

From MLA to IEEE: Creating Relevance in First-year Writing Courses for STEM-focused Students [1]

- The following activities address student learning objectives (SLOs) for critical reading, writing and composing; rhetorical knowledge; writing conventions; and information literacy. Specific SLOs can be found at www.wpacouncil.org and www.ala.org.

Activity 1: Journals Exploration [2]

Lesson Objective

Students compare/contrast submission guidelines for journals specific to their majors in order to understand process and purpose for documentation of sources in a specific field.

Essential Question

Why do ... (engineers, computer scientists, bioengineers, etc...) need to know and apply specific documentation styles for their written work?

Opening - 15 minutes: The instructor groups students strategically (see *Majors Grouping, page 2*), then revisits the university's online library databases to model the process for locating and selecting specific journals, then searching for the journals' websites and writer's submission guidelines. Instructors may choose to have students navigate the same pages on their laptops. At the end of this modeling portion of the lesson, the instructor introduces the lesson objective and/or essential question. He or she then gives directions to students: select 2 journals within your groups and then locate the journals' websites and submission guidelines, as modeled during the opening activity.

As student groups finish selecting their journals, the instructor reminds them of the above steps - searching for the journals' websites and submission guidelines pages. The instructor then gives students the last step for the in-class portion of the activity: use a graphic organizer for recording your observations regarding submission requirements for each journal. The Instructor draws the graphic organizer options on the white board, directing students to select one for recording observations. **Instructor Choice:** a few options for organizing notes can be suggested. Two are a Venn diagram or a simple T chart, such as this:

Journal 1 Title

Journal 2 Title

The instructor assists student groups, as needed, during the above activity. This includes recommending links to homepages for the styles students discover (MLA, APA, Chicago, ASM, ASA, IEEE, etc.) and suggesting reviews of the articles on their specific websites.

Next, the instructor presents the last step of the activity near the end of the session, which includes the directions for drafting their observations in essay format (students can be instructed to navigate to the course's LMS where the directions are posted). One suggestion is to keep the directions simple and limited to 3 items for this activity. An option: 1. In essay format, describe the submission guidelines for two journals, then compare/ contrast these requirements referring to your notes recorded in class. 2. Format response in the documentation style specific to your groups' major staying within the word count of 550-600 words; 3. Include end citations for the websites referenced.

Closing – 5 minutes: Instructor leads the lesson closing. Each group shares their major, the documentation style, and one surprise finding regarding a feature of their style or a requirement from one of the journals' submission guidelines.

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Activity 2: A Meaningful Argument [3]

Lesson Objective

Students counterargue a perspective on a current issue related to their academic area of study by exploring a current perspective on an issue and applying specific strategies for developing an effective rebuttal.

Essential Question

How does a specific issue impact you, the community, and your field, and what are the multiple perspectives in debate regarding this issue?

Opening – 15 minutes: The instructor introduces the lesson objective and essential question and writes the essential question on the white board. He or she then guides a shared reading activity using one editorial (STEM-related issue) selected from a major media website. This shared reading includes modeling one to three active reading strategies for text analysis. For creating a visual for students during this activity, the text can be projected on a screen for whole group annotations, provided in handouts with wide margins, or both. Another options - upload the selected piece (with wide margins) to the LMS for students' retrieval and electronic annotation.

After the above activity, either individually or on partners, students search for their own editorials related to an issue involving their area of study on the same news site or on a STEM-focused website. Students are directed to select one editorial of interest, which they will be annotating in preparation for responding to the writer's argument.

Next, the instructor provides an option for a specific organization along with a writing strategy to apply for a first draft. These can be written on the whiteboard and posted to the LMS for students' reference. As students draft their initial responses in class, the instructor makes individual suggestions and asks guiding questions regarding their annotations, their opinions on the selected issues, the application of specific strategies, and options for organization.

Instructor Choice: editorial for whole group activity; specific reading strategies to apply; specific argument and analysis skills to address. Students submit their first drafts through the LMS assignment page or bring hard copies in the following class.

Closing – 5 minutes: The instructor informs students where to locate the written assignment directions, including word count, during the closing of the activity. Each pair (or individual student) shares the selected issue and answers the essential question written on the whiteboard.

This specific activity was used to offer an extra credit opportunity. Students submitted their responses to editors, which required them to search for the submission guidelines independently and revise responses before submitting. The first draft of this assignment was also used to open the following class with an activity on counterarguments, which seemed to work well for a first revision.

2 Options for *Strategic Grouping* in FYW courses with STEM-focused Students

Majors Grouping: The instructor asks students their majors and records these across the white board. Undeclared can be its own group or instructors can include majors under consideration. **Documentation Grouping:** The instructor writes four or five documentation styles across the white board and draws a line under each. Students either select the style to apply for a specific activity by writing their names under their selection, or the instructor creates groups before the class session.

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Designing Your Own Student-centered Activities

1. *Plan with the end in mind.* Ask yourself: **What** will students be able to do and **how** will they show it?
2. Ensure these 3 elements are integrated into the activity:

75/25

Student
Exposure

Student
Choice

75/25

75% student-directed, 25 percent direct instruction

Student Exposure

Student exposure to text written in field of study

Student Choice

Student choice involved in some part of the activity

[1] C. Bruzzano and M. Cherrey, "From MLA to IEEE: Creating relevance for STEM-focused students in first-year writing courses." Presented at the *Emerging Learning Design Conference*, June 1, 2018. Montclair State University, Montclair, NJ,

[2] C. Bruzzano. "Journals Exploration." 2018.

[3] C. Bruzzano, "A Meaningful Argument." 2018.