Managing Online Groups With a Slice of Pie

Collaborative problem solving, as a learning strategy, along with an understanding of group process and use of technology are important reasons to expose online RN-to-baccalaureate nursing students to group work. The difficulty, however, is that the online group process can be a challenge to evaluate (Lowes, 2014; Roberts & McInnerney, 2007). An easy strategy to evaluate the group process that may improve student outcomes and experiences in online groups is the use of a pie chart.

For example, a weekly pie chart is created alone, by each student, and submitted to faculty for review. The pie chart represents each student’s perception of a group dynamic, such as communication (Figure), which provides an easy way for faculty to visualize and compare variation within the four to five students in a group. Each student has access to supportive links on effective methods on constructing a pie chart (i.e., https://www.cancer.gov/publications/health-communication/making-data-talk.pdf) and tutorials on how to build a pie chart in PowerPoint®.

This assignment is used as a weekly check of group dynamics, which is a solution posed by Roberts and McInnerney (2007) to reduce student apathy toward group work. Apathy is thought to happen because students perceive they are being judged on the faults or nonparticipation of others. A simple pie chart can aid faculty in early recognition of group dysfunction. For example, the Figure shows a pie chart completed by one student. The faculty may wonder if Name 1 is leading or overtaking the group. In contrast, faculty notes Name 4 may not be communicating well with the group that week. If the faculty notes this same pattern, or wildly different patterns from each student in the group, an opportunity exists to improve communication or to role model conflict resolution skills with this group.

The pie chart is a dual teaching strategy. First, because technology competence and quality improvement are an expectation of the nursing profession, use of the pie chart can give students practice for the preliminary skills of chart building, which is a precursor to communicating quality improvement data. Second, student development of the pie chart aids in visualization of group dynamics as a whole. Pie slices fit together perfectly, expanding or contracting to represent the participation of each group member. At a glance, the pie slices give a comparison of all members; this symbolism of a circle is intentional. The circle tells a student story of how each group member slice is related to and dependent on the other, just like a healthcare team. Multiple pie charts can be assigned each week to represent specific group processes, such as team structure, communication, leadership, or situation monitoring (Agency for Healthcare Research and Quality, 2017).

Overall, feedback from faculty and students using the pie chart as a method of checking the group process has been positive. For example, faculty may not have access to all forms of group communication utilized for group projects. Students may work outside the learning management system (LMS) where faculty cannot monitor participation. Use of the pie chart lets faculty visualize student perceptions of the group dynamics instead of relying on interpretation of participation based on the number of posts or interaction in the LMS. If a breakdown in the group’s process is identified, faculty may now provide team-building suggestions or support students in having crucial conversations. The opportunity to express the group participation disparity to the faculty was a relief for students. The response of faculty, to actively join the conversation with groups who need support with conflict resolution, was welcomed and appreciated by students.

As faculty rely on the LMS for group projects, use of pie chart checks can be instituted early in the process and continue at regular intervals. In addition, students have the opportunity to practice evaluation skills and are better prepared to use skills of chart building to report data. Finally, faculty receive data from multiple sources on the group process and are able to intervene early to improve student outcomes and experiences in online groups.

References

Lisa R. Singleterry, PhD, RN, CNE
Lisa.singleterry@wmich.edu
Western Michigan University Bronson
The author has disclosed no potential conflicts of interest, financial or otherwise
doi:10.3928/01484834-20180123-13