CC Co-Lab round table at the 2017 SRHE conference Learning, teaching and assessment

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Title: Peer assessing individual contributions in a group project

Abstract:

Graduates are expected to have good academic knowledge but also the professional skills required in the workplace. One such 'soft' skill is the ability to give constructive criticism and provide meaningful but professional feedback. This is particularly relevant when working in a team within industry, where peers need to influence each other to improve their project outcomes and chances of success. The development of student's skills to generate such feedback should be supported within higher education. Specifically the IPAC Consortium investigates the use of Individual Peer Assessed Contribution to group work. In this context, students create an output directed to their own peers (i.e. a form of external-facing assessment), and prepares students for similar practices in industry. This paper, linked to the roundtable session on external-facing assessments proposed by Grindle and Tong, investigates staff and student perceptions on such practice. Insights gained to this date are presented.

Introduction:

Employers expect graduates to have a good knowledge of their field of study, but also have professional skills that make them ready for the workplace e.g. ability to critically analyse their own and others' work and articulate meaningful and constructive feedback (Nguyen 1998, Lowden 2011). Universities increasingly recognize this need, introducing more authentic projects and group work into their curricula. This provides students with relevant experience, seeing 'real' projects and applying the technical knowledge that they learnt in lectures, while practicing those 'soft' skills that are essential when working with others. However, the outcomes of such group projects are typically assessed by tutors and academics, following the traditional fashion of assessment at higher education. Instead, students would benefit from *external-facing assessment*, interacting with different audiences with different levels of expertise, preparing them to communicate effectively in a

range of roles relevant to industry, such as speaking with clients, experts, peers, etc. (Nguyen 1998, Lowden 2011). Students also need to become active and take responsibility for their own assessment (Dochy 1999). Secondly, traditional methods of assessment only provide a 'group mark' for all the members of a team, which students perceive as 'unfair' and does not tackle 'free riders' [Cheng 2000, Barriopedro Moro 2016, Garcia-Souto 2016]. Therefore, variations to this type of assessment should be sought, especially when the degree has a significant component of group work.

This paper describes how both of these limitations in the traditional assessment of group work can be mitigated by engaging students in the external-facing assessment of the contribution of themselves and their peers to the group work. Staff and students' perspective are discussed.

Project background and context:

Staff and students across University College London (UCL) are concerned about the fairness of group assessment as this can greatly damage the student experience. This led to the formation of the IPAC Consortium (IPAC stands for Individual Peer Assessed Contribution to group work) in April 2016, currently formed of 40 staff members and 7 students from 23 different departments [Garcia-Souto 2017]. The Consortium investigates the inclusion of an IPAC element when assessing group work, so students get individual marks partly based on their contribution as assessed by peers instead of purely a group mark. This is used as a means of promoting student engagement and tackling associated problems. The IPAC investigation includes multiple aspects of implementing this practice, such as institutional regulations, student and staff perspectives, group work dynamics, how to quantify IPAC factors and how to combine them with the group marks, tutor moderations, practical aspects, etc..

This particular paper focuses in the intrinsic external-facing assessment of such practice, as the students must learn to give meaningful and tactful feedback to their peers. This practice also encourages self-reflection and bench-marking against other peers (Topping 1998). Ability to critically assess peers' contribution level and quality of work is important for students' future careers, where it is rare to have a "tutor figure holding the absolute truth or mark for a project" but rather projects are evaluated by peers. Finally, this is also increasingly used in industry to assess performance (Qualtrics 2017), e.g. HSBC, PepsiCo, and Exxon advertise 360 feedback as part of the performance measurement of their workforce,

hence students benefit from knowing how others perceive their contribution and possible strengths and limitations.

Method

Staff and student perceptions of the benefits and implications of using IPAC are collected in various forms. IPAC Consortium members currently using this practice have held discussion sessions to share and discuss their experiences. UCL student perceptions are being collected via anonymous on-line questionnaires. A 5 point Likert scale is used, with 1 being "not at all" and 5 being "strongly agree"; agreement was measured as percentage of votes in categories 4 and 5. In addition, focus groups are run by the student Consortium members, hence giving a less formal environment for students to express themselves freely. Finally, the use of group work and assessment methods are being mapped across the entire institution, by asking academics to complete a questionnaire during an academic group meeting in each department.

Following analysis of the collected information both from staff and students, initial recommendations to practitioners using/intending to use IPAC will be given. These include recommendations on how IPAC should be assessed such that the students complete meaningful peer assessment. Recommendations will include essential and desired key points, including the design of a relevant marking criteria.

Findings

Data collection is underway. Currently, 64 questionnaires have been completed by students, and 5 focus groups have been run. Academics from 2 departments have completed the questionnaire.

Students welcome the opportunity to get individual marks for the group work in which they participate. They believe the mark would be fairer (78%), with elements like 'how much work was produced' or 'how much effort was given' scoring very similarly (77%); and others like 'communication', 'attendance to meetings', 'quality of the work as opposed to quantity' being of importance; mark justification is required (92%). Students believe they are better aware of the individual student performance than the tutor (92%). Students say they would write the comments in a professional and constructive manner (91%), they would find it valuable to know how other team members perceived their work and contribution (94%), and would use this feedback to improve their performance and teamwork skills in the future (87%). Students believe that feedback should be anonymous (76%), and anonymised feedback should be given back to the students (79%). The effects on the group dynamics are

less clear, but 73% claimed that this type of assessment would motivate or encourage them to contribute more to the group project, as well as (73%) would behave in a more professional and respectful way to the rest of the team.

The Consortium size already gives an indication of the academic use or intention to use IPAC assessment. In addition, a significant number of other members of staff acknowledge the need of using IPAC and would implement it in their modules if a tool and clear methodology becomes available.

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Bio:

Pilar is a Senior Teaching Fellow at the UCL Medical Physics and Biomedical Engineering
Department, and a Higher Education Academy Fellow since 2013. She combines
scientific and educational research and teaching activities. Her main teaching-related
interests are improving teaching quality and student experience across the board. Pilar
has developed an improved peer assessment method (called 360PA). She also leads
the IPAC Consortium with staff members across 20 UCL departments, where IPAC
stands for Individual Peer Assessed Contribution to group work. The Consortium aims
to "identify a method for peer assessment of individual contribution in group work,
develop or obtain an appropriate tool to implement it, and disseminate these across
UCL and beyond; showing how to make the practice successful and efficient."