

MENTOR HANDBOOK

I10 | INSTRUCTION: QUESTIONING

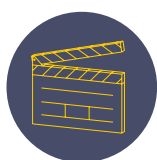
STUDY

KEY TAKEAWAYS FOR THIS MODULE

To use questioning to support pupil thinking, your teacher needs to understand that:

- > Questioning has many purposes for teachers, including checking pupil understanding, breaking down problems and extending and challenging pupil thinking.
- > Pupils need enough knowledge, guidance and thinking time to produce quality answers.
- > Questioning underpins quality pupil classroom talk, especially in the 'We do' part of instruction.

Get yourself into a strong position to mentor your teacher by working through the following:



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SUMMARY BELOW:**

TEACHING CHALLENGE

Mr Ashwin feels confident he can lead I-We-You (Lemov, 2015) sequences and help pupils access and practise complex content. However, he notices that pupils are getting used to being 'spoon fed' and are quite dependent on him to do the 'hard thinking' before they get to independent practice. How can his instruction transfer more of the thinking onto pupils earlier in the learning sequence?

KEY IDEA

Effective questioning can guide pupil thinking through checking understanding, extending pupil thinking and fostering high-quality talk in a supportive classroom environment.

CHECKING FOR UNDERSTANDING

Questioning is an essential tool for teachers to master as it can be used for many purposes (Coe et al., 2014). For example, it is among the most effective ways for Mr Ashwin to elicit what his pupils are thinking (Black & Wiliam, 2009). Sometimes Mr Ashwin checks pupil understanding by asking questions which demand short, simple answers. For example, he may want to see if pupils have enough fluent prior knowledge by asking 'what is 8×7 ?' Targeting questions at several pupils could also help Mr Ashwin make an inference about current class understanding and any common misconceptions.

Such questioning is diagnostic: it is primarily about finding out what pupils know rather than building pupil knowledge (Black & Wiliam, 2009). However, things can go wrong if the questions don't check the right things or if only a few pupils are questioned and information from these answers determine the subsequent direction of the lesson. Teachers can also inadvertently ignore the information generated from questions if they have not planned carefully when to pose them and how to respond to them. When planning questions to check pupil understanding, Mr Ashwin should consider:

- > What is the key knowledge that I need to check in this lesson? What do pupils need to be secure in before I can move on? What will they say and do if they are secure with this?
- > What is the best way to get the widest sample of answers? For example, mini whiteboards, exit tasks or post-it notes cans help quickly gather information about most of the class.
- > What are the wrong answers and misconceptions that might arise in the lesson? How will I prepare to address them?

EXTENDING PUPIL THINKING

Questioning can help Mr Ashwin develop pupil thinking as well as check it. Studies have shown that more effective teachers ask more questions and often require pupils to give extended explanations of their thought process (Rosenshine, 2012).

Sequences of open questions can help to manage pupils' limited working memory. For example, when introducing a maths problem Mr Ashwin could ask:

'What would we do first?'

'Why would we do this first?'

'Once we have done that, what might we do next? Why?'

Such questions require pupils to explain their answers which encourages pupils to think about the underlying principles of learning, deepening and consolidating their knowledge (Pashler et al., 2007). These questions are more effective when pupils have grasped key ideas first (Coe et al., 2014).

Open ended questions can also help to extend pupil thinking. Pupils might be asked to make predictions about a book's story from its title or to reason about a story, for example 'why did Winnie-the-Pooh get stuck in the rabbit hole?' (EEF, 2018).

ENSURING QUALITY ANSWERS

To ensure quality answers, questioning should allow enough 'thinking time'. Research suggests that after asking a question many teachers wait less than one second and, if no answer is given, ask another question or answer the question themselves (Black et al., 2004). Pupils with lower working memory capacities are likely to struggle the most with limited time and preparation (Gathercole et al., 2006), making it more likely class contributions are from higher achievers. A longer wait and time to prepare an answer can lead to more detailed answers and higher-quality thinking from every pupil.

Mr Ashwin could also use questioning to encourage pupils to share answers with their peers, supporting them to articulate key ideas and extend their vocabulary. Effective teachers spend more time on questioning pupils and guiding practice in this way than their less effective peers (Rosenshine, 2012). Teachers who facilitate such talk increase pupil outcomes (Jay et al., 2017). For talk to be effective, Mr Ashwin needs to bear in mind:

- > **Pupils need enough knowledge for high-quality talk:** Questioning can offer pupils opportunities to practise new ideas, which can be particularly useful after teacher input and before independent practice, in the 'We do' section.
- > **Questions can increase the quality of pupil talk:** When conducting questioning, clear teacher expectations and scaffolding are important to support high-quality talk. Teachers can use questions to consolidate technical vocabulary, clarify how to structure answers and to encourage pupils to address other pupils' misconceptions. (Jay et al., 2017).
- > **The learning environment needs to be safe and secure:** Pupil behaviour and outcomes are affected by teacher expectations and what they see other pupils doing (IES, 2008). Mr Ashwin needs to ensure behavioural expectations are enforced to ensure pupils feel safe to contribute answers when called upon through questioning. He needs to insist on mutual trust and respect and be clear that his purpose of questioning is pupil learning, rather than, for example, to catch pupils out.

NUANCES AND CAVEATS

Great questioning is often delivered on the spot by experienced teachers and is the product of deep knowledge of their subject and their pupils. This knowledge takes time to acquire so, to be as effective, newer teachers can plan out some of their key questions in advance.

SELECT

Before you observe, first select a **DEVELOPMENT AREA** to focus on. Next, familiarise yourself with the **FOCUSED DEVELOPMENT AREAS**, as you will zoom in on one of these during your observation. Finally, craft a **PRECISE TARGET** when you observe your teacher (examples are provided below).

DEVELOPMENT AREA	FOCUSED DEVELOPMENT AREA	EXAMPLE PRECISE TARGETS
All pupils thinking hard	<ul style="list-style-type: none"> > Teacher embeds a routine of no hands up questioning to encourage all pupils to think about their responses, i.e. ask a question, pause to give pupils time to think and finally, say the name of the pupil you would like to answer. > Teacher gives pupils appropriate wait time to process and reflect on the question they have been asked. 	<p>If your teacher is...</p> <ul style="list-style-type: none"> > Not doing it at all: Explain to pupils that you will be pausing after questions to give them all time to think and, when delivering questions, use a short pause to allow them time to think before saying the name of the pupil you would like to answer the question. > Doing it but needs some improvement: Explain to pupils that you will be pausing after questions to give them all time to think and, when delivering questions, vary the length of your pause depending on how challenging your question is for pupils, e.g. a challenging question means a longer pause. > Doing it well, but needs some stretch: Vary the length of the pause after you ask a question depending on how challenging it is likely to be for pupils to give them appropriate time to think. During the pause, scan the room to gauge when pupils might be ready to answer.
Checking for understanding	<ul style="list-style-type: none"> > Teacher, with the support of a colleague, plans questions about the key knowledge they need to check and are clear on the answers pupils need to give to show that this knowledge is secure before they move on. > Teacher asks questions that cause pupils to elaborate upon their answers in order to ensure they stem from a secure understanding of the underlying concept. > Teacher asks questions to samples of pupils so they can efficiently make inferences from their responses. > Teacher uses methods to get responses to important questions from the whole class so they can check all pupils' understanding. 	
Extending pupils' thinking	<ul style="list-style-type: none"> > Teacher deliberately asks a range of types of questions that get pupils to extend their thinking, e.g. by justifying their answers or prompting them to use challenging vocabulary. > Teacher reframes their questions to provide greater scaffolding or greater stretch. > Teacher models high-quality oral language, including high-quality vocabulary, and insists upon it in pupils' answers. 	

RECORD YOUR THINKING HERE

DEVELOPMENT AREA	FOCUSED DEVELOPMENT AREA	EXAMPLE PRECISE TARGETS
(select before observing)	(select whilst observing)	(select/write whilst observing)

OBSERVE

Consider the following questions based on a short (approximately 15 minute) observation of your teacher.

What was your teacher's **previous** target? Are they meeting it? How do you know?

For the **DEVELOPMENT AREA** you are focussing on for this observation, what is your teacher already doing well?

Next, go to the previous page and select a **FOCUSED DEVELOPMENT AREA** to further zoom in on. Then select (from the examples) or write one **PRECISE TARGET** (bite-sized action) to coach your teacher on. You can choose to stick with the previous target if your teacher have not made enough progress yet.

How will you model the target to your teacher to show them what good looks like? What questions will you ask to check your teacher understands the model? For example, 'How it is different from your current practice?', 'What impact might it have on your practice and pupils?', 'What links can you see between the model and the module principles (below)?'

Reminder: Your model should help your teacher develop their ability in some of the following:

- > Model and require high-quality oral language.
- > Include a range of types of questions in class discussions to extend and challenge pupils.
- > Provide appropriate wait time between question and response where more developed responses are required.
- > Reframe questions to provide greater scaffolding or greater stretch.
- > Prompt pupils to elaborate when responding to questioning to check that a correct answer stems from secure understanding.

Next, meet with your teacher to work through the 'Feedback' stage of instructional coaching. See the guidance on the feedback stage in the appendices of the Mentor Handbook for support.

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