

## EDUBYTE 12, EFFECTIVE QUESTIONING FOR HIGHER ORDER THINKING



Judith S. Nappi, a US based academic and former school principal suggests that questioning in the classroom is *“an important component of the teaching/learning process and is embedded in quality instruction and strategic thinking.”*

One study (Black) suggests that ‘teachers ask about 300 to 400 questions teachers ask in their classrooms a day.

- Most of these (60-80%) require recall of information. These require learners to restate facts without thinking much about what has been learned.
- Fewer (20-40%) encourage higher order thinking. These are questions that extend the functioning of a learner’s brain so that they think *‘on a level higher than memorizing facts.’* (Thomas & Thorne)
- It is also true that in some classrooms very few questions are asked, and therefore, learners are not adequately engaged or stimulated to think.

Cotton (2001) suggests that *“instruction which includes posing questions is more effective in producing achievement gains than instruction carried out without questioning students.”*

### Types of classroom questions

Primarily, there are two categories of questions that may be used in the classroom. These are **lower order or lower cognitive questions** and **higher order or higher cognitive questions**. Lower order questions or closed questions test recall and memory. These types of questions require learners to simply remember information or facts. Some examples are:

- When did the Soweto riots take place?
- When did Nelson Mandela become a President of South Africa?
- What is the name of the South African national rugby team?
- List the provinces of South Africa
- Durban is a city in KZN. Answer Yes or No

These questions have a space in the classroom, but they do not encourage learners to broaden their thinking or knowledge

## So, what is effective questioning in the classroom?

Effective questions are “*well-considered and challenging.*” (Ellie Collier, 2018). While recall questions are important (learners should remember what has been learned), effective questioning is about focusing on building **higher order questions** into your teaching practice. These kinds of questions:

- Challenge learners and stretch them to think beyond the obvious, encouraging them to process information.
- Develops critical and analytical skills, confidence and independence.
- Encourage problem solving and decision making skills.
- Take learners beyond the recall of facts, to asking the ‘why’, ‘how’, ‘what if’ types of questions.
- Encourage learners to form their own opinion or bring their own perspective on any issue or subject under discussion.
- Encourage learners to develop the skills to access, analyse and evaluate information and ask higher order questions themselves.

### Effective questioning helps the teacher to:

- Assess if learners understand the content
- Make connections between prior knowledge and the new content
- Make the lesson more interesting and engaging
- Encourage active learner participation in the lesson
- Encourage curiosity in the learners and inspire them to pursue knowledge independently

### Some tips for teachers to apply effective questioning to a lesson based on the reading of a story.

Be prepared before the lesson! Have a good mix in your bag of questions, one or two from lower order questions, and more from the higher order category.

- Instead of asking too many ‘who’, ‘what’, ‘when’ lower order questions, ask your learners to **suggest a different ending to the story.**
- If a character in the story is faced with a problem, ask them to **suggest a solution to the problem.**
- You may ask your learners to give their own **opinion about a particular issue discussed in the story**
- You may ask them to **analyse a character** in the story
- Ask them to tell the part of the story they enjoyed the most and **why they enjoyed it.**
- Ask them if they have ever been in the same situation that the main character was in. **How did it feel?**

***This is an open source educational resource drafted by Thandi Khumalo from Social Innovations. It draws from the sources listed below. For more EduBytes visit [www.socialinnovations.co.za](http://www.socialinnovations.co.za)***

Judy S. Nappi: The Importance of Questioning in Developing Critical Thinking Skills

Kathleen Cotton: Classroom Questioning

Black, 2001; Goodman & Berntson, 2000;

Wilensky, 1985

Alice Thomas and Glenda Thorne, Reading Rockets

(Ellie Collier, 2018)

(Jonathan Doherty, 2017)