InTA
Innovating Teachers Academy

Outils de Planification InTA

Taking Action
Checklist for Designing Effective Questions

Make students' thinking visible without complicating practice
Support reflection, explanation, and analysis

Foreword

Questioning constitutes a fundamental component of classroom practice. However, not all questions contribute equally to student learning. While some merely assess factual recall, others provide insight into students' cognitive processes.

Although teachers frequently pose numerous questions, these do not always yield clear evidence of students' actual understanding.

An effective question is not solely intended to elicit a correct response; rather, its primary purpose is **to render students' thinking explicit.**

This checklist does not introduce new pedagogical techniques. Instead, it serves as a reflective tool to ensure that classroom questioning:

- provides access to students' understanding
- supports the development of their reasoning
- informs instructional decision making

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1. Targeting Thinking Rather Than Responses

☐ Does the question require a single correct answer **(closed)** or allow multiple possible responses **(open)**?
☐ Does it prompt **explanation, justification, or interpretation?**
☐ Does it **provide insight** into the student's reasoning process?
☐ Does it extend beyond simple recall?
☐ Does it require **genuine cognitive engagement** rather than mere response production?

💡 Questions limited to predetermined answers do not adequately reveal students' understanding.

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2. Aligning Questions with Intended Learning Outcomes

☐ Is the question aligned with the **intended learning objectives**?
☐ Does it address a **central concept** rather than a peripheral detail?
☐ Will student responses provide **actionable information** to guide instruction?

💡 Misaligned questions yield limited and often non-informative evidence of learning.

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3. Promoting Elaborated Responses

☐ Are students required to **articulate their thinking** in their own words?
☐ Does the question demand more than a brief or single-word response?
☐ Does it make **reasoning processes observable**?

💡 When responses are overly concise, students' thinking remains inaccessible.

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4. Creating Opportunities for Reflection

☐ Does the question allow for **multiple approaches or interpretations**?
☐ Does it encourage **dialogue and comparison** of ideas?
☐ Are students expected **to justify their perspectives**?

💡 Questions that restrict responses to a single answer limit both reflection and discourse.

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5. Allowing Adequate Thinking Time

☐ Has **sufficient time been allocated** for students to think before responding?
☐ Do all students, including those learning the language of instruction, **have time to construct a response**?
☐ Has premature teacher intervention been avoided?

💡 Without adequate wait time, even well-designed questions fail to support meaningful thinking. Wait time directly influences the quality of student responses.

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6. Ensuring Accessibility for All Learners

☐ Can all students **understand the question**, including its purpose and how to begin responding?
☐ Has the question **been clarified or reformulated** when necessary?
☐ Does the cognitive demand reside in **the thinking process** rather than in interpreting the instruction?

💡 Misunderstood questions impede cognitive engagement.

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7. Using Responses to Inform Instruction

☐ Do student responses **reveal misconceptions or gaps** in understanding?
☐ Can subsequent instruction be adapted based on these responses?
☐ Does the question **provide a clear indication of students' current level of understanding**?

💡 Effective questioning generates information that is valuable for both teachers and students.

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8. Evaluating the Instructional Value of Questions

☐ Does the question **yield meaningful information** about student learning?
☐ Does it make **students' understanding visible**?
☐ Would the question be omitted if it did not contribute new insights?

💡 The quantity of questions does not guarantee the quality of learning.

Final Validation Question

☐ Can a student answer correctly without engaging in meaningful thought, or is cognitive effort required?

💡 If a response can be produced without reflection, the question does not effectively support learning.

Understanding the Distinction Between Closed and Open Questions

Questions vary in the type and depth of thinking they elicit.

- Some facilitate rapid verification of knowledge
- Others enable deeper exploration of understanding

While this checklist supports the improvement of question quality, an additional lever lies in shifting the nature of questions posed.

Comparative Overview

Closed Questions

- Single expected answer
- Facilitate rapid verification
- Provide limited insight into thinking
- Example: What is 8 × 7?

Open Questions

- Multiple possible responses
- Encourage explanation and reasoning

- Example: How can you explain your method for solving 8 × 7?

Transforming Questions

- What is the answer → How did you arrive at this answer?
- Is it correct → What justifies your answer?
- What is the result → Can you explain your reasoning?

💡 Open questions do not alter the content, but they increase the level of cognitive demand.

Illustrative Examples

Mathematics

- Closed: What is the result? → Open: How do you know that your result is correct?
- Closed: Which formula is used? → Open: Why is this formula appropriate in this context?

Language

- Closed: Who is the main character? → Open: What can be inferred about this character?
- Closed: What happens? → Open: Why is this moment significant?

Science

- Closed: What is the result? → Open: How can this result be explained?
- Closed: What is the correct answer? → Open: What hypotheses can be proposed?

Key Insight

💡 Closed questions support rapid verification
💡 Open questions make thinking explicit

Learning is enhanced when students are required to explain, justify, and connect their ideas.

◇ InTA ANCHOR — Questioning as a Tool for Understanding Thinking

In everyday practice, teachers may ask numerous questions without fully understanding what these reveal about student learning. Correct answers do not necessarily indicate deep understanding.

Questioning should not serve merely as a tool for rapid validation. Its primary function is to make thinking visible.

Well-designed questions enable teachers to:

- access students' reasoning processes
- identify genuine misconceptions

- adjust instruction with precision
- promote deeper learning

Teachers do not need to increase the number of questions they ask. Rather, they need to improve their quality.

Questioning transforms:

- an answer into evidence
- evidence into understanding
- understanding into informed pedagogical decisions