Socratic Questioning

Socratic questioning is a disciplined method of inquiry that systematically directs thought in multiple directions to achieve various intellectual goals (Paul and Binker, 1990). It is used to explore complex ideas, uncover truths, expose problems, reveal underlying assumptions, analyze concepts, distinguish between what is known and unknown, and trace the logical implications of one's thinking. Unlike ordinary questioning, Socratic questioning employs a deliberate and structured approach to deeply investigate key concepts, principles, theories, and problems.

Focus of the Question

This task is designed to identify which part of an argument should be the focus when generating a Socratic question. Each focus type reflects a different way of probing weaknesses, assumptions, or ambiguities within the argument.

Task Objective

Your goal is to determine whether an argument requires probing through one or more aspects of Socratic questioning.

Instructions

- Read the argument along with the exemplar associated with each focus type.
- For a given type (e.g., *Other Stakeholder Perspective*), perform **binary classification**:
  - **Yes**: The argument can be probed using this Socratic question type.
  - **No**: The argument is not relevant to this type.
- If "Yes," select the **specific span of text** that should be the focus of the Socratic question.
  - The span should be **as short as possible** while still capturing the necessary meaning.
  - If there are multiple possible spans, choose the one that **appears first** in the text.
- The selected span should lend itself to generating a **thought-provoking and meaningful** Socratic question.

The following are the **Focus of Socratic Question (FSQ) Types**, based on a newly proposed typology designed to identify which part of an argument should be the focus when generating a Socratic question. Each type represents a distinct way of probing weaknesses, assumptions, or ambiguities within the argument.

The 11 FSQ Types are defined as follows:

ALTERNATIVE VIEWPOINT

1. **Other Stakeholder Perspective:**
   A phrase that reflects a viewpoint from a stakeholder who may disagree with the main argument.

   Criteria for selecting a span and generating questions for *Other Stakeholder Perspective*:

   - The argument does not offer a clearly contrasting or conflicting perspective from another stakeholder.
   - It does not highlights a <u>potential conflict of interest</u> between stakeholders.

2. **Temporal Contrast**
   A phrase that highlights how criteria, conditions, or contexts may shift over time.

   Criteria for selecting a span to generate Temporal Contrast questions:

   - The span explicitly compares or contrasts two different time periods.
   - It reflects a change in conditions (e.g., access to information or societal norms) that may influence the validity or relevance of the argument.

CLARIFICATION

3. **Vague or Ambiguous Terms:**
   A phrase that may be unclear, imprecise, or difficult for the general public to understand due to its subjective or context-dependent meaning.

   Criteria for selecting a span for Vague or Ambiguous Terms Socratic questions:

   - Semantic Ambiguity or Conceptual Vagueness
   - Impact on the Argument's Meaning or Force

4. **Overgeneralized Statement:**
   A phrase in which the author assumes a claim to be universally true across all situations.

   Criteria for selecting a span for Overgeneralized Statement Socratic questions:

- Generalization of a negative or positive trait from a limited subset to an entire group.
- The focus should not be on the quantifier (e.g., *never*, *always*) alone, but rather on the that the trait applies to all members of the group.

PROBING ASSUMPTION

5. **Implicit Existence:**
   A phrase where the author assumes something to be true or present without explicitly stating or justifying it.

   Criteria for selecting a span for Implicit Existence Socratic questions:

   ● Reveals a logical dependency on an **unstated idea** or **background assumption**.
   ● Selection is based on the annotator's interpretation of what is **implicitly assumed** rather than directly argued.

6. **Bias and Subjectivity:**
   A phrase where the author presents a belief or judgment that appears to be based on emotion, personal experience, or implicit assumptions rather than objective reasoning.

   Criteria for selecting a span for Bias and Subjectivity Socratic questions:

   ● Opens space for reflection on **how the belief was formed**—whether it stems from **emotional conviction**, **personal bias**, or **subjective experience** rather than factual evidence.
   ● Targets phrases where a **subjective tone**, **personal opinion**, or **affective language** is used.
   ● Challenges the **basis or justification** of emotionally charged or implicitly biased statements.

PROBING REASON AND EVIDENCE

7. **Lack of Evidence**

   A phrase in which a strong or controversial claim is made without any supporting evidence or justification.

   Criteria for selecting a span for Lacks Evidence Socratic questions:

   ● The claim is asserted without support, especially when it is bold, controversial, or debatable. No evidence, example, or reasoning is provided to substantiate the statement.
   ● If a support statement is present but irrelevant to the claim, this type should not be selected.

8. **Weak Evidence:**
   A claim that is supported by some evidence, but the evidence is insufficient, weak, or only loosely related, making the overall argument unconvincing.

   Criteria for selecting a span for Weak Evidence Socratic questions:

   ● The span contains some form of evidence intended to support a claim. The evidence is relevant to the claim but lacks strength, depth, or specificity.
   ● Highlights arguments where support exists but is not compelling or persuasive enough to justify the conclusion.

PROBING IMPLICATION AND CONSEQUENCE

9. **Questionable Cause-Effect Relationship:**
   A phrase in which the author assumes that one event directly causes another, when in fact the connection may be coincidental or based on a flawed understanding of correlation and causation.

   Criteria for selecting a span for Questionable Cause-Effect Relationship Socratic questions:

   ● Highlights a mistaken correlation where a cause-effect link is asserted without proper justification.
   ● Enables probing into the validity of the causal claim, questioning whether the evidence truly supports causation or merely suggests coincidence.
   ● Targets reasoning where the causal connection is assumed, not demonstrated.

10. **Causality Flipped:**
    A phrase in which the author **mistakenly identifies the cause and effect**, asserting that A causes B, when in fact **B is the cause of A**.

    Criteria for selecting a span for Causality Flipped Socratic questions:

    ● The logic can be challenged by showing that the **true causality flows in the opposite direction** (i.e., B causes A).
    ● Suitable when questioning the **directionality** of the cause-effect relationship is central to evaluating the argument.