

## STEM

### Modeling Student-Perceived Costs and Benefits to Cooperative Education Programs (Co-ops) and Pathways to Participation

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Previous studies have shown benefits to co-op participation. Since students who participate in co-ops are more likely to persist in STEM fields, and there are differences in participation rates by race/ethnicity, it is critical to understand the reasons for non-participation. Therefore, this study examined the perceived costs and benefits to co-op participation among sophomore students at a large Midwestern U.S. research university. Students were surveyed to identify whether there are differences in perceived benefits and barriers to co-op participation when disaggregated by gender and race/ethnicity. The opportunity cost of co-ops from the perspective of co-op and non-co-op students were hypothesized to be significantly different.

Results indicate that pathways to co-op participation differ among students. From the survey responses, five critical points were identified in the path analysis: 1) interest, 2) information, 3) application, 4) interview, and 5) participation. Ninety-three percent of survey respondents were aware of co-op programs. Of the students who knew about co-ops, more than half indicated they were not interested in them. Furthermore, perceived barriers to participation differed for co-op students and non-co-op students. Co-op students most often listed a disconnect

with peers on campus as a disadvantage to co-op, whereas non-co-op students listed increased time to graduation and a preference for internships over co-op. Future work includes conducting interviews with survey respondents to gain a more nuanced understanding of perceived costs and benefits. These findings will help co-op programs best serve diverse student bodies, highlighting areas that programs can use to encourage greater awareness and potentially participation in co-ops.

*Research advisors Joyce Main and Nichole Ramirez write, "This work will inform co-op program policies, specifically focusing on how students are recruited into the program. Students and employers will benefit from understanding how the program works and what motivates students to gain valuable work experience prior to graduation. This work is the first step in providing a holistic view of the influence that experiential learning can have in higher education."*

<b>Co-op Students</b>	<ol style="list-style-type: none"> <li>1. Disconnect with peers on campus</li> <li>2. Time to Graduation</li> <li>3. Missed Opportunities on Campus</li> <li>4. Off schedule in classes</li> </ol>
<b>Non-Coop Students</b>	<ol style="list-style-type: none"> <li>1. Time to Graduation</li> <li>2. Prefer Internship over Co-op</li> <li>3. Missed Opportunities on Campus</li> <li>4. Commitment to 1 company/industry</li> </ol>

Perceived disadvantages by co-op and non-co-op students.

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