



EFFECTIVE QUESTIONING

Chaucer School 2017

Question

noun: question; plural noun: questions
a sentence worded or expressed so as to elicit information.

The purpose of effective questioning

Questions can be asked in the classroom or teaching space for a number of reasons, the most common of which are

- to interest, engage and challenge pupils;
- to check on prior knowledge and understanding;
- to stimulate recall, mobilising existing knowledge and experience in order to create new understanding and meaning;
- to focus pupils' thinking on key concepts and issues;
- to help pupils to extend their thinking from the concrete and factual to the analytical and evaluative;
- to lead pupils through a planned sequence which progressively establishes key understandings;
- to promote reasoning, problem solving, evaluation and the formulation of hypotheses;
- to promote pupils' thinking about the way they have learned.

The kind of question asked will depend on the reason for asking it. Questions can be classified as either 'open' or 'closed'.

Closed questions.

These types of question usually have one clear answer, and are useful to **check students' understanding** during explanations and in recap sessions. If you want to check recall, then you will probably ask a fairly closed question, for example 'What are the five components of skill related fitness' or 'What do we call this type of training?' These types of questions might be used to check knowledge of basic facts and to identify misconceptions at an early stage.

Open questions

If you want to help pupils develop their **higher-order thinking skills**, it would be more appropriate to ask questions that allow pupils to give a variety of acceptable responses, depending on their **justification** for doing so. During class discussions and reviews asking open questions will allow students the opportunity to **demonstrate a deeper understanding** of the content or skill being taught for example 'Which of these four training types might be most useful in achieving the athlete's goals?', 'Given all the conflicting arguments, which component is the most important for a tennis player?'.

Research emphasises the importance of using open, higher-level questions to develop pupils' higher-order thinking skills. There needs to be a balance between open and closed questions, depending on the topic and objectives for the lesson. A closed question, such as 'What is the next number in the sequence?' can be extended by a follow-up question, such as 'How did you work that out?'

The research also shows that effective teachers use a greater number of higher-order questions and open questions than less effective teachers.

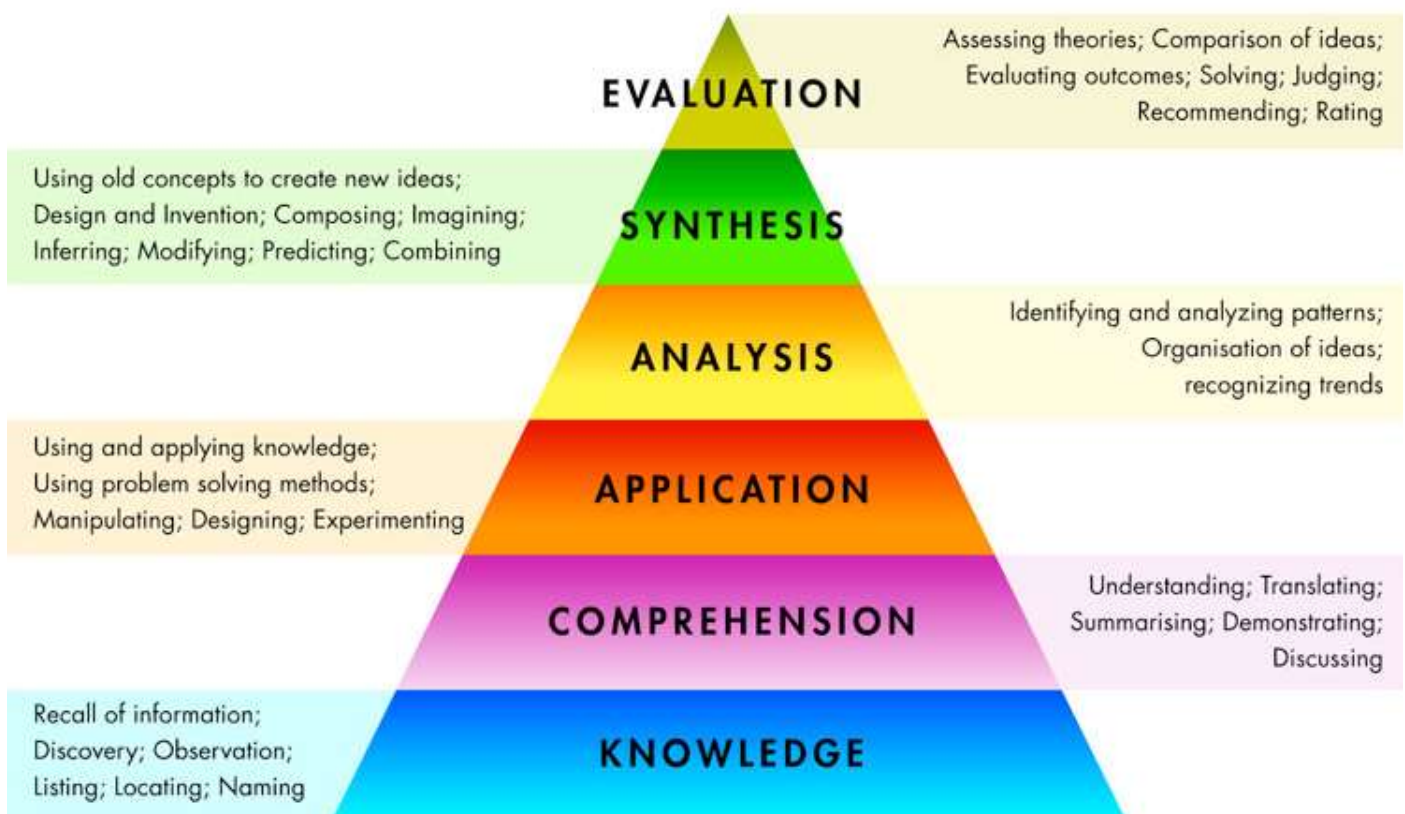
How do questions develop pupils' cognitive abilities?

Lower-level questions usually demand factual, descriptive answers that are relatively easy to give. Higher-level questions require more sophisticated thinking from pupils; they are more complex and more difficult to answer. Higher-level questions are central to pupils' cognitive development, and research evidence suggests that pupils' levels of achievement can be increased by regular access to higher-order thinking.

When you are planning higher-level questions, you will find it useful to use Bloom's taxonomy of educational objectives. Bloom's taxonomy is a classification of levels of intellectual behaviour important in learning. The taxonomy classifies cognitive learning into six levels of complexity and abstraction

1. Knowledge – pupils should: describe; identify; recall.
2. Comprehension – pupils should: translate; review; report; restate.
3. Application – pupils should: interpret; predict; show how; solve; try in a new context.
4. Analysis – pupils should: explain; infer; analyse; question; test; criticise.
5. Synthesis – pupils should: design; create; arrange; organise; construct.
6. Evaluation – pupils should: assess; compare and contrast; appraise; argue; select.

B L O O M S T A X O N O M Y



On this scale, knowledge is the lowest-order thinking skill and evaluation is the highest. It is worth pointing out that, in most cases, pupils will need to be able to analyse, synthesise and evaluate if they are to attain grade 4 or 5 on the new national curriculum leveling system.

Planning questions

It is vitally important that questions are planned to facilitate rapid progress during lessons. The quality of the questions being asked will correlate directly to the amount of progress being made in lesson and within student workbooks over time.

Looking at the text below it is possible to answer lower level questions successfully (questions 1, 2 and 3) without the need to understand the material. However questions 4 and 5 are impossible to answer without a deeper understanding of the context being taught.

“The flit stratted the blegdal. Stellbilly, the blegdal crated back. It druppued on the crankel, and frellated trenkfully.”

1. What did the flit do? – ***Stratted***
2. How did the blegdal crate back? ***Stellbilly.***
3. What did it do next, and how did it feel at the end. ***Druppued on the crankel, frellated trenkfully.***
4. Was the flit right to stret the blegdal?
5. How effective was the blegdal’s response?

Research into effective questioning. (Borich 1996; Muijs and Reynolds 2001; Morgan and Saxton 1994; Wragg and Brown 2001)

Questioning is most effective when it allows pupils to engage with the learning process by actively composing responses. Research suggests that lessons where questioning is effective are likely to have the following characteristics

- **Questions are planned** and closely linked to the desired lesson outcomes.
- The learning of basic skills is enhanced by frequent questions following **presentation of new information** that has been broken down into small steps. Each step should be followed by guided practice that provides opportunities for pupils to consolidate what they have learned and that allows teachers to check understanding.
- Closed questions are used to check factual understanding and recall.
- Open questions predominate.
- Sequences of **questions are planned** so that the cognitive level increases as the questions go on. This ensures that pupils are led to answer questions which demand increasingly higher-order thinking skills but are supported on the way by questions which require less sophisticated thinking skills.
- Pupils have opportunities to ask their own questions and seek their own answers. They are encouraged to provide feedback to each other.

- The **classroom climate** is one where pupils feel **secure** enough to take risks, be tentative and make mistakes.

How do questions engage pupils and promote responses?

It doesn't matter how good and well-structured your questions are if your pupils do not respond. This can be a problem with **shy pupils** or with pupils **who are not very interested in school or engaged** with learning.

There are a number of key points to remember when encouraging pupil response.

Pupil response is enhanced when;

- there is a classroom climate in which pupils feel safe and know they will not be criticised or ridiculed if they give a wrong answer;
- scaffolding and prompts are provided to give pupils confidence to try an answer;
- there is a 'no-hands' approach to answering, where you choose the respondent rather than have them volunteer;
- 'wait/response time' is provided before an answer is required. The research suggests that 3 seconds is about right for most questions, with the proviso that more complex questions may need a longer wait time.

Allowing appropriate response time

It is vital that teachers give students enough time to formulate a response to a question. Thinking time should be provided to allow students to formulate better responses to questioning. The use of mini whiteboards during questioning is one way of allowing students to have more 'take-up time'.