

Questions for RISE Journal Club

The basic premise behind research is hypothesis testing and as such it is important for planning experiments, grant writing, paper writing, seminar presentations, reading articles, etc. Therefore, it is paramount that one develops skills of thinking about problems in terms of hypotheses and then how to address those hypotheses. To provide a more structured approach to reading scientific articles, you are required to write answers to the following 5 underlined questions about the journal article to be discussed and bring your answers with you to the Journal Club discussion. The secondary questions are meant to assist you in directing your answers to the principle questions.

1. Does the paper address a significant problem?
 - a. Will answering the problem alter our thinking?
 - b. How does the research fit into the context of its field? Is it, for example, attempting to settle a controversy? Show the validity of a new technique? Open up a new field of inquiry?

2. What is the overall hypothesis being tested in the paper?
 - a. What approach did the authors use to address the hypothesis?
 - b. Are there any other approaches that could be used to address this hypothesis?
 - c. What are the limitations of each approach?

3. What are the major findings?
 - a. Were enough of the data presented so that you feel you can judge for yourself how the experiment turned out?
 - b. Did you see patterns or trends in the data that the author did not mention?
 - c. Were there problems that were not addressed?

4. Are the conclusions drawn from the results justified?
 - a. Are there appropriate controls?
 - b. Are there other factors that could have influenced, or accounted for, the results?
 - c. Were the hypotheses adequately tested?
 - d. Why are the conclusions important?

5. If you were to continue this research what would you do next?
 - a. How would you do it?
 - b. What are the anticipated results?