Critical Thinking Skills

Four-Levels of Questioning*

LEVEL 1-SUMMARIZING, DEFINING, FACT QUESTIONS

- What is the main argument (thesis) of ...?
- Who is (are)...?
- When...?
- How much...?
- How many...?
- What is an example of...?

LEVEL 2-ANALYSIS, INTERPRETATION QUESTIONS

- How...?
- What are the reasons for...?
- What are the types of...?
- What are the functions of ...?
- What is the process of...?
- What (are) other examples of...?
- What are the causes/results of...?
- What is the relationship between...and...?
- What is/are the similaritie(s)/difference(s) between...and...?
- How does...apply to...?
- What is/are the problem(s), conflict(s), or issues...?
- How is the argument developed...?
- What evidence, proof, or support is offered...?

LEVEL 3-HYPOTHESIS QUESTIONS

- If...occurs, then what happens...?
- If...had happened, then what would be different...?
- What does theory x predict will happen...?

LEVEL 4-CRITICAL ANALYSIS, EVALUATION, OPINION QUESTIONS

- Is...well supported by evidence or poorly supported?
- ...clear or unclear...?
- ...logical or illogical...?
- ...relevant or irrelevant...?
- ...effective or ineffective...?
- ...applicable or not applicable...?
- ...ethical or unethical...?
- What are the advantages or disadvantages of ...?
- What other theories or arguments could be applied?
- What is the best solution to the problem, conflicts, or issues?...and why

^{*} from: J. Thorpe (1997). *Method of Inquiry Book for Students and Faculty*. Toronto: Ryerson University Centre for Student Development and Counselling.

Levels of Thinking

Bloom's Taxonomy is a hierarchy of 'educational objectives' which outlines how you will be expected to demonstrate your knowledge in your courses. Most university courses design test and assignment questions at the Application level or above. These higher levels of thinking focus on <u>critical thinking</u> in which you're expected to do something with the information you have learned, not just memorize and recognize the info.

EVALUATION

judging, assessing, arguing
Argue/Defend, Question merit/value/ethics/reliability/validity

SYNTHESIS

combine ideas to form a unique product "What would you do?", "Develop a proposal"

ANALYSIS

identifying components

Compare/Contrast, "What are the themes?"

APPLICATION

solving problems, moving from theory to practice, interpreting, making connection

Case studies, "What would happen if?"

COMPREHENSION

paraphrasing, summarizing, clarifying "In your own words", "Give an example", "What's this mean?"

RECOGNITION/RECALL

memorizing, verbatim recall, no conceptual understanding "What is?", True/False, Definitions

Bloom B. S. (1956). *Taxonomy of Educational Objectives, Handbook I: The Cognitive Domain*. New York: David McKay Co Inc.