

Title: A Quantitative and Peer-Reviewed Approach for Assessment of Students' Oral Presentations

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Description: Whether peer assessment should be the basis of grading an oral presentation or not is a serious pedagogical challenge, although there is a general consensus about the usefulness of peer assessment in promoting learning and professionalism. There are some genuine concerns about using students' feedbacks in grading which include: 1. potential biases influencing the assessment, 2. the variability of standards used by the individual assessor, 3. students may be a poor judge, and 4. the trustworthiness of peer assessment process, etc. Therefore, this study tried to develop an assessment tool to minimize subjective variations in the evaluation of oral presentations done by students. Pharmacy students are required to give a 15-minute oral presentation on a pre-assigned topic in an elective course PHA 300 (Pharmacogenomics in Disease Management). The students enrolled in the course were asked to provide anonymous feedback of each presentation using blueQ survey tool. Students were oriented about their professional responsibilities and ethics about reviewing their peers. An 8-item rubric was used to provide a qualitative and quantitative assessment of the presentation. Peer evaluations were compared statistically to those of the instructor who also evaluated each presentation. Mode was used instead of mean to avoid the error caused by extremely biased evaluation/feedback.

Outcomes: Students reflected that they felt empowered and involved in their education while performing evaluation of their peers and get motivated for learning about the topic covered in the oral presentations. The reliability of data is supported by the fact that  $88\pm 12\%$  of students enrolled in the course voluntarily participated in the program of peer evaluation of oral presentation and provided their feedbacks. There was no significant ( $p < 0.05$ ) difference between the % score calculated between course faculty evaluation and peer students' evaluations. This suggests that students provided unbiased and constructive evaluations of their peers' presentations which could be attributed to the orientation process conducted before they participated in the peer evaluation. The anonymous survey tool, in future may serve as a quick and objective method to grade students' oral presentation. It is concluded that peer evaluation can imbibe a sense of engagement in student by being able to review critically work of fellow pharmacy students which can motivate them for learning and nurturing professionalism.

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