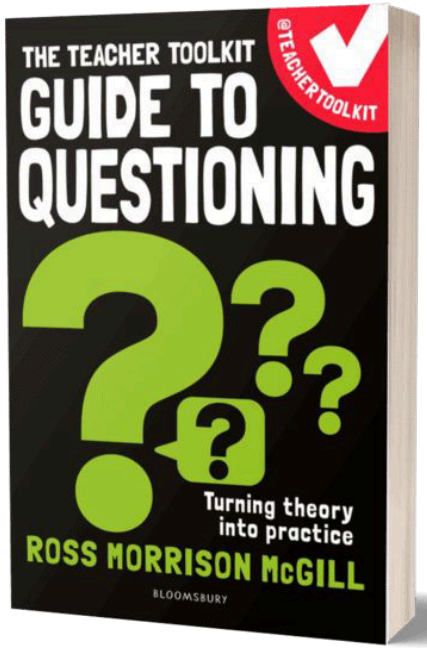
Guide To Questioning

One–Page Cartoons

Supporting teachers, worldwide



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Classroom Ideas, Teacher Training & School Resources

Guide To Questioning, Overview by Ross McGill

Chapter by chapter overview: Turning theory into practice

"Questioning is the most frequently used teacher intervention …"

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1: Questioning Research

"Teacher questions answers occupy approximately 80% of the average school day" (Stevens, 1912). **Teachers can be trained to improve their questioning practices.** So, where should we start with the no.1 instructional tool?

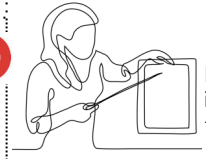
2: Developing Concrete Responses

Closed questioning focused on recall is one of the **poorer** questioning techniques because it relies on learning being implicit and not explicit.

3: Questioning Techniques

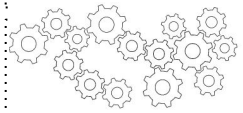
Using particular strategies can be effective for particular teaching goals. Non-questioning alternatives, including statements and **wait time**, resulting in more participation, talking, peer-to-peer interaction and student questions.

4: Questioning Influences



How do external/internal **influences** determine how effective a question is received and answered in a school classroom? These influences can help teachers understand methods for **providing feedback** to their students.

5: Questioning and Metacognition



One way in which questioning can encourage metacognition is to use **funnel questions**. When students are taught appropriate self - questioning techniques through modelling, followed by scaffolding instruction, and metacognitive strategy employment, [their] interaction is enhanced' (Rotter, 1966).

6: Questioning in an Online Context

Learning the lessons from the COVID-19 pandemic, it is important to ensure that all teachers are **trained in delivering online** learning; "scaffolding questioning strategies help facilitate reflective thinking in online small group discussions" (Choi et al., 2005).

How can teachers teach better online?

7: Developing Questioning Culture

A questioning culture values questioning, **critical thinking** and curiosity. 'If you want to accelerate learning, you concentrate on the group' (Hargreaves & Fullan, 2012).

8: Effective Questioning CPD

Where would you start if you wanted to build a **culture** of effective questioning across an organisation? Effective professional development requires the use of **regular** and **targeted** feedback …

9: Leadership Questioning

Questioning and **feedback** methods help teachers form better relationships, underpinned by **structured** procedures.

10: Academic Questioning

30 seconds

What would we need to do to instil a culture of **professional inquisitiveness** across an organisation, and what methodology could we use for school improvement? Considering all aspects of school life, from classrooms to discussions between colleagues, parents, governors and the general public, how can schools design **school improvement, underpinned by effective questioning?**

AUDIO

Chapter 1: Questioning Research

The available research on questioning ...

"It's worth paraphrasing what students have said. This allows a teacher to provide a consensus view, add details and ensure that all students have heard the correct information."

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1: Questioning History

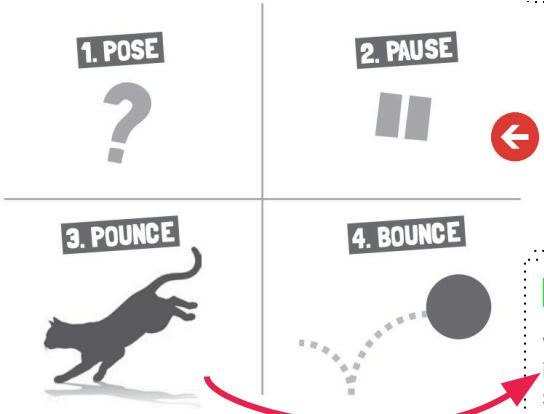
Early research, reports that "questioning breaks into the recitation and is preceded by statements made by the teacher. The latter is usually the case in the lower grades... the length is forty-five minutes." The author writes that "**sometimes the questioning comes at the end of the period**, the first part having been devoted to the lesson by the teacher" (Judd, 1914)

2: Oral Questioning Behaviours

Decisions that teachers make when questioning rely on their subject knowledge, any understanding of their students and past experiences from working in similar situations. These experiences can become **intuitive** and sometimes, given the challenges of the classroom, teachers can opt for easier, **ineffective techniques** that do not support learning (Wilen, 1991)

3: Role of Questioning

1. **Recalling** information is dominant among teachers = resulting in only 50 per cent congruence between their questions and student responses.
2. **Low-level questioning** = positive relationship with student achievement.
3. **Questioning** can impact achievement but their **influence** on student attitudes is **inconclusive**.
4. Recitation is effective for factual recall, but **not** so much for discussions and student initiative.
5. Teachers and **students lack knowledge** of appropriate questions techniques for discussions.
6. Questioning is a **complex** aspect of **communication**; teachers can be trained (Wilen, 1991).



4: Wait Time as an Instructional Tool

Professor Mary Budd Rowe was an American educator who summarised 5 years of influence of a variable called teacher 'wait time' (1972). Her analysis of 300+ tape recordings showed the mean 'wait time' a teacher paused after asked a question to a class was **just 0.9 seconds!** She learned that the longer a teacher waits before insisting students answer a question, the more learning is harnessed!

5: Questioning Influences

Wait time should be high and reward should be reduced. If rewards are increased, it can undermine confidence and act as a distraction, with some students rewarded for performance, with others fearful of taking risks.

6: Frame the Questioning Conditions

Teachers should not repeat portions of what students say or respond with 'Yes, but…' to signal a rejection of an idea; instead, teachers should **ask students to think without providing** either a pause or **cue**, plus provide evaluative comments such as 'OK, explain why?'.

7: Practical Ideas

Teachers' responses exhibit greater flexibility. Simple fixes for teachers include **responding to students with** 1) Yes, and... 2) **Tell me why** you think this... 3) What else? 4) Explain to me how… or 5) a script: Pose, Pause, Pounce, Bounce (McGill, 2013)

Chapter 2: Developing Concrete Responses

Questioning for early years and primary teachers …

Retrieval practice is the process of actively trying to recall information using working memory. This type of practice helps to strengthen memory.

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1: Questioning in Early Years / Primary Context

Put simply, when a teacher poses a question, this is a methodology to help students to retrieve information. However, **questioning during plenaries** is one of the poorer questioning techniques that a teacher can use, because it relies on learning being implicit and **not explicit** (Bianchi et al., 2021)

2: Well-Structured Questions

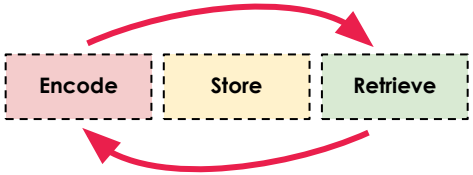
Teacher effectiveness is underpinned by a teacher's **explanations and questioning building incrementally** from students' prior knowledge, drawing together related knowledge from different areas of the curriculum.

3: Retrieval in Primary Schools

There is **little research** on retrieval practice (questioning) conducted in primary schools. Case studies are emerging …

Read more on memory retrieval, by scanning the QR code

4: How We Learn



Encode-store-retrieve is a cognitive science approach to understanding how we learn and remember information. It suggests that there are **three stages** involved in the process of learning and memory: encoding, storage, and retrieval; something I believe all teachers should know …

5: Questioning for Interaction

1. **Procedural** = help to develop interaction. For example, how are you today? Do you have a pencil? Fact-based answers seek to retrieve right or wrong answers.
2. **Convergent** = designed to engage students in learning, requiring the correct answer through retrieval. For example, 'What is the last planet in the solar system?' These types of questions can draw upon prior knowledge to help take the information one step further.
3. **Divergent** = these questions do not have a specific answer, asking students to analyse, synthesise or evaluate topics. For example, 'Do you like Marmite?'

6: Practical Ideas

Key ideas essential for the primary or Early Years classroom include:

1. Think, pair, share,
   show me (you have thought)!
2. Mini-whiteboards.
3. Whole-class feedback

7: Whole-Class Feedback

There are several reasons why providing whole-class feedback is more effective for students (Shernoff et al., 2003):

1. When students receive **immediate** feedback, they are more engaged.
2. It helps students to process information/improve understanding and clarify misconceptions.
3. By engaging in conversations with their peers, students can gain a better understanding of the material, retain more of the information!
4. Having the opportunity to talk it through allows teachers to engage with students' social, emotional and mental health aspects of learning.

8: Top Tip

Those **pauses for students to think** about the question, before pairing them up and asking them to discuss their answers is your **easiest** and **most effective** strategy!

TOOLKIT TIPS

Chapter 3: Questioning Techniques

Questioning for secondary teachers and further education lecturers …

The use of alternative non-questioning techniques 'may be more conducive than questioning techniques to stimulate student engagement (Wilen, 1991)

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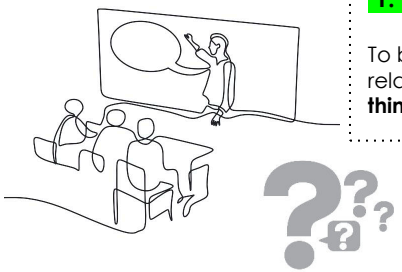

1: Questioning in Secondary / Further Education

To be effective, teachers should use **clear** and **concise questioning**, relate questions to the subject matter and provide students with **time to think** before responding; questions motivate students and keep them on task.

2: Questioning Behaviours that Interfere with Learning

There are questioning behaviours that can **interfere with** student **learning:**

1. **interrupting** students when they are speaking
2. asking questions that are too difficult or **unrelated**
3. making **assumptions** about students' knowledge
4. **ignoring** students' questions or concerns
5. giving **too much** or **too little** feedback
6. failing to provide **clear instructions** or expectations
7. not providing enough **opportunities** to practise
8. not allowing students to take an **active** role
9. and failing to address **students' individual needs** (Ellis, 1993).

3: Resolving Interference

Teacher questioning should 'assessment-driven' because essentially, a question should assess the learning and check for understanding. **Probing** student responses **in a non-judgemental way**, acknowledging correct responses from students and **using praise** specifically and **discriminately** are found to be powerful patterns for improving communication and student achievement … (Ellis, 1993)

4: Phrase Questions Clearly

If ambiguous questions are posed, **the probability of confusion** is increased e.g. how long is a piece of string? Questions activate metacognition, so that students become aware of how well they are mastering a topic …

5: Connect Questions to Subject Matter

Although non-academic questions and discussions are an important part of the social, emotional and mental health (SEMH) aspects of learning, 'they have **not** been found to increase student achievement' (Ellis, 1993)

6: Use Frequent, Factual Recall Questions

With an emphasis on memorisation and observation, these questions help nurture correct student responses. These **factual questions use the lowest cognitive level** but are most frequently used in classroom interactions.

7: Non-Questioning Alternatives

A case study of 5 high schools suggests that teacher **questions limit discussion**, whereas 'non-questioning alternatives foster discussion'. When teachers **provide explanations** to student questions, it elicits further questions from students, compared to answering questions (Dillon, 1985).

8: Practical Ideas

Cold calling is a powerful questioning technique that can be used by teachers to **encourage thinking and recall** but does it enhance class participation/engagement? (Thulasidas and Gunawan, 2022) suggests cold call:

1. Increases your sample size
2. Encourages all to participate
3. Holds every student to account
4. Uses statistical (mixed ability) sampling
5. Allows reliability in the follow-up. E.g. 'Why?'
6. Improves validity with a positive outcome
7. Can be adapted to suit the age group
8. The teacher can manage thinking / participation

9: Top Tip

TOOLKIT TIPS

Connect the material to **real-life applications**. E.g. 'How does climate change affect our daily lives?'

Chapter 4: Questioning Influences

Environmental factors which influence the classroom …

It is important for teachers to understand the various questioning conditions that impact on the feedback loop.

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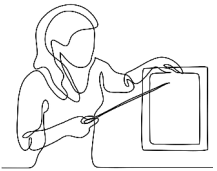


1: Questioning Influences

How do **external/internal influences** determine how effective a question is received/answered in a school classroom? How does environment in the classroom make a difference? How does teacher expertise determine the quality of the question?

2: Feedback Loop

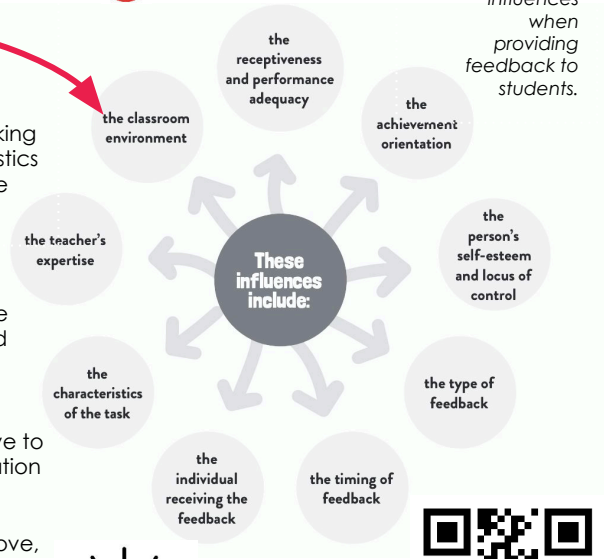
'Can feedback improve teaching?' gives an insight into how **feedback can improve performance** (Coe, 1998). Students can be actively involved in giving and discussing ideas, as well as making connections and expanding on their answers – essentially metacognitive skills.

Fact

Make yourself aware of these different feedback influences when providing feedback to students.

3: Influences Explained

These influences can help teachers to understand **the best way in which to provide feedback** to their students, taking into account the individual characteristics of the student, the type of task and the characteristics of the feedback



4: Socratic Questioning

Once described as 'the most powerful teaching tactic for fostering critical thinking'(Paul and Elder, 2006), **socratic questioning** has long influenced teaching and learning, and the process of repeated questioning to elicit tacit knowledge.

5: Developing Critical Thinking

Students readiness to respond to socrative questions is a **contributing factor** (Dalim et al., 2022) on influences participation:

1. High positivity
2. Actively involved
3. Discussing ideas
4. Making connections.

6: Developing Socratic Scripts

Questioning is powerful for supporting behaviour, scripting, setting the scene and metacognition. For **behaviour,** it holds students to account. For **scripting**, it reduces workload. For **setting the scene**, it help students to decode information. For developing **metacognition**, teachers play a critical role in helping students to problem solve.

7: Practical Idea

M is for Mosquito; similar to a mosquito, the teacher here asks lots of short and pointed questions.

A for Affectionate: Like a parent or family member, this stage acts like a close relative to help to support and encourage the formation of new ideas

L for Laceration: Following on from the above, the teacher poses a shock to the process

I for Ignorant: Finally, to leave students with further inquiry and opportunities for new learning

Guide To Questioning (McGill, 2023)

Chapter 5: Questioning + Metacognition

How questioning supports (or not) cognition and working memory …

Teacher-designed questions that ask students to think about their learning process are essential metacognitive strategies for teachers to deploy.

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1: Cognition and Working Memory

One way in which questioning can encourage metacognition is to use **funnel questions**. My interest in how the brain works, and why I believe that all teachers should know about it too, highlights why asking and **formatting** questions is critical.

2: Short-Term Memory

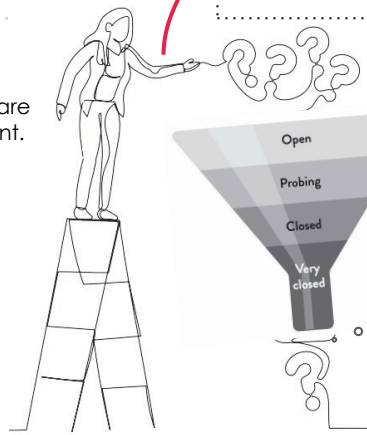
Short-term memory involves memories that are receiving **conscious attention** in that moment. E.g. reading this now!

3: Working Memory

Our working memory having **limited capacity**. We can only **manipulate** a number of pieces of information at any one time – before additional information becomes redundant. Approximately 3 to 9 pieces of information.

4: Long-Term Memory

Where we store large amounts of information **waiting to be of service.** When describing long-term memory, broadly speaking, these are memories that are **not receiving** any **conscious attention**. Think, 'activating schema'…



5: Funnel Questions

Funnel questions are a series of **increasingly specific** questions that start with broad questions and gradually become more focused. For example: 1) Name a human invention that changed the world? 2) It is found in classrooms? 3) It fits in your pocket? 4) It has a rolling mechanism? ***(Answer next to QR code)***

6: Teach Explicit Study Skills

Students must be directly taught appropriate **self-questioning techniques** through modelling, followed by scaffolding instruction, and metacognitive strategy employment (Williamson, 1996).

Fact

There is great value in teaching students using question by question!

7: Practical idea

Self-explanation is a study skill that involves actively explaining material to yourself as you read. **Elaboration** is a study skill that involves taking information from something you have learnt and adding more details to it. Both these techniques can help to promote metacognition. **Using effective questioning**, such as funnel questions, allows a teacher to retrieve information from students.

Stage 1: The teacher asks lots of **open-ended** questions and actively listens to the responses.

Stage 2: During active observation the teacher can pose **what, who, when, where, why, how** and **what if** type questions in response to a student's answer.

Stage 3: As topics are prioritised in the conversation, 'engaging in a delicate balance of asking both open and closed ended questions' (Matsumoto et al., 2015).

Like **peeling an onion** layer!

Ballpoint pen

Guide To Questioning (McGill, 2023)

Chapter 6: Questioning Online

Questioning techniques useful for an online context …

A strategy that can help teachers to work more effectively online is using 'lecture pauses' …

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1: Lecture Pauses

A lecture pause occurs when teacher-talk stops, and students are asked to **think about their learning** and what they will do with it (Rice, 2018). The evidence argues that these lecture pauses not only **benefit the students** by allowing them a chance to relate and recall, but it also benefits the [teachers] (Arnold, 2020).

2: Three Types of Pauses

1. **Starting pauses** 'grab attention and break preoccupation'.
2. A **midpause** 'allows the students to remember, apply, and understand what they have learned'.

3. **Closing pauses** are powerful because they 'help students accomplish but also because of when they occur'. (Rice, 2018, quoted in Arnold, 2020, p. 5)

3: Nine Solutions for Managing (online) Cognitive Load

How can teachers make learning easier to access?

1. **Offloading:** If using on-screen text, present words as narration instead.
2. **Segmenting:** Allow some time between successive segments of the presentation.
3. **Pretraining:** Give students prior instruction about the components.
4. **Weeding:** Keeping materials concise and coherent as possible
5. **Signalling:** ensure that the learner does not engage/focus on non-essential facts or graphics.
6. **Align words and pictures:** When the words are far from the corresponding portion of the graphic, the learner is required to use limited cognitive resource.
7. **Eliminate redundancy:** Students who learn from non-redundant presentations perform better on problem-solving tests (Mayer et al., 2001).
8. **Synchronising**: Synchronise the presentation of visual and auditory material.
9. **Individualising**: Spatial ability effect is recommended, matching high-quality multimedia materials with high spatial learners.

4: Top Tip

TOOLKIT TIPS

Interactive teaching models like the **flipped classroom** enable students to take ownership of their learning.

5: Practical Idea

Use the **ABC questioning strategy** in an **online** context: (Agree, Build, Challenge)

1. Teacher: 'Year 6, can anyone tell me how fractions can be used in everyday life?' (**Agree**)
2. Student 1: 'Proper fractions are like a part of a whole number. So, if you have a number like 3/4, it means 3 out of 4 parts.' (**Build**)
3. Teacher: 'Very good, that's correct! Now can anyone give me an example of how fractions can be used in real life?' (**Challenge**)
4. Student 2: 'We can use fractions to measure things like ingredients when baking, or to divide up a pizza into equal parts.' (**Agree**)
5. Teacher: 'That's right, fractions are used all the time in everyday life. Can anyone tell me what this fraction is on the screen?'(**Build**)
6. Student 3: 'That's 3/4.' (**Agree**)
7. Teacher: 'Excellent, so we can see that 3/4 is a fraction. Now, I would like you all to explain why knowing how to simplify fractions is useful? Add your answer to the following document. (URL link shared by teacher) (**Challenge**)

A teacher's gaze in video lectures improves learning

*Using a variety of learning technologies will not only help teachers to appeal to different students, but it also teaches students how to use a range of technology and helps them to **maximise** their **engagement**.*

Fact

Guide To Questioning (McGill, 2023)

Chapter 7: Questioning Culture

Developing inquiry across classrooms ...

Does your site manager engage with appraisal? Do all your members of staff participate in education research? Inspiring educational communities understand the importance of collaboration and innovation in teaching and learning.

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1: Developing Questioning Culture

How can schools build a questioning culture in all classrooms and facilitate teachers' ability to do so? This question also **applies to staff culture**, where effective questioning and listening **permeates** meetings, lesson observations and line management teams.

2: Guided Play, Beneficial for Learning!

Can guidance during play enhance children's learning? "Meta-analyses identified significant evidence for guided play having a greater positive effect than direct instruction on early maths skills and a positive effect than free play on spatial vocabulary" (Skene et al., 2022, p. 1163). 1) **How does questioning facilitate learning?** 2) How does 'guided play' support early development and learning?

3: Practical Ideas

1. Integrate guided play into existing lessons and activities.
2. Use open-ended questions to **encourage critical thinking** and problem-solving skills.
3. Provide **structured** opportunities to develop attitudes and approaches to learning.
4. Use a variety of techniques to guide learning; make learning concrete and engaging.

4: "Hello, Question Matrix!"

A questioning culture values questioning, critical thinking and curiosity. '**If you want to accelerate learning, you concentrate on the group**' (Hargreaves and Fullan, 2012).

The question matrix as the perfect idea to demonstrate how a teacher, or a group of teachers could build a questioning culture.

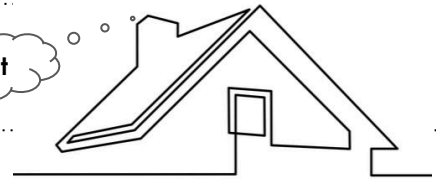
QUESTION MATRIX	IS? DOES? Present	HAS? DID? WAS? Past	CAN? Possibility	SHOULD? Opinion	WOULD? COULD? Probability	WILL? Prediction	MIGHT? Imagination
WHAT? Event							
WHERE? Place							
WHEN? Time							
WHICH? Choice							
WHO? Person							
WHY? Reason							
HOW? Meaning							

AS SCHEMATIC KNOWLEDGE STRENGTHENS, THE QUESTION FORMAT (FROM TOP–LEFT TO BOTTOM–RIGHT) SUPPORTS THE DEVELOPMENT OF METACOGNITION.

CHAPTER 7 - DEVELOPING QUESTIONING CULTURE

"Hands up who likes performance management?" asks no school leader ever! I now help schools to ask this question!

Fact



6: Developing Organisational Culture

Defining 'culture' and what this looks like for school staff? 1) Teachers are trusted to make important decisions. 2) There is a **common** conceptions of progress. 3) **Shared beliefs** about effective instruction and assessment are shared by everyone and 4) Support staff **help** teachers to carry out their duties and school leaders **protect** them from external pressures. **How many does your employer achieve?**

5: Developing Classroom Culture

The **first** step to build a questioning culture is to create an environment that is encouraging. The **second** step must ensure that students are taught the skills for questioning. The **final** step is ensuring that the school provides an atmosphere of trust/safety.

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Chapter 8: Questioning for CPD

Developing inquiry across an organisation …

How does your school design an effective staff training programme?

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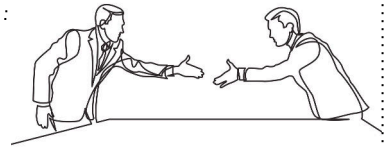
1: Effective Professional Development

Where would you start if you wanted to **build a culture** of effective questioning across a school organisation? **What would** the teacher **training look like?** How often would you need to revisit strategies and provide teachers with time to practise, and where, when and how would you bring them together to share what they are doing in the classrooms?

2: Ongoing Commitment



Effective professional development requires an **ongoing commitment** from both the staff and the school. Here are some simple, yet powerful questions you can ask to determine the culture and high performance of employers you might work with:

1. Which organisations provide effective **feedback on employee performance** and how does this impact motivation, retention and productivity?
2. How does your organisation s**uccession plan** for: a) recruitment b) diversity, quality and inclusion c) gender pay and flexible working d) risk assessment (e.g. pandemic) or e) technology (e.g. artificial intelligence, misinformation and disinformation)?
3. Which organisations **organise training effectively**, with limited time and budgets?
4. Which organisations demonstrate an **ongoing commitment** to their workforce?

'EEAA is a strategy that teachers can use to generate more discussion and debate.' (Sandling, 2021)

3: Practise, Followed by Feedback

A school needs to clearly define what they consider to be effective questioning and what the purpose of that questioning should be – for example, **to promote critical thinking and problem-solving,** encourage collaboration and further student understanding.

More than anything, the organisation provides regular and targeted opportunities for staff to come together and share experiences.

4: Practical Idea

Elaborate: When others reply to a question, a simple fix for the questioner is simply to ask others to elaborate on their answer, developing metacognition.

Evidence: Following another's answer, ask, 'What do you mean by this?' or 'Why is this important?'

Arguments For: some example prompts 1) What evidence can you find to support your position? 2) What are the main reasons why someone might disagree with your position? 3) Give me some examples of other people that share your position.

Arguments Against: A person can flip their questions when developing arguments against a topic. E.g. 'What conflicting evidence can you find to challenge someone's views of XYZ?'

5: Top Tip

1. Stay focused on creating a positive ethos using effective training. 2. Just like when teaching students, CPD programmes should encompass a **range of strategies**. 3. Provide people with opportunities share and discuss their experiences.

TOOLKIT TIPS

6: Activating Hard Thinking

1. Structuring: give staff a **sequence** of training tasks
2. Explaining: communicate ideas **clearly**
3. Questioning: using **dialogue** to promote flexible thinking
4. Interacting: **respond appropriately** to feedback
5. Embedding: giving staff tasks **reinforce** learning
6. Activating: helping staff to **plan**, **regulate** and **monitor** their learning

Fact

*Effective professional development requires the use of **regular** and **targeted** feedback …*

Guide To Questioning (McGill, 2023)

Chapter 9: Leadership Questioning

Forming better working relationships …

Critical friendships involve a dialogue between colleagues that helps to foster understanding and shared meaning.

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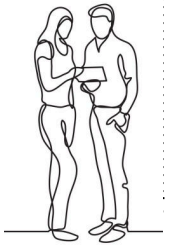


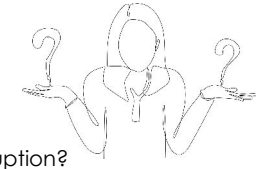
1: Forming Better Relationships

In this chapter, I explain how questioning and **feedback methods help teachers** to form better working relationships.

2: Developing Critical Friendships

At the core of **critical friendship is dialogue**, a very particular form of conversation involving the exchange of ideas and the search for shared meaning & common understanding (Swaffield, 2008)

3: Staff Survey



1. Do they **stick to the topic** in hand?
2. Does the discussion go round in circles?
3. Is disbelief suspended?
4. Do staff **listen to each other** without interruption?
5. Do they **respect** each other's viewpoints or do they pontificate?
6. Do they accept the **discipline** of collective problem-solving?
7. Do the participants have the **skills required** by the process?

To read 'Trust in teacher conversations' (Man Loon, 2018), scan this QR code

4: Trust is Transactional

'Trust in teacher conversations' (Man Loon, 2018) chose to research the single topic of 'trust' in the context of a teacher's conversation in professional learning; defined by 5 characteristics: 1) **Benevolence** towards each other 2) **Reliability** from peers 3) **Qualification** competence 4) **Honesty**; accepting responsibility and avoiding manipulation, and 5) **Openness**.

5: Try The Tuning Protocol

The tuning protocol (fine-tuning a piece of work) is a procedure for **structuring a presentation** and requesting assistance, reflection, dialogue or feedback about practice; designed specifically because it can be difficult to give **feedback diplomatically** or hear feedback and not become defensive.

6: Practical Idea

There are different models available. This one is particularly useful for teachers who work in the school, because it fits into a 10-20 minute window – perfect for people with very little time!

1. Presentation (estimated 3-5 minutes: The presenter – the one sharing a problem publicly – offers one or two key points to be addressed and sufficient information about their issue.

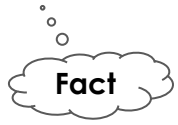
2. Clarifying questions (2-3 minutes): Only include any necessary non-evaluative questions about the presentation, avoiding any suggestion of judgement or advice – for example, closed questions that simply seek clarification and a yes/no response.

3. Individual writing/assessment (3-5 minutes): In silence, each individual writes down their immediate thoughts to generate (wide-ranging) ideas. People cannot ask any other questions and the presenter does not elaborate any further. The silence ensures everyone is focused on the solution.

4. Participant discussion (5+ minutes): The presenter cannot take part. Participants discuss using "I like this… I wonder if X has …"

5. Presenter reflection (3-5 minutes): The presenter now reflects on the group discussion or comments …

This process also works for student discussions to generate metacognition; how to listen effectively; how to pose pertinent questions



7: Top Tip

TOOLKIT TIPS

A moderator or facilitator is needed to ensure that students or team members **keep to the protocol** – this could be the teacher but it doesn't have to be.

Guide To Questioning (McGill, 2023)

Chapter 10: Academic Questioning

Embedding questioning rigour across the organisation …

How would you design a strategy around school improvement, underpinned by effective questioning?

@TeacherToolkit

30 seconds

1: Academic Questioning

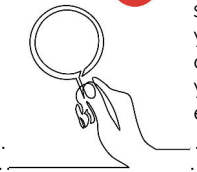
What would we need to do to instil a culture of professional **inquisitiveness across the organisation** and **what methodology** should we use for school improvement?

7: Research Questions

For teachers interested in **education research**, here are some thoughts for classroom-based research **projects**. 1) How many different types of questions do teachers pose in one lesson? 2) What is the average 'wait time' delay in your school classrooms? 3) What impact does having 'hands down' questions have on learning? 4) How do questions improve metacognition?

2: School Improvement Strategy

1. Establish a focus/team
2. Set goals
3. Identify priorities
4. Develop an action plan
5. Monitor progress
6. Evaluate outcomes



3: Imagine If

Who is driving the strategy? **Define** what you mean by outcomes! **Imagine if** you used the most effective interventions…

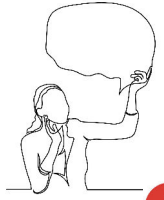
6: Miracle Questions

The miracle question technique can be used to **provide potential solution**(s):

1. If you were to wake up tomorrow and a miracle had occurred, making problem X completely resolved, what would be the first thing you would notice?
2. Imagine you have unlimited resources and support to tackle problem X, what steps would you take to overcome it?
3. If a highly successful teacher who had already overcome problem X were to give you advice, what do you think they would suggest?

4: Practical Idea

There are two questioning techniques that I'd like to share here. The **miracle question** evolves from the world of coaching and the **clarifying question** technique from the 'tuning protocol' process (chapter 9), an academic framework for developing critical thinking. **Imagine if** is a solution-focused therapy.



Imagine that a student is struggling with their behaviour. The teacher tries to have a rational and calm discussion about the situation. The teacher could then ask the student the miracle question: 'If I could wave a magic wand and **imagine if** this incident didn't happen, **describe to me** how you would feel. How would others respond to you?

The **clarifying question technique** is used to ask pithy questions to help to clarify understanding another person's problem. Part of the process is seeking a closed response – a 'yes' or a 'no' ideally. This improves your questioning techniques and encourages the other person to 'jump off the fence!"

5: Worked Example

You: "The boys never shut up!"
Me: "What, all the boys?
You: "No. It's just Ross, Ahmed and Sven."
Me: "What, these boys never shut up?"
You: "Well, on Monday mornings they are quiet, but on Friday afternoons they are a nightmare!"
Me: "**What are you doing** on Monday mornings?"

Instead of viewing school improvement as "an inch deep, stretching a mile wide", consider quality assurance with "an inch wide, stretching a mile deep" perspective …

Fact

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Bloomsbury Publisher

[Occasional Discounts]

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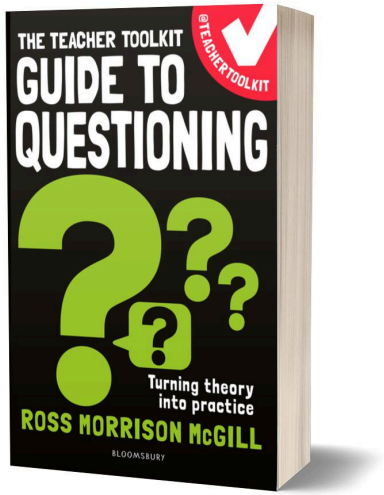

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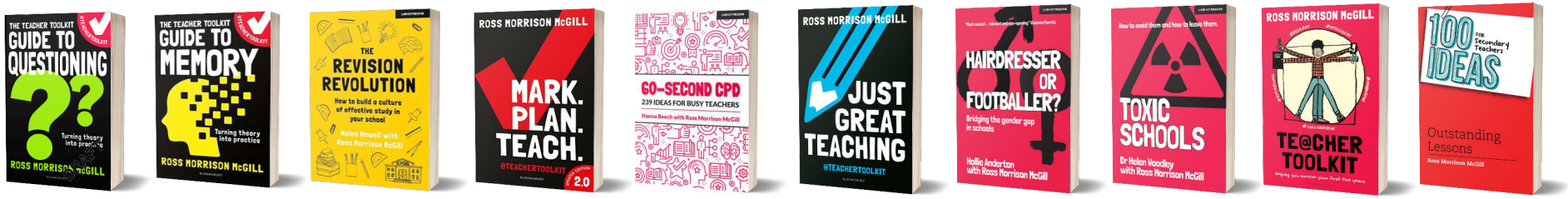

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