

Why do students need to think critically in order to do effective library research?

1. In order to understand the requirements of the assignment:
 - a. students' understanding of the assignment can depend on many things: the clarity with which it is written;
 - b. the students' perceptions of how the assignment relates to what has been discussed in class or the textbook readings;
 - c. the students' understanding of the subject matter and how it is categorized in published literature.
2. In order to analyze the kinds of information that are required for an assignment (simple facts or information? analysis? commentary? comparison or contrast to a different or larger context? relevance to other topics discussed in class or in the textbook) and to:
 - a. decide where to find the information they need -- in books, reference sources, newspapers, popular periodical literature, scholarly literature, online databases, etc.
 - b. effectively formulate a search strategy, identifying concepts, keywords and subject terms that will lead them to the desired information;
 - c. revise, refine or combine searches to tease out the most relevant results;
 - d. choose relevant and appropriate articles from a list of results;
 - e. understand which results are irrelevant or inappropriate;
 - f. note the presence or absence of bias in results;
3. In order to understand and critique the information found in various sources:
 - a. be able to synthesize and integrate this information in their essays or research papers
 - b. be able to keep a log of searches and citations;
 - c. construct a bibliography in the appropriate citation style

What are the most effective learning approaches to enable students to develop critical thinking within the context of bibliographic instruction?

1. Information Literacy instruction
 - a. the 50 minute "one shot" session
 - b. online web tutorials
 - c. for-credit or non-credit librarian-taught information literacy course
 - d. partner with faculty in a content course (e.g. English, Sociology, Nursing)
2. Problem-Based Learning (PBL)
3. Integration into content courses using CMS (Blackboard, WebCT)