

COOPERATIVE EDUCATION AS A RETENTION TOOL

Leslie Wilson Hauschildt

Metropolitan State College of Denver
Denver, ColoradoWhat Cooperative Education Is

Cooperative education, commonly known as co-op ed, is based on the idea that combining work experience related to a student's academic major with the classroom experience will enhance the total education for that student.

The history of co-op ed in the United States started at the University of Cincinnati near the turn of the century. Traditionally co-op ed has been most widely available for students studying engineering and business.

Currently co-op ed is available at hundreds of U.S. colleges and universities, and in fact is international in scope. It has evolved to become a viable option for all academic areas.

How Co-op Ed Works

There are nearly as many variations of co-op ed as there are institutions that offer it, but all of them are based on the general premise that there must be a connection between the student's work and the student's studies for it to qualify as co-op ed.

Three basic stages are involved.

#1 Recruitment: Recruitment means all the steps involved in getting people to buy into believing in and participating in co-op ed. Recruitment of employers is required for the development of work positions suitable for co-op ed. Recruitment of students (unless co-op ed is mandatory for all students) and recruitment of faculty is also required to have the commitment and enthusiasm necessary for successful co-op ed.

#2 Placement: Matching a student with a position she is interested in, will learn from, and that will also fulfill some needs of the employer is necessary.

#3 Follow-up: This is what differentiates co-op ed from just any job placement, and what ensures it is truly a learning situation benefitting all the parties involved. The institution, the student, and the work supervisor all must stay in communication with each other so that effective monitoring and evaluation occur.

What Makes Co-op Ed Work and Why It Works as an Educational Tool

What makes cooperative education work is that it is an active three-way partnership. Co-op ed's nature, that it is academically based and meant to benefit all involved parties, is the groundwork. From the beginning the educational institution, the employer and the student are all personally involved.

Through co-op placements, the educational institution is closely tied in with what is happening in the work world and the marketplace as the co-op work supervisors relay what they need from their co-op students and explain why. The interaction between the institution and the employers offers a chance for valuable discussion of what education needs to cover (and is expected to cover) with an engineering degree and why. There is also the opportunity for the institution to personally work with industry in gaining needed support (equipment, adjunct faculty, etc.).

Co-op provides an opportunity for employers to fill a variety of needs. The major fulfilled need is in recruiting and training. This recruiting and training is usually viewed, at least initially, in terms of the employer's own engineering recruitment needs. It should not be forgotten, however, that even if the co-op student does not stay with the co-op employer, that co-op experience has helped that student become a productive engineer somewhere; and in our inter-related world today, that may easily result in a benefit to the original employer in ways not originally foreseen.

What makes it work is also why it works as an educational tool. An engineering student gets to apply in a practical, real-world setting the theories she learned in her basic engineering courses. She gets to see and explore different potential career areas within her academic major. And last but not least, she gets to talk and interact with professionals in the field, and get their advice and insight on the particular questions she has about engineering.

Surveys over the past fifty years, and especially research in the last twenty years (see The Journal of Cooperative Education, Winter 1989 issue), have documented co-op ed's value as an educational tool. Given that there is more activity in co-op ed in the fields of engineering than any other one field, it logically follows that co-op ed's value as an educational tool in engineering particularly makes sense.

Why Co-op Ed Works as a Retention Tool

Although not so well researched, co-op ed also appears to act as a strong retention tool. The commitment demonstrated by the institution and the employer encourage the student to stay in school and stay in engineering. The nature of co-op ed provides one-to-one mentoring in most situations--one-to-one with a supervisor or someone in the work setting, and one-to-one with a faculty or co-op coordinator in the educational institution. This sort of commitment and personal mentoring are well established as factors that encourage retention in higher education.

There is some research currently being conducted in the area of co-op ed and retention by Shirley Dudzik Gregory at Oregon State University. The study followed co-op students in Oregon for five years; all majors, urban and rural institutions, both 2 and 4-year schools. Data on minority students was additionally collected to see if there was a variation in results. There was not. It was clearly shown that co-op students were more consistent in staying in school over the five years, and that co-op students were more likely to finish their degrees.

In a recent conversation with Dr. Gregory, we discussed if she had collected any data concerning gender and/or academic major. Although she had not, her gut reaction was that if that kind of data was collected and analyzed, the results would show an even stronger correlation between co-op ed and female students staying in school and finishing their degrees.

I conducted a (very) informal oral survey of my own among female engineering and engineering technology students here in Denver, Colorado. From the replies I received I would agree with Dr. Gregory in her expectations. The bottom line appeared to be that, while these students would be likely to stay in school and finish their degrees even without co-op, the participation in co-op work experiences reinforced their knowledge and desire to be in engineering, and gave them more confidence they were in the right field for them.

General Observations, Opinions, and Conclusion

The changing demographics of both higher education student bodies and of the nation as a whole clearly show that we must start looking at women and older students if we expect to come anywhere close to supplying our needs of the future in engineering. Co-op ed, with its emphasis on individuals, can be one of the tools that we utilize to encourage more students to enter and stay in engineering. This will mean working to keep co-op ed an individualized process as much as possible. If we who believe in and utilize co-op ed keep in mind not only the traditional needs of the employer, the institution, and the student, but also the individual needs of the female and older female student, co-op will help us meet those future engineering supply concerns.

There also needs to be more research in this area for two reasons. If the expected result is correct--that co-op ed does assist in retention of female students in engineering--then this information should be utilized to recruit more female students. If the expected result is not correct, it would strongly indicate that some concerns and problems we think are lessening or disappearing for women in engineering are in fact not doing so and need new attention.

I would like to conclude by offering my opinion that co-op ed does work in enhancing education and retention in higher education in general, and it can do this for women in engineering to an even greater degree. Finally, because it can do this, I believe we need to see that it does do this through working toward seeing more and more women students both in engineering and in co-op ed.

