

Stakeholder Summary

Structured feedback program helps students improve teamwork and collaboration skills

Providing accurate, actionable feedback to students is a critical part of developing essential skills like teamwork, but this can be difficult in a large class environment. A new study by the Higher Education Quality Council of Ontario (HEQCO) examines an initiative at the University of Toronto that used a structured online feedback tool to help students in a large first-year engineering class self-assess and receive peer assessments on their teamwork skills. The study found that the tool was effective at helping students understand their strengths and weaknesses, as opposed to open, unstructured feedback opportunities, which often only highlight what a student already does well.

Project Description

At the University of Toronto, engineering students are introduced to teamwork projects in their first-year engineering design courses. Students are grouped into teams to simulate industry working conditions and are often assessed based on the quality of their deliverable, not their performance as part of a team. Feedback on the experience of working in a team is provided, but it is unstructured and open to interpretation.

Teaching Team-effectiveness in Large Classes evaluated the effectiveness of an online feedback tool that allowed students, their peers and teaching assistants to assess 27 aspects of teamwork skills such as expressing opinions, showing respect for other teammates, being prepared for meetings and motivating others on the team to do their best, to understand whether students developed and improved upon their teamwork skills. The 280 student first-year engineering class was divided randomly into two groups, those using the tool and those not, and students were asked to provide feedback at the midpoint of the course and take part in a survey at the end of the course on the utility of feedback they received. Teaching assistants used the tool to evaluate students and these results were compared to student feedback.

Findings

Students found the feedback they received using the online tool to be more actionable, and it appeared to motivate them to improve their performance more than those who received the unstructured feedback. Students in the unstructured group, on average, only received feedback on 10 aspects of teamwork, very little of which was focused on "relational" aspects like respect for others, building trust, motivating team members and soliciting input.

The online tool was especially useful for peer assessments, but less helpful for self-assessments. The peer assessments were very similar to those of teaching assistants, while the self-assessments only had similar results with those of the teaching assistants on "organizational" aspects of teamwork such as delivering work on time, tracking progress and supporting team rules.



One positive aspect of unstructured feedback was its reliance on comments as opposed to assessment scores. Students noted that receiving comments from their team members made them feel more included and committed to the group as a whole. As a result, the authors recommend that any framework in the future include an opportunity for comments in feedback.

Authors of *Teaching Team-effectiveness in Large Classes* are Patricia K. Sheridan, Greg J. Evans, Doug Reeve, University of Toronto.