

Any Questions?

A Look at Questioning Techniques in the Classroom

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The instructor finished the point he was trying to make, looked out at sixteen pairs of eyes and snapped "Any Questions?" Sixteen pairs of eyes stared back in silence as the instructor started his next point.

At one time or another, all of us involved in training have been in the above situation. As the instructor, we can only draw two conclusions from the silence: the students have a perfect understanding of everything we've said or they don't understand enough to ask any questions. In the interest of time and to keep on schedule, we move on.

In a training situation, too many times the burden of asking questions is placed on the student. This paper is an attempt to explore the various ways that we as instructors can place the burden on ourselves and ask questions instead of asking for questions. First, we will take a look at a commonly used five-step method of teaching. Next, we will discuss the types of questions an instructor can ask based on the answer we want to solicit. We will also discuss some questioning styles and techniques to use in various situations. Finally, we will see how questions can be used in each of the five steps of our teaching methods.

The goal of this paper is for you to discover how we as instructors can enhance the learning environment if we ask questions rather than ask for questions.

THE FIVE STEP PROCESS

Motivation

Students come to training classes for many reasons. Some come to learn, others come to observe, still others come because they were told to. Whatever the reason, it is the instructor's job to motivate the student to learn. Different things motivate different people and sometimes it is a challenge to find what works.

Communication

Once we have motivated the students to learn, we must communicate the information to them. There are various methods of communication from which we can choose. They are as follows:

State It: This is the classic lecturing style of communication.

Use Examples: This method helps the student relate the learning to familiar situations.

Demonstrate it: This method lets the student actually see the learning in practice.

Make it Visible: Using flip charts, handouts, 35mm slides, and other visual aids provides a welcome break in the presentation provided they are not overdone.

Use the Group: This method of communication uses the students to provide input for discussions.

Use an Expert: Although the expert you use may incorporate any of the above methods, this method may add more credibility to the presentation.

Test for Understanding

Once the information has been presented, the students must be tested to see if they understood what was communicated. Testing for understanding allows us to determine if our presentation level is too basic or advanced. It also gives us an indication to speed up, slow down, move on, or review what was just presented.

Practice

For the students to be successful, they must practice their newly learned skills. Practice comes in many forms but hands on exercises, where the student can actually use the learned skill, is the best.

Feedback

Students can practice all they want, but if they are practicing the skill incorrectly, they will not be successful. Therefore, the instructor must provide feedback to the student that tells them they are doing things wrong or confirmation that they are doing things right.

Although the above steps are listed in an order, it is important to understand that these steps are to be done on

an ongoing basis. Motivation is not done once and then forgotten, we must continue to motivate the student during the entire learning process. More than one method of communication can be used at the same time, and consider using all methods during the life of a class. Testing for understanding should be done frequently to insure that learning is progressing.

QUESTIONS AND ANSWERS

Before asking questions of your students, it may be a good idea to plan out what questions to ask. It sometimes is easier to formulate questions if we think about what type of answer we want to solicit. The type of answers may come from the following list:

- Nod of head, Raise hand
- Facts, Figures, Names
- Yes/No verification
- Yes/No opinion
- Short answer information
- Short answer opinion
- Detailed explanation
- Argument with support and conclusions
- Summary or evaluation
- Value Judgment

Once we decide on the type of answer we want, we can formulate the type of question to ask. A question can be open, closed, or rhetorical. An open question is a question that allows the student freedom to answer in any way he chooses, and for any length of time. A closed question asks the student for specific information with no freedom to elaborate. Rhetorical questions are questions that are not meant to be answered. They can be used to introduce a new topic or bridge between two topics. One of the pitfalls of a rhetorical question is that someone may try to answer it.

A question can also be theoretical, application, or opinion in nature. A theoretical question may ask the student to answer based on certain bits of information, to draw from their prior learning and formulate a theory on how things should work. A question that is application in form, may ask the student to tell how things actually do work. An opinion question simply solicits a students opinion on a topic.

Based on this, we can ask an open application question, a closed theoretical question, an open opinion question, a rhetorical theoretical question, etc.

Thus, to formulate a question, consider the answer. If you want a Yes/No verification answer, ask a closed application.

If you are looking for a detailed explanation, ask an open theoretical question. For a student to give a value judgment, he would need to be asked an open opinion question.

QUESTIONING STYLES

You may want to ask several questions, one right after the other. If you do this, here are a couple of techniques you may want to try.

Extending: Asking the same type of question and looking for the same type of answer. This may be good if you want to do a brief review of earlier material.

Step-by-Step Up: Ask initially easy question, gradually getting harder with each one. This may be good if you want to find out what knowledge level a student is at.

Step-by-Step Down: Same as above, but start with hard question and graduate to easy question.

Funneling: Start with very general open questions then gradually change to more specific closed questions. This style may be useful when introducing a new topic.

Sowing and Reaping: Start by asking specific closed questions, progress to more open questions, then go back to closed questions.

PUTTING IT TOGETHER

Now let's take a look at how we can use question in each of the five steps of our learning process.

Motivation

Rhetorical type questions that make the student think about deficiencies and how to overcome them may be useful for motivation. "Have you ever wanted to do such and such, but were not able to because of so and so?" for example. Try the "Extending" style and ask the same type of rhetorical questions to gain interest in the subject.

Another method of generating motivation that has worked for me is to ask an open application question. For example you may ask, "If you knew..., how would you use it?" This type of question will help show the student the "pay-off" of their learning, and because it is their idea, the pay-off is of interest to them. Another reason this is a good type of

question to use is because it allows you to restructure your presentation to incorporate examples and comments that are of interest to the students. Doing so may help to maintain motivation and keep the pay-off in the students' minds.

Sometimes just asking "Why are you here?" or "What would you like to get out of this?" may help in motivation. I have often done this and wrote the students responses on a flip chart and then posted the flip chart pages on the walls of the room. It allows me to, at any point, point to a response and use it as a motivational tool.

Communication

Many types of questions can be used to communicate information to students. Rhetorical theoretical questions can be used to introduce material or as a transition between topics. Closed application questions that ask for short answer or facts can be used to summarize a lesson.

I like the "Use the Group" method of communication. With this method, open questions of any type can be used to direct the discussion or keep it moving. You may want to try the "Funneling" style of questioning when using the group. Start with open questions that ask for general answers. Then, as the group comes up with several ideas, choose the idea you want to elaborate on and ask questions that require a more focused or detailed answer. Then move to the more structured "State It" method of communication and complete the transfer of information.

Test for Understanding

This is where it gets very easy to ask "Any Questions?" If there is no reply, we conclude that the students understood what we told them. Try to stay away from this, rather ask the students some questions to see if they understood. Almost any questions you ask will test for some level of understanding. The "Step-by-Step Up" style of questioning is very useful in determining the level of understanding the students have.

Practice

Most practice of a new skill comes in the form of hands-on exercises that the students can perform. However, if you ask your students a few questions just prior to the exercise, they may be more successful in their practice. For example, if the students are to practice a new skill or set of skills, a few closed application questions that ask for facts or explanations may help them think through the practice session before starting. You may start with "In this practice session you will do..., what is the first thing you should try?", "What next?", "What is the important

information you must remember?", and use an Extending or Funneling questioning style.

Feedback

You usually do not think of providing feedback by asking questions, but you can effectively use questions to set up feedback, and reinforce a student's progress. For example, in a technical class, you normally get a group of people with a wide range of knowledge. If you want to give positive feedback to one of the slower students, you may ask him a simple closed question you know he can answer, and then praise him for the correct answer. More difficult questions that require more detailed answers can be asked of students who are faster and require more of a challenge. In general, ask questions that are at the level of the students so you can reward them with positive feedback and encourage them to strive for more.

CONCLUSION

The goal of this paper was to discuss how we as instructors can enhance the learning process by the types of questions we ask. Firstly, we discussed a commonly used five-step method of teaching: Motivation, Communication, Test for Understanding, Practice, and Feedback. Next, we saw examples of different types of answers a student can give and different types of questions we can ask. Remember, to formulate a question, consider what type of response you want from the student. Lastly, we saw examples of how asking questions fit into each the five steps of our teaching method. Do not limit yourself to using questions in only one of the steps.

Students will benefit more from a training situation if they feel they have an active part in the learning process. One way we can get students involved and make them feel they have contributed is to ask questions in all areas of the learning process. Try it. It has worked for me and I believe it will work for you.