

# TRAINING 101

## The Art of Questioning

How to ask to get the best learning.

By Ed Hootstein

Questioning is the heart and soul of training—the most widely used instructional strategy to facilitate learning. Questioning is the essence of effective teaching because of the numerous purposes it serves, such as motivating learners intrinsically, assessing knowledge and skills, and reviewing content.

A body of evidence demonstrates that appropriate questions, asked skillfully, contribute to significant improvements in learning. There are different

questioning techniques and strategies, as well as plans with individual questions arranged in patterns to achieve all of the objectives.

### Questioning techniques

The questioning techniques that follow correlate positively with learning gains.

**Phrase questions simply and clearly.** Use words that learners understand easily. Avoid clutter (additional questions or explanations).

*Appropriate:* “What are adult learners’ needs?” *Too much clutter:* “Adults need certain things to succeed in classrooms to function effectively. What are those needs that help them become more successful learners in classrooms and help them function better?”

*Pause.* Ask a question, and pause three to five seconds before calling on a participant. Waiting gives learners time to think things through, which leads to more participation and better responses. Pausing—rather than rapid-fire drill—contributes to an environment of learning discussion.

If possible, find part of the answer that’s correct and reinforce it. *Trainer:* “Why might coins no longer be necessary?” *Learner:* “People don’t like the weight in their pockets.” *Trainer:* “Good thinking. Coins are heavier than paper, but why might they become obsolete?”

Probe learners’ answers to help them clarify ideas, support a point of view, or extend their thinking. Trainers develop their own repertoire of questions to move learners toward deep understanding of concepts, issues, and situations. Examples:

- “What makes you think that...?”
- “Are you able to be more specific about...?”
- “Can you tell me more about...?”
- “What do you mean by...?”

*Trainer:* “What is patriotism?” *Learner 1:* “Using flags and singing an anthem.” *Learner 2:* “Using symbols for the country.” *Trainer:* “Those are interesting ways of looking at patriotism. Can you tell me more about the concept of patriotism?”

In that example, the trainer acknowledges the learners’ attempts and probes for a deeper understanding. An alternative is probing to help learners connect their answers to something that occurred earlier. Refocus participants by connecting their answers to previously discussed subject matter. *Trainer:*

“What are important issues in providing feedback to learners about their answers?” (No response.) *Trainer:* “Do you remember that earlier we discussed the importance of informative feedback?”

*Repeat the question.* State the question again; perhaps some participants didn’t hear it.

*Rephrase the question.* Repeat the question with a slight variation—for example, “In other words...”

*Restructure the question.* Modify it to be less complex, make more sense, or be more complete. *Trainer:* “What should be incorporated into your planning process before a lesson actually begins, (pause) Lewis?” *Learner:* “I don’t know.” *Trainer:* “How would you gain and maintain learner attention?” *Learner:* “A motivational statement or question.”

*Ask closed-ended and open-ended questions.* Closed-ended questions limit learners’ answers to one or a few answers, requiring only simple recall of information. Then the answer is judged correct or incorrect. Examples: “What is reinforcement?” “When did B.F. Skinner coin the term, *reinforcement*?”

In contrast, an open-ended question encourages a broader range of answers. Learners use such thought processes as analyzing, problem solving, predicting, and evaluating. Example: “Why might negative reinforcement eliminate inappropriate behaviors?”

*Paraphrase learners’ comments.* Restate in your own words what a participant has said to check for mutual understanding between them and you.

### Questioning strategies

There’s no simple formula for arranging questions in meaningful sequences. A specific type of sequence depends on the learning goals and content, and on learners’ abilities.

You can begin with high cognitive-level questions (such as analysis and synthesis) and proceed to questions

requiring simple recall (comprehension). Such a sequence can include possible applications of an idea, followed by probing for details about how those applications might work.

In contrast, a sequence of low-level followed by high-level questions can direct learners’ attention to important facts and stimulate them to integrate facts and draw conclusions. The following strategies include types of sequences and their purposes:

*Extending.* A sequence of questions at the same cognitive level on the same topic. Extending often occurs in rapid-fire drills. Be certain that learners know the necessary facts for a given topic.

*Extending and lifting.* A sequence of questions at the same level followed by a leap to a higher level. Ensure that learners know the facts before asking challenging questions.

*Funneling.* High-level questions narrowed down to recall. Generate interest, and make certain that learners know all of the details.

*Step-by-step up.* A sequence of questions moving from recall to higher levels in a systematic way. Stimulate learners’ thinking by gradually increasing the complexity of the questions.

- Example of Recall: “Can you remember...?”
- Example of Knowledge: “How are...?”
- Example of Application: “How could aspects of...?”
- Example of Analysis: “Why...?”
- Example of Synthesis: “If you had unlimited funds, what...?”

Design and ask questions to meet specific outcomes. The impact of questions is well documented by research, though most decisions seem intuitive. As you plan, attend to the ways to frame and sequence questions and you’ll see improved learning.

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