# **Explore the Techniques and Strategies of Classroom Questions and Answers**

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**Abstract:** As an important part of teaching, classroom question-and-answer is a powerful means to improve classroom efficiency and test teaching effect. In teaching, classroom questions and answers can effectively inspire students to think, connect knowledge, and improve the connotation and depth of teaching. Based on the practical experience of classroom teaching, in order to better explore the questions and answers in the classroom, this paper mainly through case analysis and question exploration, on the basis of constructivism, to improve the quality of classroom questions to explain, and draw a conclusion on how to ask questions effectively.

# Why Do We Ask Questions in Class

As an important part of teaching, classroom question-and-answer is a powerful means to improve classroom efficiency and test teaching effect. In teaching, classroom questions and answers can effectively inspire students to think, connect knowledge, and improve the connotation and depth of teaching. For example, if the required knowledge is compared to the destination, the classroom question and answer is the map to the destination, through the question and answer to find the way, and choose the most convenient way, and ultimately the path to the destination into personal experience.

Of course, all classroom questions are purposeful and targeted, but the timing of the questions, the method of the questions, and even whether the current questions need to be asked are very effective ways to test a classroom question. Therefore, in the classroom teaching, after the teaching and learning time is allocated according to the proportion, in the teacher's teaching process, the classroom questions need to be very accurate efficiency calculation. What is the effective classroom question, should become the teacher teaching deep discussion question.

### What Is Effective Classroom Questions

The essence of classroom learning is the process of construction. In 2001, China started the eighth curriculum reform. After more than ten years of accumulation and preparation, we have reached the critical point of classroom teaching. That is, our class is going from "teaching" to "learning". So what is learning hall? Learning here does not mean "students", but "learning". Therefore, to analyze the process of classroom questions and answers, let's first look at what kind of process learning is. It explains what learning is. In ponds, there was a frog and a fish, as a frog of amphibians, often have the opportunity to look at the shore of the boundless universe, fish in the knowledge about the shore are derived from the mouth of the frog, one day, the frog came back from the shore, excitedly told he saw a cow, the fish began to plead with the frog to he describe the long what kind, the frog said to describe the body of the cow is very thick. It had four legs below, a tail, and two pointed horns on its head. It ate grass, and the image of a cow slowly came to the fish's mind. It was a fish cow. This parable of constructivism gives us many inspirations. The core learning is a construction process based on students' experience and knowledge.

It can be seen that if we only indoctrinate knowledge in the classroom, students will get a superficial fragmentary unreal understanding, and over time, an unreal land world will emerge in the mind of the fish. Not only fish and cattle, but also fish and birds, and so on, and its advent broke the beginning of indoctrination. Some educators point out that changing a declarative sentence into a question often means the beginning of thinking.

Imagine that if the fish started asking questions about the appearance of the cow in detail, the frog would make an analogy with the aquatic animal that most closely resembles the cow, and construct the shape of the cow in the fish's mind. The cow in the fish's mind is infinitely close to the real cow

As bruner says, the teaching process is an ongoing activity that asks questions and solves them. And this problem is often not a teacher's problem, but a student's problem. Learning is the process of asking and answering questions. After the reform of the new curriculum, the appearance of the teacher in a word has been greatly improved. Today, it is rarely seen that the teacher performs a one-man show in class. However, this does not mean that the students are really thinking, and sometimes the question and answer can be a kind of indoctrination in disguise.

What do our class questions and answers often look like? A teacher once did a study to look at one of the problems. "PI, PI is a fixed number. Remember how you got PI in your math class? Write it down briefly." One of the full marks answered: "we found a lot of round objects, and then we took a piece of inelastic rope, put a circle around the round object, marked the rope, then spread the rope on a ruler, measured the circumference of the circle, and then measured its diameter. After several measurements, the result is always about 3. Most of the answers were "the teacher told us to memorize PI to be 3.14" or "the teacher asked us what PI was and I saw it on the book was 3.14". The test is more about the teacher than the students. Through the students' answers, we can roughly imagine how the teacher will teach in class. The student said that the teacher could tell by only asking us to recite such words. This reflects the indoctrination of the classroom, in which the teacher directly tells the student what he needs to know. From the students' answers, we can see that there are questions and answers in the class. But such questions and answers do not inspire students to think at all. Except the class is a little more lively, and the effect is the same as indoctrination. Professor maier in the United Kingdom thinks that such a structure can easily become a student guessing what the teacher wants the answer to be. In other words, the teacher is the authority, and there are answers waiting for the students to guess. Compare it to a verbal tennis match. The teacher throw questions. The students answered the questions correctly. The teacher asks questions. The student replied. Teachers accept opposition or develop answers. The teacher went on asking questions. The student continued to answer. This kind of question reflects a drawback that is the efficiency of the question is low.

#### How to design effective questions

In teaching, we classify knowledge into four dimensions: skills, facts, concepts and principles. Corresponding different test study results, such as skilled shall for the purpose of performance skills, one to describe the fact that, for the purpose of concept model to identify the concept for the purpose, principle model based on the theory for the purpose of application, so each kind of question of different emphasis should use of knowledge, like most of the teachers' questions begin with "why" or "what is". Then this kind of question is not appropriate for skill-based knowledge. In the same way, in addition to identifying knowledge types, we should also give consideration to the characteristics of subjects when asking questions. Taking Chinese and English as examples, we should cultivate the knowledge accomplishment as language ability and cultural character, while mathematics should focus more on data analysis and logical thinking.

In addition to the classification of the starting from the knowledge itself, is the questioner should also ask, is an important part of teachers in the teaching, full consideration should be given to learners of all levels and cognitive level, is suitable for most of the people's problem is put forward, such as with the text "zhuzhiwutuiqinshi", for example, teachers can design multiple layers, with the main question "what is the main content of this article", this problem is suitable for learners of

all levels, through the preparation, most of the students can describe the content, to achieve the purpose of learning factual knowledge, then behind the articles about language content will need to think through certain of wisdom. This deep questioning can quickly screen out those who pay more attention to the students, while targeted guidance to other students. At the same time, the language of questioning is also a good aid to effective questioning.

#### How to make efficient question

## How do you phrase your question

A good question needs a clear direction, most teachers like in class begins with an "talk about your understanding of the course" the goal is to lead to learning content, but such problems often take up a class most of the time, because he didn't have a clear direction, some students may explain the literal meaning, but the content of the answer cannot be formed and the content of the teacher's anticipation cohesion, then teachers tend to choose other students to answer. Spend a lot of time when the import course in explaining the concept is very waste time requires efficient query method, the first is the wording of the questions, language should pay attention to the following three points, is a key question direction, 2 it is to have clear meanings, 3 it is to the student age, grade, experience, and cultural level. When selecting key words to ask questions, thinking clues should be combined. After research and investigation, questions can be classified into memory problems. The common forms of expression are reciting the full text or summarizing concepts. The common form of analysis questions is used to distinguish word usage scenarios. The application of class problems is to calculate mathematical problems according to formulas and to find the length of the sides of triangles by Pythagorean theorem.

#### Time to wait for an answer

We can summarize the students' answers after listening to the questions into four steps: listening to the questions, understanding the questions, internal answers (organizing language), and external answers (audio answers). In this process, the most effective way for teachers to help students is to do nothing, which is simply to keep quiet and give students plenty of time to think. Luo, a teacher at the university of Florida, studied a large number of classroom cases and found that most students' answers were short and quick and did not ask questions. There were only three cases in which students asked questions, and the obvious difference between these three cases and other classes was that there was periodic silence in the class.

Rowe calls these moments of silence "waiting times," or "wonderful pauses." She further distinguishes between two types of "waiting time": one is after the teacher asks the question, before the student answers, and one is after the student answers, before the teacher or other students respond. According to the research, the longer the waiting time, the more mature the students' answers will be, the more students will participate in the answers, and the classroom discipline will be greatly improved.

To sum up, classroom questioning is a process requiring long-term exploration, and only through continuous practice and a large number of cases can the final answer be obtained.

#### References Critical thinking and questioning

In their book "the bible" institute for questioning, a field of critical thinking, brown and keeley mention two types of learning: panning for gold and sponge learning, which involves quickly absorbing nutrients to broaden the mind. Panning for gold means that learners should keep a cautious attitude and think about all the materials. It is possible to imagine that the two methods correspond to different behaviors, and the reader who adopts sponge learning will read the text word by word. On the other hand, the panning reader writes notes on the margins of the book as he reads, writing down his doubts and comments. The two complement each other, but comparatively speaking, gold panning learning is more important for the cultivation of critical thinking. Its explicit feature is constant questioning and questioning, so it is also an effective way to cultivate

questioning thinking.

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