goals that will result in the awarding of the engineering degree sought by the student.