Assessing Groupwork in Common Core Courses
PERSPECTIVES FROM ELSEWHERE

Students' attitudes and perceptions

Comparison between students' perceptions of individual and groupwork assessment (UK)

This study compares environmental science and geography students' perceptions of individual and groupwork assessment. The survey results show that the students preferred individual work. Interestingly, the results also indicate that the group exercise was more useful in developing both students' understanding and key skills. The study concludes that a combination of individual and group assessment (linked to learning outcomes) can be used for effective delivery, practice, and testing of key skills.

Knight, J. (2004). Comparison of student perception and performance in individual and group assessments in practical classes. *Journal of Geography in Higher Education*, 28(1), 63–81.

Students' attitudes towards groupwork assessment (UK)

The study explores final year accounting students' attitudes towards group assessment in a cooperative learning environment. Students work in groups of 4 on a case study for which all receive the same grade. Each group member is required to keep an individual log containing details of and time spent on activities. The survey shows that students had a positive attitude towards the group assessment and believed that their cooperative skills had improved because of the assessment. They were, on the other hand, uncertain about the benefit of the learning log.

Ballantine, J. & Larres, P. M. (2007). Final year accounting undergraduates' attitudes to group assessment and the role of learning logs. *Accounting Education*, 16(2), 163-183.

Students' perceptions about groupwork assessment in the creative arts (UK)

The study elicits creative arts students' perceptions about groupwork assessment through focus groups, interviews, and observations. Students were found to have very different views about fairness in groupwork assessment. For some, fairness meant all in the same group would get the same grade. In contrast, others insisted that individual contributions should be reflected in the grades. This study also reveals that the students found it problematic to document individual contributions to the groupwork through the medium of reflective journals.

Orr, S. (2010). Collaborating or fighting for the marks? Students' experiences of group work assessment in the creative arts. *Assessment & Evaluation in Higher Education*, 35(3), 301-313.

Assessing processes and/or skills

What facilitates quality groupwork? (Australia)

Based on the video footage of 18 second-year veterinary science students (three groups of 6), the study argues that not all forms of groupwork generate high-level knowledge co-construction. Students sometimes simply stay in superficial conversations without engaging in any higher-level cognitive activities. This study identified four factors that enabled higher-level knowledge co-construction among group members: question-asking; tentativeness; background knowledge; and shared positive emotions.

Volet, S., Summers, M., & Thurman, J. (2009). High-level co-regulation in collaborative learning: How does it emerge and how is it sustained? *Learning and Instruction*, 19, 128-143.

Assessing both groupwork skills and outputs (Hong Kong)

The course reported in this study adopts a problem-based learning pedagogy, assessing both groupwork skills and the outputs. Groupwork skills are defined as collaborative problem solving skills involving abilities to think critically; balance arguments; be open to alternatives; accept constructive criticism; cultivate and value minority views; and take collective ownership. The assessment of the skills is based on an adapted rubric from the literature. The outputs of the groups included group report and presentation. The groups of students demonstrating better groupwork skills were also found to produce higher-quality outputs.

Zou, T.X.P., & Mickleborough, N. (2015). Promoting collaborative problem-solving skills in a course on engineering grand challenges. *Innovations in Education and Teaching International.* 52(2), 148-159.

Processes and outcomes in student groupwork (Spain)

This study analyses the relationship between groupwork processes and outcomes. Data were gathered from first-year economics undergraduates. The findings indicated that groupwork processes determined students' perception of goal attainment, perception of skill improvement, and overall attitudes towards the group. In practical terms, this meant that teachers should highlight to students the importance of processes in groupwork (e.g., monitoring or coordinating) and define assessment tasks that require a suitable management of the processes.

Bravo, R., Lucia-Palacios, L., & Martin, M. J. (2015). Processes and outcomes in student teamwork: An empirical study in a marketing subject. *Studies in Higher Education*. DOI: 10.1080/03075079.2014.926319

Assessing contributions

Using peer-assessment to assess contributions in groupwork (New Zealand)

This paper reports a study of groupwork assessment in an undergraduate social psychology laboratory class. Students worked in groups to design research, collect data, and perform analysis. Each member was then required to write a report individually and also indicate their contributions and those of other group members (i.e., self and peer-assessment). It was found that students took the peer assessment seriously, clearly differentiating between group members. The self-assessment however was found to be biased, resulting in students giving their own contributions higher ratings.

Johnston, L., & Miles, L. (2004). Assessing contributions to group assessment. *Assessment & Evaluation in Higher Education*, 29(6), 751-768.

Deriving individual student grades from groupwork assessment (UK)

The paper presents a method to derive individual grades in groupwork from tutor mark and ratings which students make of each other' contributions. It is emphasised that whether or not individual marks should be moderated according to their contributions needs to be carefully considered and that the aim of doing so is not to introduce radical changes to student marks but to moderate them within a certain limit (typically within 25%) around the marks given by the tutor.

Sharp, S. (2006). Deriving individual student marks from a tutor's assessment of group work. *Assessment & Evaluation in Higher Education*, 31(3), 329-343.

Six ways to deal with free-riders (UK)

This paper introduces six ways to deal with free-riders adopted in a business school: two-card tricks; viva warning; team-led individual; examination follow-on; divided mark; and 80/20 grading. A survey showed that students in general enjoyed the groupwork and perceived that these approaches were a fair means of assessing groupwork. The only exception was the lower rating for the two-card tricks. Postgraduates were found to view groupwork and the assessment approaches more positively than undergraduates.

Maiden, B., & Perry, B. (2011). Dealing with free-riders in assessed group work: Results from a study at a UK university. *Assessment & Evaluation in Higher Education*, 36(4), 451-464.

Wikis making groupwork assessment more transparent (Australia)

The group task in this study was completed on Wikis, meaning that students in groups collaboratively compiled their group Wiki Pages. Interviews with students revealed that the use of Wikis made the groupwork assessment more transparent and fairer. Students also pointed out that a Wiki enabled them to truly collaborate with group members because they had to read what others were contributing to ensure that their own work was well integrated into the page.

Caple, H., & Bogle, M. (2013). Making group assessment transparent: What wikis can contribute to collaborative projects. *Assessment & Evaluation in Higher Education*, 38(2), 198-210.

Facilitating groupwork in classroom (US and Canada)

In this 15-min video, Nobel Laureate Prof. Carl Wieman, together with his colleagues and students, shared some tips and examples of facilitating and assessing groupwork in classroom, which prompt fresh thinking about the topic. Examples included the use of worksheets, whiteboards and case studies in groupwork. Part of the discussions was around some frequently asked questions including "how many people in a group?", "who should be in each group?", "who should choose the groups?", and "what types of questions should be asked?"

Group Work in the College Classroom. Videos produced by the University of Colorado Science Education Initiative (CU-SEI) and the University of British Columbia Carl Wieman Science Education Initiative (CWSEI). http://www.cwsei.ubc.ca/resources/SEI_video.html