Create Your Own Assignment for “Analyzing a Journal Article”

Follow these steps to create an assignment that will help you prepare your students for the research, writing and learning skills needed for the transition to post-secondary education. You can create lesson plans for your classroom that use the academic literature in your subject area.

1) Getting started
   a. Review one of the subject-specific Lesson Plans on the SPOT website to familiarize yourself with the purpose and details of the journal article assignment.
   b. Determine a topic related to your course content that you would like to focus on for your tailored assignment.

2) Selecting the article
   a. Review the “Searching for Scientific Journal Articles” module.
   b. Follow the instructions in the module to access the Directory of Open Access Journals (DOAJ) at www.doaj.org. Enter appropriate search terms for a topic related to your course’s content.
   c. Browse through the search results to identify and select an appropriate article based on both the topic of the article and the level of content. Make sure the article is available in full-text form.
   d. Optional: determine which specific Ontario Curriculum Expectations are being met.

3) Filling out the Student Worksheet
   a. Read the article thoroughly, then fill out the Student Worksheet for this article to create an answer sheet for discussion with students when they complete their own Student Worksheet.

Hints:

Step 1a. This information is usually found at the end of the Introduction. The article may include a purpose statement, and/or a hypothesis, and/or a statement of aims and objectives, etc. The purpose will also usually be stated in the Abstract.

Step 1b. Review the “Paraphrasing” module to familiarize yourself with how students can be advised to write in their own words.

Step 1c. This information is usually found in the Introduction, often in the paragraph(s) just before the purpose statement.

Step 2a & b. Look for this information in Results and in Discussion, as well as in the Abstract, and summarized in the Conclusion if there is one.
Step 3a. From the Materials & Methods section, identify the key methods used in the paper, highlighting any that will emphasize the current content you are discussing in the course or lab.

Step 3b. This information may be found in Materials & Methods, but may also be in the Discussion. You will want students to think about how many repetitions the researchers performed, what their sample size was, whether they had a control, etc.

Step 3c. Often a section describing the statistical analysis is located at the end of the Materials & Methods.

Step 4a. Look for this information in the Results and in the Discussion.

Step 5a. Review your notes from Step 2 and compare the authors’ conclusions to their purpose (Step 1) to analyze whether the conclusions make sense or are too broad/too narrow.

Step 5b. Review Steps 3 and 4 to decide whether the conclusions can be believed.

Step 6a. The authors will typically comment on the contributions in the Discussion and in the Conclusion, if there is one. The Abstract may also summarize the significance of the work.

Step 6b. Comments on the article can relate to the completeness of the information, the clarity of the purpose and explanations, and the organization; if any of the information for the worksheet was difficult to find, that could be considered a weakness. Comments on the study can relate to the accuracy and limitations of the methodology (Step 3), the reliability of the results and problems with the study (Step 4), and conclusions that don’t make sense in light of the findings (Step 5).

4) Providing additional resources for students

a. If your students are struggling with plagiarism and paraphrasing, then refer them to our online “Paraphrasing” module.

b. If your students are struggling with figuring out how to read the information in the article, then refer them to the section on active reading in the “Learning from Textbooks” section of A Guide for University Learning.

c. If your students want to learn how to find more academic information on other science topics, then refer them to our online “Searching for Scientific Journal Articles” module.