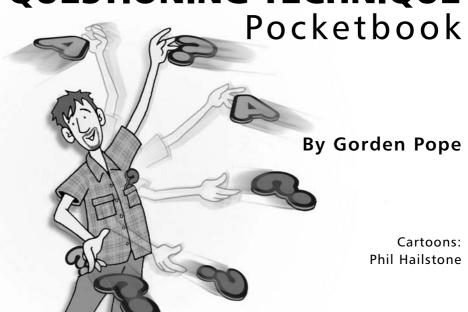
QUESTIONING TECHNIQUE



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Raising Questions The importance of questions, why ask them?; how do they stimulate learning?; cognitive conflict; ZPD; effective questioning; frameworks and classifications; Bloom original and revised; Gallagher and Ascher taxonomy; Sternberg model: from theory to practice



The Questioning Environment The right climate; setting the rules; fear of mistakes; overcoming the fear; mistakes as learning opportunities; the blame-free classroom; climate control; conflicting social norms; pupil passivity; 'I don't know' attitude; practice makes...; equalising quality and quantity; all aboard!; mind your language; praise effort not ability; the problem with praise; review



Framing Questions Which question?; planning; key questions; sequencing questions; extending and lifting; narrow to broad; open and closed; fishing and shooting; opening possibilities; can 1?; 5 Ws (and H); hinge questions; get emotional; use thinking words; analogy; fact first; big questions; rhetorical questions; thinking hats: Fermi questions: pitfalls



Delivering the Question It ain't what you do...; did everyone catch that?; do you see what I'm asking?; not just what, but when? eye to eye (or not); Wait Time 1; I'm thinking; internal and external processors; look no hands!; pose, pause pounce, bounce; think, pair, share; focus on question type; telegraphing; class brainstorm; all-student response systems; mini whiteboards; multi choice; buzz groups; pair checking; assertive questioning; bad habits



Responding to the Answer Feedback; ethos; understanding; characteristics of effective feedback; But...; goal, medal and mission; cognitive level of question; a dilemma; Wait Time 2; pupil's voice; teachers' voice; body language; preparing for the answer; incorrect, incomplete and muddled answers; pinpoint questions; focus and follow-up questions; pitfalls



Improving Your Practice Monitoring; you; pupils; reflection; HODs; subject leaders; SMT; suggested reading

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Analogy – same but different



Questions that ask pupils to identify similarities and differences between two or more concepts aim straight at higher order thinking and are highly effective in activating the cognitive system. Connections are made, patterns seen, and comparisons and contrasts identified. Try using analogies, ie:

- Explaining something unknown in terms of something known
- Explaining something unseen in terms of something seen
- · Explaining something unfamiliar in terms of something familiar

Ask your pupils to develop their own analogies. Young learners need explicit help with this, but by overt modelling you'll soon show how they work. Self-created analogies (as long as they are accurate) are more effective. A useful question to ask is 'How far is this analogy correct?'

Examples

- In History many pupils will make an analogy between conflict in the global arena and playground behaviour
- In Year 2 Music pupils offered: 'Moving by step is like walking up or down stairs' 'Glissando is like sliding down a slide'

Analogy examples



There are many ways to use analogy. You could:

- Use a comparison table to answer the question:
 What are the similarities and differences between the human eye and a camera?
- Use a Venn diagram to demonstrate: How is the brain like a muscle? How are they different?
- Ask questions about the analogy and then ask pupils to translate this into reality:
 If 'All the world's a stage', who are the actors?
- Ask questions about the reality, but get students to refer to the analogy in their answer: What does a good story opening do that a 'hors d'oeuvre' does?

Caution – No analogy is perfect and invalid comparisons can sometimes lead to misunderstanding. If young children think of electricity 'flowing' like water, this is not going to help when studying advanced physics.



Fact First



Fact First questions are good for checking that knowledge (memory) translates into understanding. Here's how to use them:

1. Take a fact question

- What is a Local Area Network?
- Who is known as 'the father of medicine'?
- Who are the 'Stolen Generations'?

2. Turn it into a statement

- A Local Area Network (LAN) is a computer network linking devices within a building or group of adjacent buildings
- Hippocrates was known as 'the father of medicine'
- The 'Stolen Generations' are the Australian Aboriginal children taken away from their families to be brought up in institutions or fostered out to white families

3. Create a new question

- A Local Area Network (LAN) is a computer network linking devices within a building or group of adjacent buildings. What might be the benefits of a LAN for a small organisation using fewer than five computers?
- Why is Hippocrates known as 'the father of medicine'?
- The 'Stolen Generations' are the Australian Aboriginal children taken away from their families. Why did the people who organised this think it was a good idea?

Big questions



Include 'big' questions in your teaching to stimulate curiosity and a spirit of enquiry. Big questions are the significant questions that get to the heart and essence of a topic. They can be current or enduring. They can uncover things we take for granted and raise awareness. They enable us to question values, beliefs and prejudices. Each subject will have its own and there are abundant cross-curricular concepts to be discussed.

- Where does creativity come from?
- What does it mean to be successful?
- What is art for?
- Why are there so many different types of insect?
- Are justice and the law the same thing?
- Should life be fair?
- How do you know the person next to you is alive?

Spend some time on the big questions regularly and your students will start asking the questions too.



Rhetorical questions



Rhetorical questions are not really questions at all – they are statements masquerading as questions. They are usually not meant to be answered; if they are, the intention is usually that the students agree with the teacher.

- Why do I bother?
- How many times do I have to tell you?
- What's the matter with you?
- Am I talking to myself?
- What time do you call this?
- Did I tell you it was going to be easy?
- Look at Janet's picture. Isn't it clever the way she's captured the reflection?

Notice that it's quite hard to find examples of positive rhetorical questions. As teachers, we should avoid them, shouldn't we?

Thinking hats



Although Edward de Bono's well known *Six Thinking Hats* is essentially a problem-solving tool, the coloured hats can be used as prompts to create a series of teacher questions.

Hat colour	Mode of thinking	Question prompt
White	Facts	What do you know about?
Red	Emotion	What do you feel about?
Green	Creative	What new ideas can you think of /about?
Yellow	Positive	What are the good things about?
Black	Cautious	What do we need to be careful about?
Blue	Process thinking	How should we go about this?

About the author

Gorden Pope



Gorden specialises in provision for able, gifted and talented students, and in the development of thinking skills and creativity. He believes that the key to pupils' success is having enthusiastic, skilled and confident teachers. Gorden began teaching in the late '80s, having studied for his BEd (Hons) as a mature student. After 10 years in a variety of primary schools he moved to Local Authority advisory work in Inner London working with primary and secondary schools.

He now runs his own company providing consultancy to headteachers and leadership teams, and running training sessions in schools, teachers' centres and at conferences. He currently divides his time between classroom teaching and consultancy/training. Gorden recently completed his MEd researching the extent to which professional development planning contributes to school improvement.

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