USING CO-OP REVIEWS AS AN ASSESSMENT TOOL

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Abstract – This paper describes our work-in-process of incorporating co-op visits and reviews into program assessment to prepare us for the next ABET review. This one-page paper briefly discusses our co-op visit and review procedure, benefits of using co-op visits and reviews for assessment, our methods of doing this assessment, an example result of this assessment and a planned improvement of this assessment method.

Index Terms – Co-op program, assessment, ABET criteria

This paper reports on our experiments of using co-op reviews as an assessment tool for evaluating our performance in achieving the program objectives.

Our department has five to ten students in the co-op sessions each semester. In about the middle of the semester, the campus co-op education director and I, department co-op academic advisor, go to each of the co-op companies to visit the student and meet with the supervisor. At the end of the semester, the supervisors provide us with evaluations and the co-op students submit self-evaluations with technical reports and may also give oral presentations on the campus to faculty and students.

In the process of developing and using multiple assessment tools for the program goals, we feel that the co-op reviews should be a good additional assessment tool. It is because

- Co-op students’ performance should indicate, to some extent, the strengths and weaknesses of our curriculum and courses.
- The feedback is very timely; there is no or little time lag between feedback and on-going activities.
- Verbal discussion with supervisors and students in the meetings well clarifies their feedback.
- The assessment return is usually 100%. Over a time period of three years, say, we can have about fifty responses from students and an equal number from employers.
- The efforts are relatively low due to the fact that this assessment can be well integrated with regular co-op visits and reviews.

For each co-op visit, I take with me a copy of the student’s academic record and ask the supervisor and the student, separately, the following questions:

- How well does the student master the knowledge of the courses already taken? What is her/his ability to apply the knowledge to applications?
- What is the student’s ability to develop and conduct experiments in investigating problems?
- What is the student’s creativity in the work?
- Can the student function effectively on teams?
- Can the student communicate effectively?
- Does the student understand professional and ethical responsibilities?
- Does the student have the attitude of continuous improvement and life-long learning?

These questions are in line with the ABET criteria. I also leave or later e-mail a form to the supervisor and a form to the student for them to send back at the end of the semester. The forms basically have the same above questions with different wording for the supervisor as for the student. The forms also have ratings for each question so that responses can be summarized numerically for statistical study.

I started this work in the fall of 2002. Both the students and the supervisors were very cooperative. The assessment indicates, for example, lack of ability to conduct experiments is a common weakness of our students. For using this assessment tool, I have learned that I should reword some of the questions to make them more specific. For example, instead of asking whether the student has the attitude of continuous improvement and life-long learning, I would ask whether the student is willing and able to do some self-study for doing a better job.

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