Effective Questioning

What is Effective Questioning?
Effective questioning is a key tool in Assessment for Learning strategies and should be planned such that a range of responses are anticipated. Good questions lead the learner on a journey in which there is a balance between content (who, what, when) and process (how, why).

Why is Effective Questioning Important?
Effective questioning is a key aspect of the teaching and learning process, as the kinds of questions we ask determine the level of thinking we develop. Lessons that incorporate questions are more effective in raising attainment than lessons which do not. Good questioning requires time for pupils to think and respond, and the more learners are actively engaged in learning, the less scope there is to switch off.

Asking well structured/thought-out questions has a number of positive benefits within the classroom including:
- Directing students’ thinking in a particular way
- Encouraging learners to think and actively construct their own schemas
- Structuring or guiding the learning of a task
- Allowing teachers to assess the learning of their students both in terms of what they bring to the lesson and what they are taking from the lesson
- Identifying gaps and/or misconceptions in students’ learning
- Providing immediate insight into where the learning of pupils has developed to
- Helps students clarify their understanding of a topic
- Motivating students’ interest and engagement in a topic
- Providing opportunities for student learning through discussion

What are the Characteristics of Effective Questioning?
Good questions are purposeful and promote learning. Teachers should anticipate where mistakes may arise and have probing questions or examples ready to shape learning. How teachers respond to erroneous answers is critical in maintaining trust and developing curiosity. Mistakes should be experienced genuinely as learning opportunities.
Types of Questions

- **Closed questions** are useful in checking pupils’ memory and recall of facts. Typically there is only one ‘right’ answer.
  
  *Who discovered penicillin? When was the battle of Flodden? What are the characteristics of living things?*
  
  However, closed questions can invite a game of ‘guess what the teacher is thinking’. Wrong responses risk humiliation in a public arena and can create ‘performance anxiety’ which reduces the willingness of some pupils to contribute ideas.

- **Open questions** have more than one answer and typically promote higher order thinking skills. When well designed, they enrich the learning experience by encouraging links to be made by the learner from previous understanding to the current situation. They can also enable teachers to check pupils’ knowledge and understanding, to assess learners’ ability to apply acquired knowledge, and generalise it to new contexts boosting problem solving skills and developing creativity.
  
  *What do you remember about Stig? What do you think will happen next? How are you going to remember how to spell ‘friend’? Why might some birds mate for life? What are the pros and cons of planning an essay?*

Bloom’s Taxonomy

There is a hierarchy of types of learning in the classroom, with the most in depth at the top, therefore questions can be planned to develop deeper learning:

- **Remembering**
  - Who, what, why, where, how?

- **Understanding**
  - What are the parts of...? Features of...? Classify according to.....?

- **Applying**
  - How is .... an example of? How is ... related to?

- **Analysing**
  - What would infer from? What ideas can you add to....? How would you design....? Do you agree that...?

- **Evaluating**
  - How could you design/invent a new way to...?

- **Creating**
  - Can you explain the writer’s ideas about...?
Strategies for Effective Questioning

- Ask learners in twos or threes what they would like to know about the topic or subject first to stimulate interest and assess how much the pupils already know about it.
- Ask pupils to discuss their answers first; this enables shy pupils to contribute more and for many pupils it is much more comfortable to say ‘we thought’ than ‘I think’.
- Ask a thought provoking question at the start of the lesson to crystallize a key concept and engage learners – this might be asked again at the end of the lesson or topic.
- Ask the rest of the class to evaluate a response – what does everyone else think?

This helps to enrich the answer and may allow the initial responder to reconsider their answer in light of other ideas.
- Allow thinking time and then allow people to change their minds or have another go. Do you still think ...? This helps to keep pupils thinking and puzzling about what they really think or believe, especially where new information is revealed – What would happen if ....?
- Ensure a balance between closed and open questions as well as content and process related questions. A simple first question if well prepared can lead into a journey of true discovery.
- Develop a stock of good follow up questions which might be quite simple but, as far as possible, be clear where the question is leading. Be prepared to be flexible and inclusive about the route – What else? How come? What if? How do think/feel/ know? Are examples that can extend simplistic responses.
- Show appreciation for any answer and give appropriate praise for high quality responses.
- Wrong answers should not be left uncorrected, but followed up with additional related questions, or allow “wait time” to provide students with an opportunity to rethink answers.
- Rephrase questions to simplify them or ask them in another way.

<table>
<thead>
<tr>
<th>Maximise Responses by...</th>
<th>Minimise Responses by...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asking open questions that begin with words like “What if...” “Explain,” “Analyse” “Create” and “compare and contrast” etc.</td>
<td>Asking closed questions that have a “yes” or “no” response or questions that simply require direct recall of definitions and/or information.</td>
</tr>
<tr>
<td>Increasing “wait time” after you pose a question, to allow students more time to process the question in their minds.</td>
<td>Calling on students directly after you pose a question and calling on a student before you even ask the question.</td>
</tr>
<tr>
<td>Asking students to elaborate on their answers and asking students “why?”.</td>
<td>Telling a student their answer is wrong and not asking them to think about why it is wrong.</td>
</tr>
<tr>
<td>Allow opportunities for students to pose questions amongst themselves.</td>
<td>Straight lecture without student interaction.</td>
</tr>
<tr>
<td>Providing opportunities that challenge students’ original conceptual understandings.</td>
<td>Providing opportunities that do not encourage creative and critical thinking.</td>
</tr>
<tr>
<td>Encouraging students to work through their decision making process, even if it brings frustration and makes them leave their comfort zone of learning.</td>
<td>Giving students direct answers to their questions without allowing them to think through the decision making process.</td>
</tr>
</tbody>
</table>

Overview

Effective questioning is a key aspect of the teaching and learning process. How questions are fielded by teachers sets the learning climate and enables pupils’ thinking to be revised, affirmed and extended in a cost effective way which also supports positive relationships between teachers and learners.

For further information:


www.ndt-ed.org/TeachingResources/ClassroomTips/

Effective_Questioning.htm


Educational Psychology Service
West Lothian Civic Centre
Howden South Road
Livingston
EH54 6FF
01506 283130

http://www.westlothian.gov.uk/education/ and click on Educational Psychology Service