

Paper Review Debate Activity

Objective: This activity is designed to help students critically evaluate scientific literature by engaging in a structured debate format. Students will develop analytical, presentation, and argumentation skills while assessing the strengths and weaknesses of a selected research paper.

Activity Structure:

Group Formation & Roles:

- Each paper will be assigned to a group of **4-6 students**. The Moodle link for signing up will go online this **Friday, February 21, at 10:00 am**.
- The group will be divided into two teams, each representing peer reviewers:
 - **Reviewers 1 (Team A, 2-3 students):** Acts as a favorable reviewer, presenting an overview of the paper and highlighting its key strengths. Reviewers 1 will argue that the paper should be accepted for publication in a specific journal based on its merits.
 - **Reviewers 2 (Team B, 2-3 students):** Acts as a critical reviewer, presenting an overview of the paper and critiquing its limitations and weaknesses. Reviewers 2 will argue that the paper should not be accepted as is and must undergo revisions before publication.
- **Editorial Board Responsibilities:**
 - The rest of the class serves as the **editorial board of the journal**, responsible for making a final decision on the paper.
 - While reading the full paper in depth is not mandatory, it is encouraged for a more informed discussion.

Debate Format (Total Time: 22 minutes, timer will be set):

- **Reviewers 1 Presentation (9 minutes):**
 - Reviewers 1 present first, covering all required points using a presentation with slides: an **overview of the paper's main results and conclusions** (ca. 5 min) and a **discussion of the strengths and why it should be accepted for publication** (ca. 4 min).
- **Reviewers 2 Presentation (9 minutes):**
 - Reviewers 2 follow, covering all required points using a presentation with slides: an **overview of the paper's main results and conclusions** (ca. 5 min) and a **discussion of the weaknesses and why the paper should not be accepted in its current form** (ca. 4 min).
- **Q&A and Class Vote (4 minutes):**
 - The editorial board participates by asking questions or challenging the arguments presented by both teams.

- The editorial board votes on which review provided a more compelling and well-supported analysis.
- A discussion follows on whether the paper would be:
 - Accepted without revisions
 - Accepted with minor revisions
 - Resubmission with major revisions
 - Rejected

Note: Both **Reviewers 1 and 2** will present the content of the paper. This is **intentional**, as presenting the paper twice allows for reinforcement of key concepts, encourages different perspectives on the same material, and helps the editorial board engage with the discussion more effectively.

Assessment Criteria:

- Depth of analysis (understanding of the paper's content and implications)
- Clarity and structure of arguments
- Use of evidence to support claims
- Engagement in discussion and rebuttals
- Presentation skills
- **All students must participate in the in-class presentation.**

Expected Outcomes: By participating in this activity, students will:

- Develop critical reading and analytical skills
- Learn how to construct well-supported scientific arguments
- Improve their ability to evaluate the quality of scientific research

Preparation:

- Read the assigned paper thoroughly.
- Collaborate with your team to prepare well-supported arguments.
- Be ready to defend your position and respond to opposing points.

We look forward to a lively and insightful discussion!