21 Using Peer Evaluation For Assessment 'As' Learning
Dr. Maireád Seery
Department of Computer and Software Engineering TUS Midlands

Summary of Teaching & Learning Context

All Year 1 students in the Department of Computer and Software Engineering take a module in semester 2 called Communication for Engineering. One of the learning outcomes of the module is that students should be able to "reflect on their ability to communicate and collaborate with others in their discipline". To achieve the learning outcome, students were tasked with working on a group project related to their discipline. A team-based learning (TBL) approach supported students in this task during weeks 1-7. The project culminated in a presentation to the class in week 8.

Implementing the strategy

Peer evaluation is a type of assessment 'as' learning. It requires students to articulate and apply assessment criteria to their peers, and ultimately to themselves. In this way, peer evaluation provides formative feedback, allowing students to adjust their own performance and improve.

Within a TBL context, peer evaluation is key to promoting individual accountability to the overall team performance.

I used different strategies to implement peer evaluation:

1. Students completed an individual, anonymous 5-star rating of each of their team members based on two questions: How well does [name] contribute ideas to the team? How well does [name] listen to other people's ideas? At the end of the lesson, students received an aggregate score based on the ratings. Students were also required to self-evaluate as part of this exercise.

2. Teams discussed and provided a written account of their teamwork using two prompt questions: What is your team doing well? What could your team do better?

3. On an ongoing basis, teams could review and rate the answers of other teams' application exercises.

4. Each team completed an evaluation sheet for each team presentation.

Impact on student learning

Strategy 1 was the least preferred method. Concerned that their responses would be identified to them, students frequently gave each team member the full 5-star rating. I also felt that students engaged in this exercise in a very superficial manner. That said, students who did the individual evaluation raised queries as to how absent students should be assessed. Interestingly, students also expressed surprise at having to evaluate themselves.

Strategy 2, where the team discussed their own strengths and weaknesses, appeared to be most effective, and there was a sense of the teams pulling together to provide an account for themselves.

Strategies 3 and 4 allowed teams to evaluate other teams. Enabled by a software to support TBL, strategy 3 occurred at the "simultaneous reveal" stage of the application exercises. I found that students were interested to see other teams' answers during class, just as they were to watch and evaluate the other teams' final presentations in week 8. There was great excitement - and often indignation! - when they saw what their peers thought about them and their work.

Overall, students engaged well with all five strategies. Peer evaluation generates discussion about what assessment criteria mean, how to apply them fairly and how to deal with grey areas. Having to apply evaluation criteria to their peers' and justify their evaluations generated significantly more discussion than I had anticipated or even allowed time for – a point I will note in planning lessons next time.