

**** EXERCISE #3: LESSON PLANS ****

This project will provide you with an opportunity to direct the results of your research for Exercise #2 (Case Studies) towards the design of a lesson plan suitable for introducing your future students to historical, philosophical, and sociological perspectives on science and/or mathematics.

The entire project comprises two phases, the first of which should either precede or accompany the historical research you'll undertake in developing your case study (Exercise #2), while the second will follow upon the completed study.

Phase I: Annotated Bibliography

Prepare an annotated bibliography of ten sources of information concerning the topic of your Case Study (Exercise #2). At least five of these sources should be print-media books, even if you access them electronically; anthologies of articles are perfectly acceptable. The remaining five sources may be from scholarly journals. Doubtless you are aware that Wikipedia articles are not suitable for serious academic work. The Walker Library JEWL Search Engine will provide you with access to a wide range of scholarly books and journals. Your citations may be formatted in APA, MLA, or Chicago style, as you wish, but in any case, you should provide complete publication data for each source, followed by an analytical commentary, approximately 100-200 words in length. Note that analytical commentaries not only summarize the contents of the source material, but also consider the strengths and weaknesses of what is presented as well as describing the applicability of the author's conclusions to your case study. If you are unfamiliar with the proper procedures for annotating a bibliography, see the presentation provided by the Walker Library at <https://library.mtsu.edu/c.php?g=538188&p=3684076> (or simply google "annotated bibliography mtsu" to find this site).

Phase II: Planning Document

Compose a three-five page essay sketching out how you might incorporate the results of your case-study research when teaching your subject matter. You might, for example, propose to provide slide shows or videos, organize discussion groups, assign real-world problems, create contests, invent role-playing games, or design experiments.

Concepts which have proved useful for ordering things easily assume so great an authority over us that we forget their terrestrial origin and accept them as unalterable facts. They then become labeled as 'conceptual necessities,' 'a priori situations,' etc. The road to scientific progress is frequently blocked for long periods by such errors. It is therefore not just an idle game to exercise our ability to analyze familiar concepts, and to demonstrate the conditions on which their justification and usefulness depend, and the way in which these developed, little by little...

--Albert Einstein (1916)