

# Effective Questioning Techniques to Increase Class Participation

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## Questioning Techniques in the Classroom

There are various methods used to increase class participation, however, the most important method is the use of effective questioning techniques. Structuring a classroom based on frequent participation is essential in assessing and enhancing each child's learning experience; without interaction between the teacher and the students, education is greatly impeded. There are many classrooms in which it seems that the students lack motivation and interest in what the teacher is discussing. This is frequently because the teacher lacks the proper questioning skills to keep students actively engaged and interested in the material. On the other hand, there are several teachers who have mastered this concept and receive tremendous response from their students, thus, improving the overall learning environment and the teacher/student relationship. Being that we are pursuing careers in Elementary Education, it is important that we understand how to implement appropriate questions;

observing the different response levels associated with various questioning techniques will allow us to interact effectively with our students in the future. The question that we plan to directly address is which questioning techniques are used most frequently and how well do they generate student response?

## Methodology

In order to answer our question, we plan to observe the student response to the teacher's current questioning techniques. We plan to directly observe what kinds of questions the teacher asks throughout class such as convergent, divergent, rhetorical, etc. and record our findings. After observing which questioning techniques the teacher implements, we will take notice as to which of these is the most effective in eliciting a strong response from students. An example of another influencing factor that could impact participation could be wait time; this is not necessarily a questioning technique but a way to provide students ample time to process information and formulate a

response. We will be recording this information as well.

Based on the data gathered from our observations, we will conduct an experiment to draw relationships between the various types of questions implemented and how the students respond to them. This will simply be done during our lesson by taking a tally of the number of students that answer each question type; questions that result in particularly strong responses will also be recorded to include in our results. If our data reflects that the teacher did not get a strong response from his students, we will implement other questioning techniques during our lesson that were not used by the teacher as well as observe the effects of other factors such as wait time. By doing so, we will be able to conclude whether the students participation is influenced by the types of questions they are asked and how they are phrased or possibly another contributing factor we did not focus on for our research.

### **Review of Related Literature**

The questioning process is an essential part of instruction in that it allows teachers to monitor student competence and understanding as well as increase thought-provoking discussion. Frequently, a lesson is composed of countless questions that often require minimal effort and low-level thinking to answer (Cooper, 2010, p. 192). It is important to present students with questions that encourage reasoning and that allow them to draw from their prior knowledge rather than accepting “yes or no” responses. Through encouraging students to

formulate educated responses and express their opinions, teachers are able to assess how familiar or interested they are in the material. Continually involving students in their own learning experience and providing them with valuable feedback is a necessity in promoting progressive learning (Stiggins, 2008, p. 18). Productive feedback, or follow-up, should serve to “clarify, synthesize, expand, modify, raise the level of, or evaluate students’ responses” (Cruickshank, 2009, p. 375). The importance of providing feedback is to encourage student-originated responses while correcting or elaborating on their effort. In the case of an incorrect response, it is appropriate to ask the student to provide support for their answer in an effort to guide them towards the correct solution (Cruickshank, 2009, p. 377).

In addition to providing feedback, probing is another effective technique used to expand thinking and increase the likelihood of future response (Cruickshank, 2009, p. 377). The premise behind probing is to direct the student’s thinking towards the major concepts or important aspects of the topic. When using this technique, convergent questions, or those that encourage a single broad content answer, are most appropriate and help to obtain more elaborate responses (Cruickshank, 2009, p. 378). In many classrooms, even when teachers pose divergent, high-level questions, students tend to show more comfort responding with convergent low-level answers.

Redirecting, or posing the same question to a different student, is another method that is often used with students who

demonstrate high levels of self-confidence (Cruickshank, 2009, p. 378). In contrast, students with a low self-concept respond poorly to this technique and are often discouraged by it (Cruickshank, 2009, p. 378). Rephrasing is a different technique that can also have adverse effects; rather than rewording a question it is better to obtain a response to serve as a basis then use probing to direct the attention of the student towards the correct answer (Cruickshank, 2009, p. 378). When a teacher attempts to explain his question again, students may become confused or lose interest in participating. In accordance with these techniques, it is important to be aware of and appeal to student's current level of reasoning and competence as well as their particular interests. Rhetorical questions, or questions asked for effect instead of to generate responses, can also serve to confuse students and discourage future participation (Cruickshank, 2009, p. 371). These questions tend to discourage continued participation because students are often unsure if they are actually supposed to respond or if they are not.

According to Lev Vygotsky's sociocultural theory, students perform at their best when they are working within their zone of proximal development (Berk, 2009, p. 265). The zone of proximal development (ZPD) refers to a level of understanding in which a child is challenged but still able to comprehend and perform a particular skill. For example, teachers frequently ask questions pertaining to newly presented information in which the students are challenged to go beyond formulating simple responses and demonstrate higher-

level thinking. When teachers present these types of questions, it is expected that they will follow-up and provide guidance through probing, allowing students to create their own responses with minimal assistance (Berk, 2009, p. 265).

Another theorist, Howard Gardner, introduced the concept of multiple intelligences in which he states that each individual operates under the conditions of a certain intelligence such as linguistic or musical (Berk, 2009, p. 323). In application to questioning techniques, it is beneficial to ask questions that incorporate as many of the intelligences as possible. This allows teachers to extend their lesson to a wider range of students and increase participation through individualizing questions; through this method students are able to make personal connections to their own interests and are encouraged to express their opinions (Berk, 2009, p. 323).

Benjamin Bloom's taxonomy is valuable when determining the types of questions that teachers should ask their students. Bloom stated that there are six different levels of thinking: knowledge, comprehension, application, analysis, synthesis, and evaluation (Cruickshank, 2009, p. 168-69). In describing these six different levels of comprehension, also called the cognitive domain, Bloom stated that the first three were representative of low-order thinking, or content, whereas the last three were representative of high-level thinking, or process. Effective teachers appeal to each level of thinking to encourage students to draw conclusions, relationships, and applications of information they receive during class. Designing questions to match

your objectives and the ability level of students is imperative in receiving strong responses and connecting major concepts of different lessons (Cruickshank, 2009, p. 373). In order to do this however, planning questions prior to class discussion is necessary to ensure variety; divergent questions that appeal to a higher level of thinking are often more difficult to formulate, thus many teachers who do not plan in advance resort to asking predominately convergent questions (Cruickshank, 2009, p. 373). The overemphasis on convergent questions lessens student interaction and hinders their ability to comprehend and retain information.

### Results

During our day in school experience, we discussed the premise behind our research with our host teacher in order to gain some background knowledge of his students. While we were meeting with our teacher we inquired as to the type of questions that the students responded well to; from this discussion we gathered that the students showed a high level of response to divergent questions in which they could actively voice their own opinions and thoughts. After having this conversation, we were surprised that during our observation the teacher relied mainly on rhetorical questions such as “what did I just say?” or “who thinks we should cancel free reading time today?”

In many instances, the students did not respond well to these questioning techniques and often seemed confused. In

addition to the low level of response from students, we felt as though the class was not being challenged to their full potential. Several of the questions that were asked seemed to be below their zone of proximal development and demonstrated a lack of preparation. As we discussed earlier, formulating questions prior to class is essential because it allows students to focus on the question at hand rather than distracting from class time while the teacher struggles to think of effective questions. We also noticed that the teacher relied heavily on rephrasing when the students showed that they did not understand his questions; as we stated in our literature, this technique should be avoided because it often leads to more confusion and a lower participation level (Cruickshank, 2009, p. 378). Rather than building on students’ responses and providing valuable feedback to redirect their answers, the teacher would frequently rephrase the question then quickly move on if he did not receive much response. Although the questions were designed to match the content of the lesson, the teacher did not provide students with much time to process the questions and formulate a response. Using wait time allows students to establish a certain level of comfort in the classroom and encourages them to voice their personal opinions more freely (Cruickshank, 2009, p. 373).

During our lesson we decided to implement divergent questions because in the few instances that the teacher used them the class had a much higher level of response. We relied on these types of questions during the first part of the lesson in which the students were asked to recall

the main ideas of the story. We used divergent questions during this part of the lesson because the students had read *Stellaluna* previously and were responding to our questions with substantial background knowledge. After the read aloud, we tallied the number of divergent questions to be ten. For each of these questions, the majority of the students were eager to share their responses and communicate with us. Convergent questions were also included in the beginning half of the lesson in the form of vocabulary terms; we presented students with five words from the text and asked them to provide us with the correct definition. The use of convergent questions for this section proved to be very effective because the students were able to draw connections to the vocabulary in context by hearing several different responses. At the end of the read aloud we also used hypothetical questions to engage the students in higher-level reasoning. Some of the questions asked were how the story would have been altered if certain events occurred out of sequence or what they thought motivated certain characters to behave as they did. The students responded well to these questions; they all seemed to enjoy being able to express their own opinions about the story and the various events within it. These questions led into the second half of the lesson in which we had the students get in order according to the structure of the story. For this activity, each student was provided with a card to wear around their neck which had one event from the story written on it. The students were to read their cards aloud and then work together to get into a line according to the

correct sequence those particular events occurred in the story. During this part of the lesson, we relied more on convergent questions to prevent the class from becoming distracted or overwhelmed with the activity. Due to the fact that the activity was something new to the students, these questioning techniques were very helpful in communicating the goal of the activity. After the students positioned themselves in their final placement in the line, we asked them simple yes or no questions regarding the correct placement of each person; when the students answered “no” we had them provide a reason for their answer and suggest where they thought that particular person should move.

For our lesson, we decided to avoid the use of rhetorical questions and rephrasing because our data we gathered from our observation proved them to be ineffective techniques in increasing participation. During our lesson, we were able to elicit a strong response from the class as a whole and the students seemed to feel comfortable interacting with us and sharing their answers. After each question, we made sure to implement the concept of wait time to allow the students to become acclimated to having us instruct them and to gather their thoughts. Rather than providing a simple response to their participation, we would often ask students to explain their reasoning behind a correct answer or redirect them after an incorrect answer. In appealing to Bloom’s taxonomy and individualizing questions, we structured our lesson to have a section in which students could simply listen to the story in addition to an interactive section that allowed students to

communicate with one another and move around. It was helpful to have planned our questions prior to class because we were both comfortable with the material and the students were challenged rather than being presented with low-level questions. Overall, we experienced a positive response from the class and feel that our questioning techniques were effective and appropriate.

### Discussion

During our observation, the host teacher relied mostly on rhetorical questions which we found to be one of the least effective questioning techniques from our literature (Cruickshank, 2009, p. 371). During his lesson, the teacher often implemented these types of questions which resulted in confusion among the class and decreased participation; his questions only received about five answers out of a total of twenty-three students. In addition to the use of rhetorical questions, the teacher often asked questions that were below the students' zone of proximal development which resulted in convergent, low-level responses from the class (Berk, 2009, p. 265). Due to the fact that his questions did not generate a high-level of response, he resorted to rephrasing frequently which only served to further confuse the students (Cruickshank, 2009, p. 378). Although the questions did not match the students' ability level, they were formulated to coordinate with the content of the lesson. However, the students were not provided with sufficient wait time to gather their thoughts and respond to the question. According to Cruickshank, implementing wait time allows

students to organize their thoughts and prepare high-level responses with more confidence (Cruickshank, 2009, p. 373).

In an effort to determine which questioning techniques were effective in eliciting strong and frequent responses from students, we implement different questioning techniques during our lesson. We relied mostly on divergent questions based on the information from our literature which states that these questions encourage critical thinking and reasoning in addition to increased participation (Cruickshank, 2009, p. 372). In most cases, we received response from at least 15 students. Convergent questions were used to review difficult vocabulary terms at the beginning of the lesson to quickly monitor the students' understanding. For these questions, all 23 students responded. In response to the low-level of participation we observed from during our host teacher's lesson, we avoided the use of rhetorical questions during our lesson. After the students responded, we encouraged them to provide explanations for their answers. This resulted in increased participation because students were eager to share their opinions and beliefs. In most cases, students who did not respond to the first question, often elaborated on other students' responses after hearing their explanations. In addition to providing feedback to student responses, we created our lesson with individualized questions to appeal to different learning preferences. This allowed students to participate in a multitude of ways and resulted in high levels of participation throughout the entire lesson.

## Recommendations

Overall, we feel that our host teacher did not implement effective questioning techniques to increase class participation; he mainly relied on rhetorical questions and convergent questions which did not result in high levels of participation or strong responses. It is imperative to include a variety of questions to ensure that each student's learning style is addressed rather than only implementing one or two techniques continuously. In addition to appealing to differing learning styles, the teacher should encourage students to share their opinions freely through the use of divergent questions; this gives students a sense of importance and confidence which will lead to increased participation in the future. After students have given their opinions or responded to a question, it is necessary to provide them with feedback in order to get them in the habit of explaining the reasoning behind their thought process. Feedback is also significant because it builds the level of comfort between the student and teacher in addition to providing the class with valuable discussion. Lastly, and most essentially, teachers should prepare their questions prior to each lesson to ensure that they properly assess the main ideas of the material and are not confusing for students. Developing and executing appropriate questioning techniques in a classroom is the most valuable way to guarantee strong student participation and increase the ability to which students learn.

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