

An investigation into the Assessment of Teachers' Questioning Techniques during Classroom Interactions

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Abstract

The utilization of an interrogative approach is vital within the framework of educational progression. Participating in critical thinking can be advantageous for students as it helps stimulate their cognitive processes. The implementation of an interrogative strategy by the teacher is crucial in the classroom environment. Therefore, the purpose of this study was to ascertain the various questioning techniques used by an English vocational school teacher in Yogyakarta when interacting with Grade 10 students. Furthermore, the study aimed to ascertain the most commonly employed questioning technique as well as the least frequently used tactic by the teacher. The current study utilized a descriptive-qualitative research methodology. The data was obtained through the application of observation and interviews. The observation was to see the different types of inquiries presented and the general dynamics inside the classroom. Meanwhile, the interview was to obtain the teacher's viewpoint regarding the question methodology implemented in their teaching practices. The investigation has revealed several inquiry techniques that are dependent on the content of the inquiries. The strategies encompass probing questions (57.1%), factual questions (3.5%), divergent questions

(3.5%), higher-order questions (14.2%), emotive questions (10.7%), and structuring questions (10.7%). The penetrating inquiry is the most successful approach for questioning, whereas the factual question and the divergent question are the least effective strategies.

Keywords: *questioning strategy, classroom interaction, probing question*

Introduction

Student engagement is crucial in the learning process, as optimal instruction and learning necessitate active interaction between educators and learners. Teachers should offer students support by posing questions to facilitate their spoken interaction and assess their comprehension of the material. By encouraging interactions between the teacher and students during language learning activities in the classroom, the teacher will use a variety of pedagogical strategies to facilitate the learning process. The interactive classroom as a dynamic environment where there is active engagement and collaboration between the teacher and students, as well as among the students themselves.

The teacher's active engagement in the learning process facilitates student participation and interaction in the classroom (Johnson, J. H., & Picciuolo, 2020). Students opt to remain silent and attentively listen to the instruction, even if they lack comprehension, when the teacher refrains from posing questions to them. Although students may remain quiet and attentive during class, this does not guarantee their comprehension of the teacher's remarks. This includes group discussions and any other forms of classroom participation. In this case, the classroom rule plays important thing to make the students active (Widyastuti, 2020) for instance the rule in answering the teacher's questions actively (Mackey, 1999).

Questions play a significant role in engagement. The teacher is required to present thought-provoking questions that stimulate students' desire to respond. Questions have been demonstrated to be effective teaching approaches for fostering classroom interactions (Lynch, 1991). Throughout the lesson, the majority of questions are posed by the teachers; hence, a proficient teacher should also foster an environment that encourages students to inquire. Questions in academic settings, whether posed by teachers or students, are crucial in fostering successful communication between both parties (Ziyaeemehr, 2016). The ability of a student to ask questions is a significant skill that is crucial for achieving success in the modern period (Costa & Kallick, 2000). Therefore, it is imperative to engage in a discourse (Watson, 2018) regarding the act of questioning based on research discoveries.

The questioning method is structured into three distinct sessions, specifically positioned at the commencement, midpoint, and conclusion of the session, according to its function. Questioning is regarded as a method to facilitate communication between teachers and students and evaluate the students in order to achieve the objectives of the class. The question serves to stimulate critical thinking, foster curiosity, and establish a dialogic connection (Ma, 2008). Based on the aforementioned comprehension, the question serves as a crucial strategy to employ in the educational process, as it has the ability to encourage the students to engage in more analytical thinking. The objective of critical thinking is to assess a notion or opinion by carefully considering the opinion presented. Typically, dependable criteria support these traits. Engaging in critical thinking can enhance students' comprehension of the subject matter and

promote greater participation in the classroom. Students can cultivate ideas in response to learning challenges, benefiting from the positive influence they get. Hence, the teacher must possess the ability to formulate inquiries that are essential to every educational endeavor.

However, in the classroom where most students are reluctant to speak or passive, creating questions for engaging the students is very challenging. The significant number of students exhibited reticence and timidity in submitting questions to the teacher is also happened in the current study. The teacher incited the students in the class to inquire, ensuring their comprehension of the provided materials. As a result, the teacher posed multiple questions during the lesson.

Method

This research focused on the English teacher employed at a vocational school in Yogyakarta. This study involves two stages of data collection. The first part entailed observing the classroom environment by taking video footage. This allowed researchers to directly witness the real-time event and gather data. During the observation process, the researcher assumed the position of a participant, with both students and teachers being aware of the researcher's participation. Upon the completion of the observation, the researcher proceeded to the subsequent stage, which involved conducting interviews. Using an audio recorder, the researcher asked the teacher a series of questions during the interview. The utilization of an audio recorder was intended to facilitate researchers in obtaining more distinct and comprehensive data throughout the interview procedure. Hence, the data collected solely comprises transcripts of teacher interactions, specifically focusing on the types of questions posed by the teacher during classroom instruction, for subsequent analysis.

Results and Discussion

This research identified six categories of inquiries based on the approach used for questioning. The types of questions include probing questions, factual questions, divergent questions, higher order questions, emotive questions, and structural questions. The results regarding the sort of questioning strategy were presented in the table below.

Table 1. The Questioning Strategy Type

Questioning Strategies	Number of Questioning
Probing question	16 (57.1%)
Factual question	1 (3.5%)
Divergent question	1 (3.5%)
Higher order question	4 (14.2%)
Affective question	3 (10.7%)
Structuring question	3 (10.7%)
Total	28 (100%)

Based on the provided table, it is evident that the most commonly employed question strategy by teachers was probing inquiry, accounting for 57.1%. The higher-order questions follow with a percentage of 14.2%, while the affective and structuring questions equally account for 10.7% each. The category with the fewest number of questions was Factual and Divergent Questions, accounting for only 3.5% of the total.

Probing Question

Within this study, a significant majority of the questions, specifically 57.1%, were categorized as probing questions. The table 1 shows that the probing question type (57.1%) is the most frequently used by the teacher to ask questions to students during class learning. Probing Questions is a strategic approach that involves asking questions in a deliberate to enhance student involvement and participation (Toni, 2013). These questions were typically posed at the commencement of the session or when the teacher sought to initiate the learning process.

In order to enhance the quality of responses and promote greater understanding, accuracy, and logical reasoning, probing questions are employed to elicit more comprehensive and detailed answers from the intended students. In other words, the probing questions are used to assert the students' knowledge around the lesson which will be delivered (Jiang, 2014). On the current study, the researcher found some probing questions types as follows.

fostering heightened critical awareness

It is happened when the questions are designed to make the students analyze the topic discussed (Ingram & Elliott, 2014). The questions can also be used to examine the level of the students' understanding on the topic as well as to lead the students to think in higher-order level (Toni, 2013).

motivating more exploration

In the beginning of the lesson, the teacher applied the probing question to motivate the students in exploring the students' state of art on the lesson topic. This strategy is effectively used to establish the students' engagement to the topic discussed after they listen to the answer of the other student (Acid, 2018; Ingram & Elliott, 2014).

redirecting the topic to another student

Pointing one student to answer the probing question will make all students pay attention. This strategy is effective in engaging the students to the topic of the lesson (Febrian, 2017). However, in doing so, the teacher should really understand the students' characteristics and competencies (Wang, 2016). By giving an opportunity to one or two students who are categorized as excellent in the classroom, it allows other students to grab the understanding on the discussed topic (Meguid & Collins, 2017).

Factual Question

Factual questions are commonly encountered during the process of acquiring knowledge. The teacher poses questions that pertain to previously covered information in order to reinforce students' comprehension of prior learning.

Prior to commencing the instruction or discussion of the next content, the teacher initiated a query and prompted students to recall their comprehension of the information previously presented by another teacher. The teacher should perform this task at the commencement of every lesson, as it serves as a means of assessing students' preparedness to engage in classroom learning. In the current research, the teacher utilized a clarification to elucidate the topic of student learning discussed in the previous meeting. The discovered inquiry was related to the creation of memories. Furthermore, the specific sort of question was deliberately employed to capture the student's attention at the outset of the class. Appropriate inquiries have the ability to stimulate students' attention, memory recall, as well as motivation and curiosity.

Divergent Question

Divergent inquiry is a pedagogical technique employed by educators to stimulate students' cognitive abilities, fostering their capacity for expansive, imaginative, and analytical thinking, and enabling them to generate responses to classroom inquiries.

The purpose of this type of question is to stimulate students' broader and more creative thinking abilities, as well as to foster their capacity to generate responses. The teacher use this strategy to entice students into developing a broader perspective and retaining the offered information. Additionally, this is also a method employed by the teacher to assess the cognitive abilities of the students (Costa & Kallick, 2000).

Higher Order Question

Higher-order questions are complex inquiries posed by educators to motivate students to engage in critical thinking and employ innovative problem-solving techniques. According to the provided table, it is evident that posing high-level questions can stimulate students to think creatively and make informed decisions. Additionally, in a classroom setting, students should be accustomed to receiving instructional material before the teacher's explanation in order to foster critical thinking skills. Higher-order questions enable teachers to cultivate students' critical and creative thinking abilities. By posing thought-provoking questions to students, they are encouraged to engage in critical thinking and enhance their learning process (Toni, 2013). When students are presented with questions, it stimulates their thinking. Learning occurs when students engage in critical thinking. Cognitive ability is an essential prerequisite for students to acquire knowledge and serves as a kind of gratification for problem-solving (Willingham, 2009). Students will engage in critical thinking even when faced with a straightforward question (Toni, 2013). Regular usage of the tool will cultivate students' familiarity with it and foster the development of their critical thinking skills.

Affective Question

Affective questions are queries employed by educators to elicit the students' sentiments and emotions. In the present study, this particular sort of question is positioned at the commencement of the class. The teacher inquired about the students' preparedness to commence the lesson.

The expression of "Are you ready to start for our lesson today?" in the beginning of the lesson is classified as an affective question. The aforementioned questions are commonly employed by educators as a means of initiating the learning process prior to the teacher's exposition of the subject matter. This approach serves to alleviate the tension in the classroom, fostering a

calm environment for the students. Furthermore, this inquiry has the potential to motivate students to ready themselves for classroom instruction. In addition to establishing the cognitive hierarchy, Bloom also formulated the psychomotor and affective hierarchy (Krathwohl et al., 1973). The realm of affect encompasses sensations, sentiments, dispositions, and behaviors. In this context, manners encompass various aspects related to emotions, including excitement, feelings, motivations, values, admiration, and attitudes. In the present investigation, the students were still operating at the level of receiving and reacting. Receiving cognitive input from the teacher and actively engaging in answering the teacher's inquiries pertaining to their eagerness for acquiring knowledge.

Structuring Question

Structuring questions are interrogatives that elicit responses limited to complete phrases or single words, such as "yes," "no," or "don't know." This question is commonly employed by teachers to evaluate their students' understanding of the topic.

Structured questions are a specific category of questions that educators employ to assess students' comprehension of the subject matter. Regarding the given question, "Up until now, do you have any inquiries?" The generic structure of a descriptive text refers to the typical organization or format that such a document follows. Students have the option to provide a response to the question using either a complete statement or single words, like "yes," "no," or "don't know." The yes-or-no questions are intended to facilitate ongoing communication (Zhu & Wu, 2011) between the teacher and the students.

Conclusion

The current research applied a descriptive qualitative to identify the specific questioning techniques employed by the English teacher during classroom interactions in a vocational school in Yogyakarta, Indonesia. The teacher predominantly employed the probing question method (57.1%), while the factual and divergent questions were used the least (3.5%). From this point, it can be concluded that the probing questions were used mostly to engage the students to the lesson. It is understandable due to the students' characteristics. Most students were passive so that the teachers should offered questions frequently. Moreover, the probing questions were also used to evoke the students' critical thinking.

The objective of employing a questioning method in general is to facilitate students' acceptance and comprehension of the learning material, thereby enabling the successful attainment of knowledge. A teacher may utilize inquiry as a means to deliver educational content to students or as a means to elicit responses from students. Based on the aforementioned comprehension, it is obvious that the teacher uses the questioning strategy to facilitate communication with the students. The teacher employs a series of questions to effectively convey the subject matter and ensure comprehension among the students. It is anticipated that students will be able to readily embrace and comprehend the material, hence attaining the learning objectives.

The utilization of learning strategies aims to foster communicative learning. When the teacher poses questions that discourage student responses, it has a negative impact on the teacher's intended outcome. Furthermore, this may adversely affect the teacher's enthusiasm for teaching, as it would result in a diminished sense of self-assurance. Hence, the teacher must possess the ability to formulate an interrogative approach within the framework of communication that facilitates bidirectional exchange between the teacher and the students.

Teaching and learning activities can involve two-way communication through the teacher asking questions. Students will feel satisfied when they are able to answer easy questions, as they perceive themselves as competent and knowledgeable in the subject matter. This sense of mastery contributes to their intrinsic motivation to learn and develop. During classroom learning activities, the teacher uses a range of strategies to ask questions, including wait-time, reinforcement, probing, and interaction inquiries.

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