Various Activities to Facilitate Participation in Group Discussions

Tanya Kunberger
Florida Gulf Coast University, tkunberg@fgcu.edu
**Various Activities to Facilitate Participation in Group Discussions (MS#2071)**

Dr. Tanya Kunberger, U.A. Whitaker College of Engineering, Florida Gulf Coast University

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### Abstract

Research has shown that group discussions benefit students' comprehension of material, critical thinking, and development of communication skills. However, ensuring both preparation and participation by all, or even a majority of students, are often some of the most challenging aspects of class discussions. This participation is further complicated in larger classrooms, where individual voices may be less likely to be heard—either from the perspective of timing or logistics or from a students’ unwillingness to contribute. Awarding credit for class participation and/or soliciting participation from reticent students are potential solutions, but can be a complex undertaking if an instructor wants to divide a larger class into smaller discussion groups.

This poster presents approaches taken in an upper level course at Florida Gulf Coast University (FGCU) to both increase class preparation for class discussions and promote participation of more students in class discussions. These roundtable activities are bi-weekly occurrences and focus on both historical articles written by some of the most well-known researchers in the field to journal articles published within the last six months on transformative research or recent projects. Inclusion of both pre-class activities and the associated rubrics, as well as various in class approaches will be included.

### Approach and Observations

- **Topic Discussions** — 1 – 2 times early in semester
  - Allows students to contribute in small groups of familiar individuals as a starting point for discussions.
  - Singular focus initially encourages a more in depth analysis and potential extension of ideas beyond initial topic.
  - Provides opportunities for students to contribute to larger group discussion by presenting group rather than individual thoughts.

- **Table Discussions** — 1 – 2 times early to mid semester
  - Allows for small discussions on multiple topics and the ability to transition between topics.
  - Encourages greater awareness of group discussions as each individual is ultimately responsible for reporting out on a section of the discussion.
  - Requires large group participation as individuals are responsible for presenting group thoughts on particular subject.

- **Jigsaw Discussions** — 1 – 2 times mid to late semester
  - Allows students to listen and gain additional perspectives in initial discussions.
  - Requires students to participate in secondary small group discussions while allowing for presentation of group rather than individual thoughts.
  - Introduces students to wider group of classmates in smaller group settings.

- **Large Group** — 1 – 2 times late semester
  - The ultimate goal of the course which is the ability for all students to engage in a larger group discussion.
  - Builds on previous experiences designed to make student more comfortable contributing in a larger group setting.
  - Topic direction heavily influenced by students with only minimal input from instructor.

### Written Roundtable Expectations

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Highest Performance Level Rubric Expectations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Critical Points (35%)</td>
<td>Recognizes &amp; details important points of article. Illustrates relationship between points within article as well as to other sources. Acknowledges any implicit limitations associated with presented results/ discussion.</td>
</tr>
<tr>
<td>Course Relation (20%)</td>
<td>Presents a clear, well-developed relationship of discussion topic to course objectives.</td>
</tr>
<tr>
<td>Author Qualifications (10%)</td>
<td>Includes a recognition of and appreciation for the merits of the author.</td>
</tr>
<tr>
<td>Clarity &amp; Completeness (25%)</td>
<td>Clear, concise, well written. Free of spelling / grammatical errors. Flow is smooth and logical.</td>
</tr>
<tr>
<td>Synthesis &amp; Contribution (10%)</td>
<td>Highly organized, illustrating big picture as well as finer details. Shows strong link to previous topics and future direction. Presents personal observations in addition to article information. Includes unique insights.</td>
</tr>
</tbody>
</table>

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### Example Discussion Schedule

<table>
<thead>
<tr>
<th>Class</th>
<th>Activity Type</th>
<th>Article Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>Quiz &amp; Topic Discussion</td>
<td>Geotrasra (Sub-discipline Specific Trade Magazine). May/June 2015</td>
</tr>
<tr>
<td>5</td>
<td>Written &amp; Table Discussion</td>
<td>2015 International Foundations Conference and Equipment Expo Conference Program, Volume 1, Number 1, 2015</td>
</tr>
<tr>
<td>6</td>
<td>Quiz &amp; Topic Discussion</td>
<td>Canadian Geotechnical Journal, Volume 4, Number 1, 1963</td>
</tr>
<tr>
<td>10</td>
<td>Written &amp; Table Discussion</td>
<td>Civil Engineering Disciplines Magazine, July/August 2015</td>
</tr>
<tr>
<td>12</td>
<td>Quiz &amp; Jigsaw Discussion</td>
<td>Geotrace, Volume 65, Number 4, 2015</td>
</tr>
<tr>
<td>14</td>
<td>Written &amp; Large Group</td>
<td>2015 International Foundations Conference and Equipment Expo Conference Proceedings</td>
</tr>
<tr>
<td>16</td>
<td>Quiz &amp; Large Group</td>
<td>Canadian Geotechnical Journal, Volume 34, No. 4, 1999</td>
</tr>
</tbody>
</table>

### Conclusion

- Employing a framework that scaffolds allows for students to gain confidence in expressing opinions in group discussions.
- Providing options that allow for contributions that may or may not be personal thoughts increases the likelihood that hesitant students will contribute (reduced fear of “wrong” or “unpopular” response).
- Providing multiple approaches to discussions also keeps the bi-weekly activity fresh and different.

### Future Direction

- Incorporation of student-led group discussions to further increase the course focus on students over faculty.
- Solicitation of student questions in a more intentional manner to form the basis (or partial basis) of discussion activities.
- More formalized assessment of activities to determine significance of approach to classroom participation.

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### Project Overview

General Course Information
- Senior level course required of all Civil Engineering Students
- Second course in the Geotechnical Engineering sequence
- Meets once a week for 4.5 hours each time
- Roundtable activities 10% of course grade
- Eight roundtable assignments over the semester

Roundtable Expectations
- Students are expected to read article prior to class attendance.
- Individual accountability based on either written submission or participation (3 of 5 or 8) or brief quiz at start of class (5 if 8).
- Each quiz worth 20 points, each written submission worth 40 points (20 points extra credit built in).
- What are 2 – 3 critical points of the article?
- What are 2 important qualifications of the author (not included in the article)?
- How does the article relate to the course?
- How does the article relate to other courses, broader engineering concerns, the real world, etc?

In Topic Discussions, students divide themselves into groups of 5 – 7 individuals. Each group is given a unique topic for discussion during the first part of the class. The second part of the class has one person from each table present their question and a second summary of the table discussion on the topic. Each group member is responsible for summarizing the table’s response to a specific question and becomes the speaker for that table when the question discussed with the entire class. After each table’s speaker has had a chance to respond to the group question, the floor is opened to anyone who would like to comment further on the specific topic. This manner the class works through each discussion point.

Jigsaw Discussions begin by having each student draw a slip of paper out of a container. Those slips contain a letter, a question, and question. Students begin by forming groups based on the letter on their paper. All students in the group have the same question, which is the basis for the first discussion. Once this discussion time is complete, students transition to groups based on the number on their paper. These groups contain an individual from each of the initial groups. Each person must read their question and summarize the discussion from the first table to their new group, who then is given a chance to provide additional thoughts on each subject.

Large Group Discussions include the entire class for the entire period of the discussion. The instructor begins by starting the discussion with a question. Depending on the instructor’s role, the instructor will intervene to redirect the conversation. Students are asked to participate in the discussion and to keep track of who participates and who does not participate late in the discussion. This participation is further complicated in larger classrooms, where individual voices may be less likely to be heard—either from the perspective of timing or logistics or from a students’ unwillingness to contribute. Awarding credit for class participation and/or soliciting participation from reticent students are potential solutions, but can be a complex undertaking if an instructor wants to divide a larger class into smaller discussion groups.

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