

Evaluation of Online Group Activities: Intra-Group Member Peer Evaluation

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Introduction

Learning experiences of students can be enhanced through individual or group assignments or projects. Assessment of students' learning, including evaluation of these assignments, is necessary for continuous improvement and appraisal of the quality of instruction and overall effectiveness of teaching and learning (Angelo, 1995, 2000; Angelo & Cross, 1993; Palomba & Banta, 1999). Although many of the same assessment and evaluation strategies used in face-to-face teaching are being applied to online teaching, the design of the assessment and pedagogical approach can be different, especially exploring the connections between group activities and assessment methods.

Online teaching and learning environments are naturally conducive to group collaboration, especially when learning activities and the method of assessment are aligned with teaching and learning objectives that promote effective group tasks. However, constructing an effective assessment technique can be a daunting task for many online instructors (Palloff & Pratt, 2003), particularly group work activities, which may be difficult to assess. The difficulty comes from issues related to equity of individual contribution, fairness of grading, and student experience as a member of the group. However, an intra-group member evaluation approach would eliminate many of these concerns and provide an opportunity to the student to voice his/her perceptions of contributions and those of the other members in the group.

Background Information

Evaluation of group activities can be a useful and valuable venue in helping students promote personal and academic growth including developing their critical skills in the evaluation process. Most group work is assessed by giving every individual the same grade for a team effort. However, this approach runs counter to the principle of individual accountability in group learning, and it makes the process difficult to determine the individual grades for work products submitted by the group. At this point, intra-group members' evaluations play an important role in both improving team performance and determining individual effort along with the individual grades on group work assignments/projects (e.g., collected data are used to adjust individual grades for group assignments).

Almost three years ago I started using group learning activities in my online courses as part of an ongoing masters program for physicians and other healthcare professionals. For the purpose of assessing student performance within the groups, I developed an intra-group peer evaluation form using predetermined criteria to assess individual performance (e.g., submitted assigned tasks on time; participated in discussion regarding group projects; attended all scheduled online meetings; participated in collaboration sessions, chat room and WebEx discussions, etc.). Initially, the form was used in a word document format. However, collecting the results and student submission of the evaluation forms via digital drop box or email were labor intensive procedures. Therefore, in order to facilitate the data collection, I put the forms completely online using SurveyMonkey, a Web-based tool to create/publish custom surveys and collect/analyze results in real-time. This type of assessment helped reduce the students' concerns about group assignments and increased their awareness of expected performance and the group product.

Intra-Group Member Peer Evaluation Approach

My online classes (“Master’s Research Seminar” and “Integrating Technology into Curriculum” courses) are comprised of masters-level students who are primarily physicians, nurses and other healthcare professionals with significant teaching responsibilities and interest in educational research. These students are fulltime-working professionals with limited time for educational endeavors. Therefore, it is important to offer a variety of learning activities including group work assignments that will expand their educational experience in teaching methods and evaluation.

For weekly group assignments, participants often work in small groups (three or four students) to construct knowledge and master the course materials. Each group member is responsible for learning what is taught and for helping their group members learn. Group members are assigned by the instructor and are changed periodically (every two or three weeks). This gives participants a chance to work with different classmates with various ability levels in order to produce more diverse learning experiences. Participants discuss the project within their groups in the reserved “Group Work” area (this area is created by the instructor on Blackboard apart from the main discussion board.) The instructor observes the group preparation to help participants or to mitigate group conflict during the group projects. This auditing is important to track to ensure that students are keeping up with the assigned material and applying the relevant concepts to their project. This also helps keeping group motivation high.

Groups complete their collaborative work and then post the final group product to the main discussion board area so that all groups can interact and provide feedback. Meanwhile, at the end of each assignment/week, individual group members fill out intra-group member peer evaluation forms for their group members and for themselves (via SurveyMonkey). This is linked to the Blackboard under the “Group Member Evaluation” area. Thus, the peer evaluation process identifies those who have been active, cooperative members as well as those who did not participate or who did less, or who did more of the work on the project. Using Web technology, this method is useful to provide quick feedback to each group members in an anonymous manner (although the instructor knows the individual ratings) to enhance their performance. As an instructor I have found a consistency within groups concerning each student's participation and ratings.

In order for the peer evaluation process to work fairly, all of the perceptions of all of the group members need to be compared and evaluated. For tracking purposes, the evaluator’s name is required on the form since the results can only be viewed by the instructor, not by other students. If any members of the group do not participate, they receive an email reminder so that the instructor can accomplish the objective of assigning individual grades to group members. The overall rating that is given by group members is used to calculate individual grade. The instructors do have the flexibility to change the calculated individual grade based on his/her observations in the group area.

Group projects and group evaluations provide several important benefits in an online teaching and learning environment as follows:

- Help participants discuss concepts that promote deeper understanding of the material
- Engage participants in the learning process and increase participation
- Allow participants to tackle more complex problems
- Give each participant experience in handling interpersonal professional relationships, which is critical in "real-world" settings
- Provide or improve practice evaluation skills as working professionals

- Help create a sense of a learning community, which is important for online students (e.g., participants have similar interests, can exchange ideas in medical education, professional organizations)
- Allow group members to assess other members of the team as well as self-evaluation
- May assist participants to develop skills in independent judgments and encourage sense of involvement and responsibility on the part of students
- Provide data that might be used in assigning individual grades for team assignments
- Improve learning and produce higher quality results
- May reduce instructor's workload involved in assessing and grading

However, there are some possible drawbacks such as:

- Increasing instructor workload in terms of setting up an evaluation area, collecting data for each participants or giving feedback individually
- Teaching participants how to evaluate themselves and the others (the evaluation system may be perceived as unreliable or some of the students may not be clear about the learning benefits of group work and group assessment)

The following suggestions would eliminate possible problems in the implementation of the intra-group member peer evaluation:

- Provide students clear information regarding the rules and expectations before the first assignments. If necessary, provide examples how to assess and be fair to each other. It is also useful to include the information in the syllabus.
- Provide group members individual feedback based on the group members' reflections and evaluation. It will be more effective if you include your own observations and suggestions as an instructor. This will give students opportunities to improve performance before the final grading
- Compare each individual evaluation data with the rest of the group members including the group member self-evaluation score. Based on the data from my own classes a few students report their performance lower than that of the other group members. Inconsistent scores are resolved or adjusted in various ways such as being based on the instructor's personal knowledge of the students and observational data.
- Be consistent when evaluating each group member's performance by using the clear guidelines.

Final Thoughts

Assessment and evaluation are vehicles for educational improvement. Good assessment and evaluation help instructors focus on teaching and learning, while it asks meaningful questions about what students know and what they can do with that knowledge. It provides accurate estimates of student performance, and enables instructors to make informed decisions. When group assignments are used in a course multiple types of evaluations need to be performed. According to the student feedback many students found the peer evaluation beneficial and increased the group dynamic with clear assessment requirements. Also, intra group member evaluation was helpful to reduce the students' concerns about group assignments and this helped them understand the criteria for the group product, processes, measurement of individual contributions in the group.

Some studies have raised concern regarding rating bias and good grade issues in group member evaluations or shortcomings of peer evaluation method (Johnson & Smith 1997; Kane & Lawler, 1978). Therefore, the validity and reliability of this approach requires further research.

References

- Angelo, T. (1995). Improving classroom assessment to improve learning. *Assessment Update*, 7(6), 1-2, 13-14.
- Angelo, T. (2000). Classroom assessment: Guidelines for success. *Teaching excellence: Toward the best in the academy*, 12 (4), 1-2. North Miami Beach, FL: The Professional and Organizational Development Network in Higher Education Essays on Teaching Excellence series.
- Angelo, T., & Cross, P. K. (1993). *Classroom assessment techniques: A handbook for college teachers* (2nd ed.). San Francisco: Jossey-Bass.
- Kane, J.S. and Lawler, E. E. (1978). Methods of Peer Assessment. *Psychological Bulletin*, 85, 555-586.
- Johnson, C.B. & Smith, F.I. (1997). Assessment of a complex peer evaluation instrument for team learning and group processes. *Accounting Education*, 2(1), 21-41
- Palloff, R. M., & Pratt, K. (2003). *The virtual student: A profile and guide to working with online learners*. San Francisco: Jossey-Bass
- Palomba, C. A., & Banta, T. W. (1999). *Assessment essentials: Planning, implementing, and improving assessment in higher education*. San Francisco: Jossey-Bass

Biographical Sketch

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