

**STUDENTS' QUESTION STRATEGY AND THEIR HIGHER ORDER
THINKING SKILL IN LEARNING ENGLISH**

(Descriptive Research Design at SMP Negeri 2 Sungguminasa)



Submitted to the Faculty of Teacher Training and Education University of Muhammadiyah Makassar in Partial Fulfillment of the Requirement for the Degree of Education in English Department

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ABSTRACT

Muhammad Taufik, 2022. The objective of this thesis is to find out the "Students' Question Strategies and their Higher Order Thinking Skills in Learning English (Descriptive research design at SMP Negeri 2 Sungguminasa)" supervised By Syamsiarna Nappu and Farisha Andi Baso.

The method of this thesis is descriptive qualitative research. This thesis used two instruments; questionnaires and interviews. The subjects of this research were 10 students from grade IX, namely 5 students from grade IX.4 and IX.5 of SMP Negeri 2 Sungguminasa. This thesis uses purposive sampling technique. The sample of this study consisted of 10 students with a population of 47 students from each class IX.4 and IX.5.

The purpose of this study was to examine the questioning strategies and higher order thinking skills of students in English. And the results shown are based on the data obtained that students can show question strategies through the questionnaire given, as well as their higher-order thinking skills through interviews given by researchers. Therefore, it can be concluded that grade IX students at SMP Negeri 2 Sungguminasa can use question strategies and their higher order thinking skills in learning English.

The result of this thesis shows that learning oriented to higher order thinking skills or HOTS, can investigate original thinking and according to the perspective of students to solve a problem in classroom especially in learning English. Therefore, the best way to see students' higher order thinking skills is to investigate a question strategy consisting of four; inferential questions, interpretation questions, transfer questions and hypothetic questions. Based on the result, student believe that by asking questions they will be able to explore English cognitively, and this can investigate their higher order thinking skills.

ABSTRAK

Muhammad Taufik, 2022. Skripsi ini bertujuan untuk mengetahui *"Students' Question Strategies and their Higher Order Thinking Skills in Learning English (Descriptive research design at SMP Negeri 2 Sungguminasa)"* yang dibimbing oleh Syamsiarna Nappu dan Farisha Andi Baso.

Metode penelitian tesis ini adalah penelitian kualitatif deskriptif. Tesis ini menggunakan dua instrumen; kuesioner dan wawancara. Subjek penelitian ini adalah 10 siswa kelas IX yaitu 5 siswa kelas IX.4 dan IX.5 SMP Negeri 2 Sungguminasa. Skripsi ini menggunakan teknik purposive sampling. Sampel penelitian ini terdiri dari 10 siswa dengan populasi 47 siswa dari masing-masing kelas IX.4 dan IX.5.

Tujuan dari penelitian ini adalah untuk menguji strategi bertanya dan kemampuan berpikir tingkat tinggi siswa dalam bahasa Inggris. Dan hasil yang ditunjukkan adalah berdasarkan data yang diperoleh bahwa siswa dapat menunjukkan strategi bertanya melalui angket yang diberikan, serta kemampuan berpikir tingkat tinggi mereka melalui wawancara yang diberikan oleh peneliti. Oleh karena itu, dapat disimpulkan bahwa siswa kelas IX di SMP Negeri 2 Sungguminasa dapat menggunakan strategi pertanyaan dan kemampuan berpikir tingkat tinggi mereka dalam pembelajaran bahasa Inggris.

Hasil tesis ini menunjukkan bahwa pembelajaran yang berorientasi pada kemampuan berpikir tingkat tinggi atau HOTS, dapat menyelidiki pemikiran yang orisinil dan sesuai dengan perspektif siswa untuk memecahkan suatu masalah di kelas khususnya dalam pembelajaran bahasa Inggris. Oleh karena itu, cara terbaik untuk melihat kemampuan berpikir tingkat tinggi siswa adalah dengan menyelidiki strategi pertanyaan yang terdiri dari empat; pertanyaan inferensial, pertanyaan interpretasi, pertanyaan transfer, dan pertanyaan hipotetis. Berdasarkan hasil tersebut, siswa percaya bahwa dengan mengajukan pertanyaan mereka akan dapat mengeksplorasi bahasa Inggris secara kognitif, dan ini dapat menyelidiki kemampuan berpikir tingkat tinggi mereka.

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Makassar, 5 September 2022

Muhammad Taufik

TABLE OF CONTENTS

COVER.....	i
LEMBAR PENGESAHAN.....	i
APPROVAL SHEET	i
SURAT PERJANJIAN	ii
SURAT PERNYATAAN.....	iii
ABSTRACT	v
ACKNOWLEDGEMENTS	vii
TABLE OF CONTENTS	ix
CHAPTER I: INTRODCUTION	
A. Background.....	1
B. Research Question.....	5
C. Objective of the Research.....	5
D. Significant of the Research.....	5
E. Scope of the Research.....	6
CHAPTER II : REVIEW OF LITERATURE RESEARCH	
A. Previous Related Research Findings	7
B. Concept of Question Strategy.....	9
C. Concept of HOTS.....	19
D. Concept of Learning English.....	24
E. Conceptual Framework.....	33
CHAPTER III: RESEARCH METHOD	
A. Research Design	34
B. Research Subject.....	34
C. Population and Sample	35
D. Research Instrument	36
E. Data Collecting	36
F. Data Analysis.....	39
CHAPTER IV: RESEARCH FINDINGS AND DISCUSSION	

A. Research Findings.....	43
B. Discussion.....	45
CHAPTER V: CONCLUSSION AND SUGGESTION	
A. Conclusion.....	50
B. Suggestion	52
BIBLIOGRAPHY.....	54
APPENDICES.....	58
LIST OF FIGURES	
List of Figures.....	33



CHAPTER I

INTRODUCTION

A. Background

Higher-order thinking, known as higher order thinking skills (HOTS), is a concept of education reform based on learning taxonomies (such as Bloom's taxonomy). The idea is that some types of learning require more cognitive processing than others, but also have more generalized benefits. In Bloom's taxonomy, skills involving analysis, evaluation and synthesis (creation of new knowledge) are thought to be of a higher order, requiring different learning and teaching methods than the learning of facts and concepts.

Higher-order thinking investigates the learning of complex judgmental skills such as critical thinking and problem solving. Higher-order thinking is more difficult to learn or teach but also more valuable because such skills are more likely to be usable in novel situations (i.e., situations other than those in which the skill was learned).

Several definitions were successfully interpreted by researcher to support the research process in the integration of HOTS. Efforts to see the quality of education cannot be separated from the complex and challenging demands of 21st century competitiveness. There are three main frameworks for 21st century skills: 1) learning and innovation skills, 2) life and career skills, and 3) information, media and technology skills Joynes (2017). Learning and innovation skills consist of communication, collaboration, critical thinking, and creativity (4CS) skills.

Life and career skills consist of flexibility and adaptability, self-initiative and direction, social and cross-cultural skills, productivity and accountability, leadership, and responsibility. Furthermore, information, media and technology skills consist of information and media literacy. In addition, Bialik (2015) mentions four main problems within the framework of 21st century education implementation: Knowledge, skills, character, and metacognition. The teacher uses various types of questions as a tool to measure student understanding and to ensure that the learning process of certain subjects has taken place Kerry (2002). In addition, Kerry (2002) also states that the types of questions used in class play an important role in the teaching and learning process because they affect student achievement and also the level of involvement. It is Jariah Mohd Jan and Rosli Talif (2005), Ribowo (2006).

Effective questioning by combining higher-order thinking skills (HOTS) is believed to be more helpful in developing students' critical thinking levels. Vijayaratnam (2012). HOTS is one of the main aspects for someone to be able to solve new problems in the 21st century Brookhart (2010), Moseley et al (2005) Thompson (2008). HOTS also plays an important role in applying, connecting, or manipulating prior knowledge to effectively solve new problems Thomas & Thorne (2009). In the revised Bloom taxonomy, HOTS is defined as an incision between the top three levels of ability in the cognitive dimension (analyzing, evaluating, creating), and 3 levels of the dimension of knowledge (conceptual, procedural, metacognitive) Anderson & Krathwohl (2001), Thompson (2008). Therefore, HOTS is measured using tasks, including analyzing, evaluating, and

creating conceptual and procedural knowledge, or metacognition. This means that familiarizing students with HOTS activities is important to help them get ready to solve new problems, adjust to new situations, and make decisions about certain problems.

Some things that become gaps include the integration of HOTS in schools so that the problem that is faced by researcher is the application of HOTS itself. As a supporter of this opinion based on experts, researcher take examples in the implementation of learning about HOTS. The problem is HOTS cannot be taught directly to students. Students must be trained on HOTS, as a skill, through learning activities that support its development. Active learning and student-centered learning are activities for HOTS training Akyol & Garrison (2011), Limbach & Waugh (2010). Active learning and student-centered learning such as problem-based learning (PBL) Mokhtar, Tarmizi, Job, & Nawawi (2013), project-based learning (PjBL) Vidergor & Krupnik-Gottlieb (2015), learning discovery, and inquiry-based learning Orlich, Harder, Callahan, Trevisan, & Brown (2010), or other learning models that use contextual problems are some examples of strategies for training students about HOTS. In addition, Protheroe Goethals, (2013) and Miri, David, and Uri (2007) mentioned that group discussions and complex and interdisciplinary problem solving in the learning process are important activities to train HOTS students.

Results for student HOTS development outcomes can be achieved through the active role of the teacher in planning, implementing, and evaluating HOTS-oriented learning. To be able to plan HOTS-oriented learning, teachers need

knowledge of ways, strategies, methods to train students about HOTS Bartell (2012). However, some research results indicate that English teachers face some difficulties, especially when training their students on HOTS.

The obstacles they encountered included difficulties in developing HOTS-based problems and finding appropriate learning tools Jailani & Retnawati (2016), Retnawati, Munadi, Arlinwibowo, Wulandari, & Sulistyaningsih (2017), Thompson (2008). Related to previous research, in this study we take all the actions that are very disturbing in the integration of higher order thinking skills (HOTS) that is be carried out and study their validity before after the previous research which is then used as a reference in previous research. Used as a reference better. Therefore, after seeing the results of previous research related to the title of this study, in the future this research is be conducted to determine the knowledge and development of students on integrating HOTS (Higher Level Thinking Skills) questions during English language learning. And then this integration is triggered by their English teachers in the teaching and learning process in English. Teachers are also expected to master the stages in triggering the ability of their students to be able to use HOTS (Higher Order Thinking Skills) in learning English. And the reference for investigating this research is to use questions as triggers so that students can use higher-order thinking skills by hoping students are able to think more critically about the material provided by the English teacher. To support the researcher's statement referring to the research conducted by Milawati et al. (2019) with the research title "EFL Teacher Oral Questions and Answers: Are Questions and Strategies Effective?" This study

examines the question strategy, the taxonomy of question types, and their application by teachers in advanced prose classes, to design student learning.

Therefore, this research aims to investigate students' Higher Order Thinking Skills by letting students give several questions strategies related to the material given by the teacher so that they can further explore the material according to their perceptions. The discussion is including questions from students that are used in the classroom which play an important role in the teaching and learning process because it investigate student achievement.

B. Research Question

1. What types of questions strategies are used by students to investigate their Higher Order Thinking Skill?
2. Is the question strategies used by student investigated their Higher Order Thinking Skills?

C. Objective of Research

Based on the research questions, the objective of this research are:

1. To find out the types of questions strategy are used by student to investigate their Higher Order Thinking Skill.
2. To see questions strategies can investigate students' Higher Order Thinking Skill in the English learning.

D. Significance of The Research

Theoretically, the results of this study are expected to confirm the theory of students' question strategy and their higher order thinking skills (HOTS) in learning English at SMP Negeri 2 Sungguminasa.

Practically, the results of this study are expected to provide information to English teachers about Students' question strategy and their higher order thinking skills (HOTS) in learning English at SMP Negeri 2 Sungguminasa. In addition, it also explains about the investigate of HOTS to make students able to solve their own problems by using questions strategies on learning English.

E. Scope of Research

The scope of this research process is how effective higher order thinking skills can help students solve problems in class and focuses on the use of inferential questions, interpretation questions, transfer questions and hypothetical questions related to the types of questions in investigation of higher order thinking skills (HOTS) and which is be used to get the results. Then using instruments in the form of questionnaires and interviews to find out how the process of investigating questioning strategies to investigate students' higher order thinking skills (HOTS) in learning English at SMP Negeri 2 Sungguminasa.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter is describes what is the types of questions, the way to integrated, the low level students and the way to display English as question used in the classroom play a significant role in the process of learning as it affects students' achievement in SMP Negeri 2 Sungguminasa.

A. Previous Related Research Findings

There are several research findings on question strategies that aim to increase or investigate students' HOTS related to the research conducted, as follows:

Mustika (2020) "*Investigate of Asking Techniques In EFL Class on The Development Of Students' HOTS*" found that HOTS is a sensible and reflective thought that focuses on deciding what to believe or do. HOTS is reasonable thinking because it requires that we have good reasons for our decisions. HOTS is reflective because it investigates thinking about a particular problem from several different points of view at once, including thinking about what method is appropriate to solve the problem. HOTS also aims to decide what to believe and what to do.

Narayanan (2015) "*Analysis of Question Papers In Engineering Courses With Respect To Hots (Higher Order Thinking Skills)*" in this research it aims to see students' higher-order thinking skills, teachers must use appropriate teaching and assessment methods. Anderson and Krathwohl (2002)¹⁰ categorize

knowledge as factual knowledge, conceptual knowledge, procedural knowledge, and meta-cognitive knowledge. It is remembering, understanding, analyzing, evaluating and rearranging the dimensions of cognitive processes. In this study the focus is only on Bloom's original taxonomy.

Khansir & Dashti (2014) "*The Effect of Question-Generation Strategy on Iranian EFL Learners' Reading Comprehension Development*" The aim of this research was to examine the effect of question generation strategy on Iranian third grade EFL the ability of high school students in reading comprehension only through multiple choice questions. Linse (2005, p. 69) suggests that "reading is a skill set that investigates making sense and meaning derived from print" words". Anderson (2003) states that the purpose of reading is understanding. Reading comprehension is one of the primary English class activities in an EFL setting.

Similarities of research conducted by research and above its all research focus on question strategy and the application of HOTS. Study illustrates that the question strategy and HOTS are very influential on students' learning styles in the classroom. Conditions like, they curious about the impact of question strategy and HOTS in influencing students' thinking patterns to be more critical of the material given. This research also explains about their perception when they get question strategy and HOTS it can be make them satisfied or dissatisfied.

The difference between the research conducted by this study and the research above is that each has different grade levels and techniques that are adapted to the abilities of the students who are the object of research.

Based on the research above, the researcher concludes that many recent researchers have focused on how to make students more trigger HOTS skills in learning efforts in the classroom because this skill supports the perception of students' learning skills that are more critical, creative and free to explore the limits of their skills in learning.

B. Concept of Question Strategy

In this section, the researcher discusses about the concepts of theories regarding the question strategy consisting of: definition, types, implementation and advantages. Here are the divisions:

1. Definition of Question Strategy

The following are some definitions of the use of question strategies according to several experts who inspired researcher to carry out this research:

- a. According to Silberman (2009: 144) the understanding of question strategy are the learning method that let students to ask questions about their subjects.
- b. Suprijono (2010: 112) state that question strategies are the learning method that start with a question is an active learning method in asking.
- c. Djamarah (2010: 399) define that question strategy are the way to create active learning pattern is to investigate students to be participate on subjects without explanation from the teacher.
- d. Hamruni (2009: 276) clarify that question strategy are the learning method in which the learning process of something new is be more effective if students

tool for teachers to carry out learning that develops students' thinking skills. The questions are:

1. Inferential Questions

Inferential questions are questions that must be answered immediately after students make observations and assessments of the material provided by the teacher. The information material can be in the form of portraits, pictures, short writings, poems, news, and so on.

This question aims to reveal what they saw or found and what the participants found after watching or reading the material presented by the teacher.

Here are some examples of inferential questions.:

a. Basic examples of inferential questions:

(Source from Ariyana et al. 2019.p.44)

What do you know about ... this?

What is your opinion?

Have you found what strengths or weaknesses you read about?

What is your attitude with the meaning you get?

b. Examples and types of terms from an inferential question:

(Source from Ariyana et al. 2019.p.44)

Generating attention or interest

Exmple: *"Who is the most amazing person in Indonesia? How was his life journey?"*

Diagnose or checking

Example: *"What do you know about corruption"*

Given specific information from an event

Example: *"When did the earthquake and tsunami in Aceh occur? How many lives were caused by the earthquake and tsunami?"*

Managerial

Example: *"How to enforce discipline in school?"*

2. Interpretation Questions

Interpretation questions that are asked from students are related to incomplete or incomplete information on the material presented by the teacher, and students must be able to provide meaning. With this question the aim is that students can interpret a result of a symptom or cause. Below are some examples of interpretation questions:

a. Basic examples of interpretation questions:

(Source from Ariyana et al. 2019.p.45)

Why do you have that opinion?

What causes the failure of efforts to ...?

What caused the big flood that occurred in ...?

b. Examples and types of terms from an interpretation questions:

(Source from Ariyana et al. 2019.p.45)

Encourage thought processes

Example: *"What do you know about vandalism? What caused it? How to handle it?"*

Structure and lead to learning

Example: *"There are several forms of corruption namely: forced greedy and designed in congregation. Which form is the most dangerous?"*

Evoke emotional attitudes

Example: *"What if you become a poor person who is refused treatment at the hospital because you cannot afford to pay?"*

Experiencing problems

Example: *"What is your conclusion after seeing the film? What about the character of the player?"*

Interpretation

Example: *"What are the consequences for example: After reading Andrea Hirata's trilogy, what is the fourth novel about?"*

3. Transfer Questions

If the two questions later are an attempt to explore the problem or nature of something, then the question that is be shown is a transfer question which is an attempt to broaden one's horizons or become horizontal. Following are some examples of transfer questions:

- a. Basic sample of transfer questions

(Source from Ariyana et al. 2019.p.45)

What's the difference between theory ... and theory ...?

Can you explain the answer in more detail?

In detail, how many of these ideas do you have?

What if your answer was separated between negative and positive?

- b. Transfer questions also cover the application of knowledge in other cases.

(Source from Ariyana et al. 2019.p.45)

What if this theory were applied to the case ...?

Is it possible if done in ...?

Are there any other possible attempts to ...?

4. Hypothetic Questions

Hypothetical questions are questions that refer to fiction rather than fact. And it's designed to get opinions and spark conversation. Hypothetical questions that are being applied in this research are also known as questions about hypotheses, generalizations, and conclusions. Hypothetical questions can encourage students to make predictions or forecasts of a problem at hand and / or draw conclusions to generalize. These hypotheses and conclusions are the results of understanding the problem plus the data or information that is already owned and / or data that is intentionally obtained to investigate the problem further. Examples are the following questions:

- a. Basic example of hypothetic question:

(Source from Ariyana et al.2019.p.46)

What happens when the hot and cold weather changes rapidly?

What happens if someone sleeps on a lot of nails and what if they sleep on two or three nails?

What if the even odd vehicle policy implemented in Jakarta was implemented in your city. Is there something that needs to be revised or developed from the policy?

What if the supporters who commit violence against the eleven are frozen or barred from competing?

b. Examples and types of terms from hypothetical question:

(Source from Ariyana et al. 2019.p.46)

The question of cause and effect

Example: *"What is happen if oil runs out?"*

Reflective questions

Example: *"Asking the truth, for example, How do you know if what is shown on the screenings is true?"*

Each example of questions strategy to Develop High-Order Thinking Skills in English Learning is based on and strengthened by several expert opinions to support this research process towards success relate to types of HOTS investigation questions that is be applied in this research process. Furthermore, the reasons above is be used as a reference for finding research results related to The Use of Questions Strategy to Investigate Student's Higher-Order Thinking Skills in Learning English. This has been reinterpreted resulting in a process of asking appropriate questions to find ways to investigate student HOTS.

3. Implementation of Question Strategy

The implementation of the question strategy is very important to be applied to find out whether this strategy is effective in investigating students'

higher order thinking skills. As a support from this, the researcher was inspired by several studies related to the implementation of the questioning strategy, among others, Timothy J. et al. (2021). In research that focuses on the application of question strategy in the classroom. Here are some implementations of question strategies:

1. Repeat questions / comments for the whole class

Repeat students' questions or comments throughout the class ensures that everyone can hear the information. The teacher needs to paraphrase long or complicated questions / comments. When responding to students' questions or comments, be sure to look around the room to include all students in the teacher's comments. Furthermore, based on the results of direct research has been carried out by researcher the general rule is to respond by focusing 25 percent of the teacher's eye contact on the questioner and 75 percent on the whole class - this is the 25/75 rule.

2. Give clear signals to students that the teacher is listening

Classroom management is an important point to contain a conducive learning space. When used effectively, attention signals are one of the best tools for management. Without them, learning time is often lost in transition and student expectations can become blurred and misunderstood.

3. Acknowledge all student contributions

Acknowledge every student, every day, Thanking or praising students for asking questions or expressing views with comments such as "Good questions"

and "Thank you for sharing with us." Such comments reinforce the behavior of asking questions and providing information voluntarily during class. However, make sure that the teacher varies the reaction of the teacher to students to avoid using the same comments excessively. The teacher can vary the teacher's response in the following ways:

- a. Reiterate what the speaker said to reinforce the point.
- b. Invite students to explain: "Tell us more about that."
- c. Ask for clarification: "What do you mean by that?"
- d. Extend student contributions: "That's right, and to follow up ..."
- e. Acknowledge the originality of the response: "That's a good point. I haven't thought about that."
- f. Link student responses with other student comments

The strategy that is being outlined is the result of interpretation in such a way that it can find a solution in the investigation process of Higher Order Thinking Skills (HOTS) by using a question strategy. Some are quoted from the article University of Waterloo (2016) But with adjustment reading investigates student HOTS. The strategy that has been described is expected to achieve the research results that the researcher wants to achieve.

4. Advantages of Question Strategy

After recognizing several theories related to the question strategy. This section discusses several advantages related to the application of a question strategy based on experts who inspired researcher in this research:

Based on King et al. (2006). Learning oriented towards higher order thinking skills or HOTS, the role of the teacher does not explain much, and on the other hand the teacher investigates a lot of questions. This theory focuses on the advantages of the question strategy related to the investigation of higher order thinking skills for the students themselves, which consist of:

- a. Questions to focus attention or study for deepening
- b. Questions to encourage students to think about finding reasons or taking positions of opinion
- c. Questions to clarify a concept with direction can formulate clear definitions through comparing, linking, and looking for differences over existing concepts
- d. Questions to encourage the emergence of creative and alternative ideas through imagination
- e. Questions to encourage students to find data and supporting facts and evidence to make decisions or positions
- f. Questions to encourage students to develop the mind further and deeper, by trying to apply something information in a variety of different cases and conditions, so that it has more arguments.
- g. Questions to develop the ability to apply more general rules or theories to the case being studied.

C. Concept of Higher Order Thinking Skills

In this section, the researcher discusses about the concepts of theories regarding the Higher Order Thinking Skills consisting of; definition, types, implementation and advantages. Here are the divisions:

1. Definition of Higher Order Thinking Skills

Here are some definitions or brief explanations according to some experts regarding Higher Order Thinking Students.

- a. According to Ichsan et al. (2019) explain that HOTS is environmental learning that has undergone various changes over the last few years of the demands on 21st century learning that changes various aspects of learning.
- b. Based on the research by Smith et al. (2015) in this research define that HOTS are strategy to empower students to work, think, and act independently in college educational settings.
- c. According to Saido et al. (2015) states that with high-order thinking skills students can trigger their cognitive abilities in solving a problem. Cognitive is a thinking process, namely the individual's ability to connect, assess, and consider an event or events Susanto (2012:48).
- d. Based on the research from Singh et al. (2018) clarified that HOTS is a way to develop and validate higher order thinking skills to make students more productive by letting them think within their limits. And with this it can be expected that their thinking can be more developed by exploring new things according to their higher of thinking skills.

- e. Based on the book from Afandi & Sajidan. (2017) Critical thinking skills are one of the important skills in dealing with the demands and challenges of the 21st century. This study aims to determine the effectiveness of Stimulating Higher-Order-Thinking Skills (Stim-HOTs) model in improving students' critical-thinking skills on cell metabolism topic.

2. Kinds of Higher Order Thinking Skills

HOTS (High Order Thinking Skills) or higher order thinking skills are broken down into several types of categories; making decision, problem solving, creative thinking, and critical thinking Harriman (2017), Purwanto (1999:17; Gigerenzer (2007), Kahneman (2003), Angelo (1995). Here are some definitions according to experts regarding the types of things that refer more to the categories contained in the HOTS themselves:

a. Making a decision

Research on assessment and decision making describes the view of decision-making abilities: decision is the ability to find cognitive shortcuts that can result in systematic and consequential errors Kahneman (2003). Furthermore, it is related to a pessimistic view that sometimes triggers a more optimistic rebuttal - cognition so that it can adapt well to process limited information quickly and accurately Gigerenzer (2007).

b. Problem Solving

Understanding problem solving according to experts, one of which is Purwanto (1999:17), defines that this is a process to go through new events using certain strategies, methods, or techniques. The goal is that the event or situation can be passed in accordance with the wishes that have been set.

c. Creative Thinking

Creative thinking is a thought that seeks to generate ideas. Creative thinking is part of, including knowing the problem, creating guesses and hypotheses about the problem, seeking answers, proposing evidence, and finally reporting the results.

d. Critical Thinking

Critical thinking is implementing thoughts which are rational, activities related to higher order thinking, which consists of; activities of analyzing, synthesizing, recognizing problems and their solutions, concluding and evaluating.

3. Implementation of Higher Order Thinking Skills

For the implementation, here are some implementations of higher order thinking skills related to the use of the question strategy according to Resnick (1987) planning that is be carried out next is to provide insight into the implementation of higher order thinking skills:

- a. A particular learning situation that requires a specific learning strategy and cannot be used in other learning situations.
- b. Intelligence which is no longer seen as an ability that cannot be changed, but the unity of knowledge that is investigated by various factors consisting of the learning environment, strategies, and awareness in learning.
- c. Understanding of views that have shifted from un-dimensional, linear, hierarchical or spiral towards understanding views to multidimensional and interactive.

- d. More specific higher-order thinking skills such as reasoning, analytical skills, problem solving, and critical and creative thinking skills.

4. Advantages of Higher Order Thinking Skills

According to Wichtowska (2019) in her article "Develop higher-order thinking skills to future-proof your organization" here are some of the benefits of HOTS:

- a. Participants build skills for creativity and innovation

The ability to be creative and innovate is one of the most important skills students need today. As technology advances, both organizations and students need to adapt to a rapidly changing environment to keep up with the pace.

While the ability to think creatively and innovate comes naturally to some, for others it needs to be developed. Unfortunately, because creative thinking is not currently the focus in schools, many recent graduates enter the workforce without being encouraged to use these skills in school. This becomes a problem when they enter the fast-paced modern workplace, and feel unprepared.

- b. Learn to be more interesting

When students are encouraged to engage with higher order thinking skills, this requires more of their attention and uses more of their brain capacity. As a result, learners are more involved in professional development, and online learning courses that apply this type of activity are often much more applicable in real-life scenarios.

- c. Increased potential for innovation within the organization

When students engage with learning tasks that give them the confidence to be innovative, the potential for new ideas within an organization will thrive throughout the ecosystem.

As technology advances faster, the ability to innovate will be a key advantage for organizations to stay competitive in the market. Already, those who can quickly adapt as markets shift are more likely to survive digital transformation.

d. Learners build transferable skills for real-life scenarios

When students engage with higher order thinking skills through online courses, they are also more likely to apply this knowledge after the training is complete. Learning tasks that encourage divergent thinking develop skills that can be applied to a variety of situations, and are not tied to specific topics or job role requirements later.

f. More opportunities for collaborative learning

Learning activities that encourage higher order thinking are often more conducive for students to work collaboratively. While finding ways for learners to learn together can be challenging with online learning, tools such as discussion boards and information sharing allow participants to share their ideas throughout the learning process.

D. Concept of English Learning

In this section, the researcher discusses about the concepts of theories regarding about English Learning that consisting of; definition, types, implementation and advantages. Here are the divisions:

1. Definitions of English learning

Here are some definitions of learning English according to experts:

1. According to Uma et al. (2001) Explain that learning English are several skills in teaching and learning English from four skills consisting of: listening, speaking, reading and writing. Skills are related to each other and cannot independent so these skills must be put together; For that reason, students are required to master these four skills.
2. Based on Brown (2001) define that learning English is one way to master the international language that is used as a means of communication in international relations and widely used in all branches knowledge.
3. According to Krashen et al. (1983) state that English learning, especially in education, is a process in teaching students in schools to master English; in this case, teachers must understand the concept of acquisition and learning. Acquisition can be defined as the process of having language naturally or unconsciously. On the other hand, learning is the process of owning a language consciously.
4. Based on BBC World Service (2009) clarify that learning English is what people do when they want to use English. In language learning, people often talk about language skills and language systems. Language skills include:

speaking, listening, reading, and writing. The language system includes vocabulary, grammar, and pronunciation. Learn English at school, where English is a common subject. Many people also want to spend their personal time learning English. Some of these people may not know English, whereas others will study English in school, and want to see their knowledge of it.

2. Kinds of Learning English

According to website of CEL (2020). Eight types of learning language In general; there are eight most common learning styles among people – four perceptual, two cognitive, and two relating to the learner's personality:

1. Perceptual learning styles – Four of the most common learning styles have to do with how individuals perceive the world around them, i.e. what their “primary” perceptive senses are.
 - a. Visual learners – People with visual learning tendencies like to read, as they enjoy seeing words and letters in front of them. Also, they enjoy making language connections via flash cards or photos.
 - b. Auditory learners – As the name suggests, auditory learners love to learn through sound. They love to interact and talk with other people. They don't need to see the words in the writing.
 - c. Tactile learners – English learners with an interest in touch enjoy manipulating various teaching materials while learning the language. They love what is known as direct work.

d. Kinesthetic learners – These learners enjoy taking long breaks and being physically active while learning English. They don't like to sit behind a desk for long periods of time and they like to move around while studying.

2. Cognitive learning styles – There are two cognitive learning styles that can investigate how you develop while learning English.

a. Field dependent learners – Another name for analytics learners, these people like to focus all their attention on the small details of the language. They love to learn the rules of grammar, and they like to break down parts of language into smaller parts. Due to their attention to small details, they can fail to see the big picture when learning a language.

b. Field self-study – They also use the global student name. They don't like getting into the minutiae of English. They don't care about the inner workings of a language. They focus on the big picture, all that language represents, and they want to convey an idea, not worry about the perfect grammar behind it.

3. Personality learning style – Finally, even a learner's personality can investigate the way a language is learned. Two language learning styles that concern personality are:

a. Reflective learners – These learners enjoy thinking about a language, reflecting on how they can convey their thoughts accurately, and reflecting on their language learning efforts. They tend to make fewer mistakes, but they also tend to take longer to get the message across.

b. Impulsive learners – These learners are born to take risks when learning English. They want to talk, they want to interact, and they don't think too

much about grammar. They are always trying new things, they make mistakes, and learn through them.

3. Implementation of Learning English

Based on Fadhillah (2020). This is closely related to the implementation of the English language learning that supports this research, which consist of:

a. Basic Teaching Materials

There are some basic materials that may often be forgotten to convey to novice students. Every language lesson, the most important thing is to provide basic knowledge first as a foundation.

In teaching English for beginners, there are at least five basic materials that must be mastered at this level.

b. Recognize the Alphabets and Numbers

English teachers often skip lessons about the alphabet and numbers. The teacher considers this lesson easy, but for beginners, of course, really need it. As a second language, English certainly has a distinct component of the alphabet and numbers. So the material of the alphabet and numbers is very important to be taught at the beginning. There are several ways that can be done to teach about the alphabet and numbers.

The first is to provide examples or explanations, then ask students to memorize them. As much as possible students already know how to write the names of numbers so that they can be studied again.

How to teach English for beginners is to use flash cards or learning cards. Write a letter or number on each card then let students guess the correct answer on the back of the card.

c. Teach Pronunciation

Pronunciation is a basic material in teaching English as a second language. A good teacher or teacher should teach pronunciation so that students get used to pronouncing words correctly.

Pronunciation is also very important so that when communicating in English, students can sound like native speakers. For this pronunciation material, the teacher can focus on some difficult sounds. For example the sound of "th" which is usually found in the word think or they which does not exist in other languages. Usually some people will find it difficult to pronounce words with the letter "th", especially beginners. So they need guidance at the beginning of learning so that they get used to it. The other sound is the r sound which is not very clear in English. There is a slight difference with Indonesian where the letter "r" is pronounced clearly. So, teachers should be able to choose the right way of teaching English for beginners.

d. Teaching about Word Class

In English there are different classes of words to learn. Starting from nouns, adjectives, adverbs and verbs. For novice students, you should learn from nouns. Nouns are the names of objects that are commonly encountered in everyday life. The way of teaching is to introduce the names of nouns in class, at

home, on the street. For example, by introducing the words chair, table, chalk, car, road, tree, bedroom. Can also introduce nouns about food, electronic devices, and others.

After teaching nouns, the next step is to teach verbs and adjectives. This is a way of teaching English for beginners so that they quickly understand and can make sentences in English. The next way to teach English for beginners is to teach adjectives. Verbs and adjectives are the main modals for making simple sentences in English. Both sentences for writing and orally. Also explain the meaning of verbs and adjectives first. Verbs are words that describe an action or action. For example talk (talk), walk (walk), sleep (sleep), and others. Adjectives are words that can be used to describe other words. For example beautiful (beautiful), wild (savage), wide (wide), and others.

The importance of providing an understanding of verbs and adjectives is that students are able to distinguish between the two classes of words. The teacher or teacher also needs to explain the verb changes for the present, past, and participle forms.

e. Explaining Tenses

After understanding the difference in word classes, the next material is to learn about tenses. Tenses are the timepieces in English. Usually these tenses are related to various sentence formulas, the difference is the time of their appearance.

Tenses in English there are 16 tenses. However, what needs to be mastered at the beginning are the three main tenses. The tenses are present tense (current),

past tense (past) and future (future). This tense is also the main modal in making sentences in English. So, it is very important to be taught to beginners. How to teach English for beginners only introduces these three types of tenses. If you are proficient, you can add other tenses.

f. Teach Common Phrases

Common expressions encountered in everyday life are very important to teach beginners. The way to teach English to beginners with common phrases is so that they can practice common expressions. For example the sentence is okay, no doubt, don't mention it. The teacher or tutor can provide a list of commonly used and well-known phrases teaching common phrases can also help beginners avoid word-for-word translation in English. Some expressions in English are already in common phrases.

g. Compose Simple Sentences

After teaching the basics mentioned earlier, the next step is to learn to compose simple sentences. Making sentences can help develop writing and speaking skills. There are several important things that must be considered when teaching to compose sentences in English. As we know that a sentence is a unit consisting of a subject and a predicate (verb). However, there are also sentences that consist of various components. For example, a sentence consisting of a subject and a verb run dog. The sentence only consists of subject dog and verb run. There is also a sentence John eats pizza which consists of a subject, a verb, and an object. Other sentences like cat is cute are simple sentence structures consisting of a subject, a verb, and an adjective. There are also sentences

consisting of subject, verb, and adverb like the lion is there. Or a sentence consisting of a subject, verb, and noun as in the sentence Emma is a student.

4. Advantages of English learning

Based on the Wall Street English article (2020) which discusses the advantages that can be obtained by learning English. Among others:

a. Increase Potential and Job Opportunities

Although in the world of work there is no specific language that has been determined, English has become a universal language used in almost all companies, both at home and abroad.

b. Sharpen Brain Ability

When learning language or linguistic skills, the brain will continue to work actively. In fact, according to research, a person's electrical activity and brain capacity can be increased by learning a foreign language.

c. Known as International Language

By mastering English, English is a language that is commonly used in all tourist attractions around the world. Even if for example when going to visit a country that does not use English as its main language.

d. Admission to Preferred University

Just like applying for a job, to get into a top university, one must have good English skills.

e. Enjoy Unlimited Information on the Internet

Most of the information contained in cyberspace is stored in English. Therefore, by mastering English, access to an unlimited repository of information will open. with this, one can find a lot of knowledge through the information found on the Internet. All journals, research studies, to important articles are available on the Internet and are written in English.

f. Getting to Know World Culture

By learning English, one will automatically learn about global culture. In this way, one can gain insight into very diverse foreign cultures. By mastering English, this can also refer to learning how to express yourself in front of others through quotes. Positive cultural assimilation to increase one's selling point in the eyes of the company.

E. Conceptual Framework

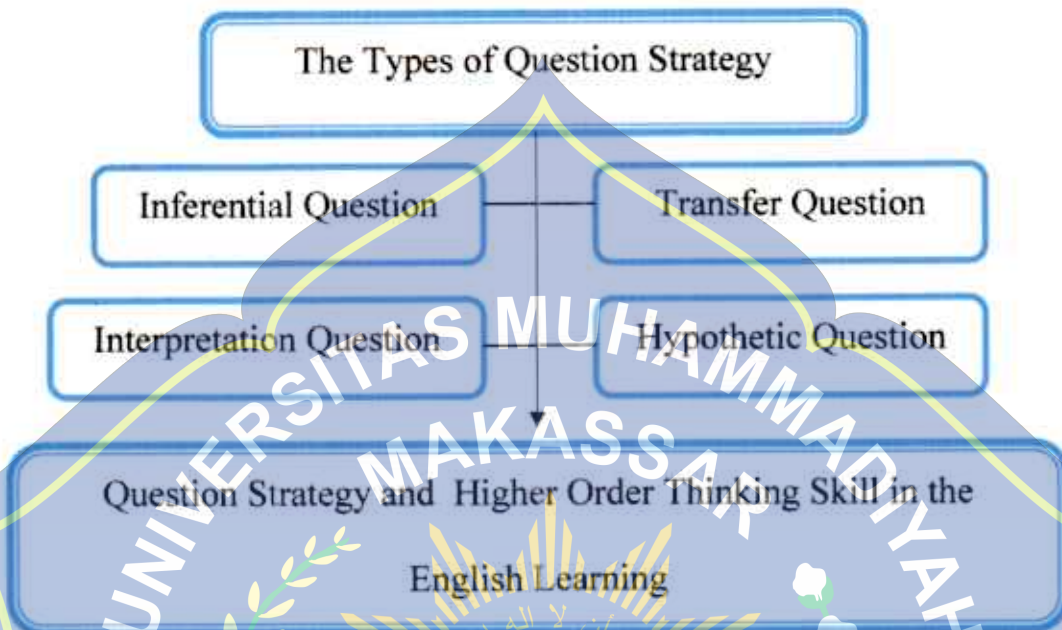


Figure 2.1

The conceptual framework above describes the research that will be carried out by researcher. The first thing to do is determine which class to choose is a class that focuses on learning English. Then proceed with giving instruments in the form of a questionnaire related to the types of questions that are often used by students when learning English. Next are conducting interviews about the investigate on students after using the question strategy that investigate their higher order thinking skills in English learning. Those are some descriptions of what researcher do at SMPN 2 Sungguminasa.

CHAPTER III

RESEARCH METHOD

A. Research Design

This research is one of the studies most often used in learning English, so this study uses qualitative research methods with the phenomena that occur in SMP Negeri 2 Sungguminasa.

Information that can be obtained by experts that for the current researcher. Qualitative research is research that is used to examine the condition of natural objects, where researchers are key instruments Sugiyono (2005). Descriptive research has overlaps with other essentially qualitative approaches including ethnography, hermeneutics and symbolic interactionism. Pure phenomenological research seeks essentially to describe rather than explain, and to start from a perspective free from hypotheses or preconceptions Husserl (1970). According to Sugiyono (2017) purposive sampling is a data sampling technique based on certain considerations.

B. Research Subject

To find out the research subject, based on an article of University of Rochester (2013). Research subjects are individuals who take part in the research. Information (or 'data') is collected from or about individuals to help answer the questions being researched. Sometimes research subjects are referred to as human subjects, research participants or study volunteers.

In this research, researcher chose subjects through selection. The numbers of students who are the subject of this research are class IX.4 and IX.5 students

with a total of 10 students as respondent. There are 10 students from grade 2 SMP Negeri 2 Sungguminasa in academic 2020-2021. They are categorized based on their English learning habits.

The researcher chose several classes from class IX. The researcher chose students who studied in English class and were willing to be participants to fill out several questions on the given instrument. The subject is consisting of 10 students for every class.

C. Population and Sample

Researchers determine the population and sample before conducting the study. The following is an explanation of the population and sample.

1. Population

The populations in this research were 10 students consisting of two classes, from IX.4 and IX.5 at SMP Negeri 2 Sungguminasa.

2. Sample

The sampling technique in this study used the purposive sampling technique. In this study, researchers took all students of SMP Negeri 2 Sungguminasa who took English classes; the number of samples were 10 students from the population.

D. Research Instrument

Research Instrument methods used in this study that also adjusts the conditions of the pandemic are as follows. The data instrument process that is be carried out in this study includes the following steps:

1. Questionnaire

According to Sugiyono, (2014: 230) a questionnaire is a method or technique of collecting data by means of researcher providing a list of questions or written statements to be answered by respondents. In this study, researcher distributed questionnaires directly.

2. Interview

According to Sugiyono (2016: 194) interviews are used as data collection technique if the researcher wants to do a preliminary study determine the problem to be studied, and also if the researcher wants to know more about the respondent's things. Meanwhile, According to Hadi, (1993: 39) interviews can be viewed as a method Data collection by means of question and answer was carried out unilaterally systematically and based on the purpose of the investigation. In this case, the researcher used a structured interview.

E. Data Collecting

1. Permission. Adjusting to the current pandemic conditions, it is certain that researcher is continue to carry out formal procedures such as before entering the study site, the researcher confirms through the communication media to request permission from SMP Sungguminasa involved in this

study and then bring permission for official research. But for this research can be done without being seen then determine the time to Questionnaire students and teachers who can be invited to collaborate.

2. Approach. When having several contacts that is be the object of research.

In this case the researcher tries to make a personal and familiar relationship with the subject of research, seeking information and various sources of complete data and trying to capture the meaning of various information received and observed. the phenomenon. Therefore, researcher try to be as wise as possible so as not to offend informants both formal and informal learning process that is done through online

3. Data logging (data logging) At this stage, researcher conducted the process of collecting data that has been determined based on the focus of research through contacts made between teachers and students in the process of Students' question strategy and their higher order thinking skills (HOTS) in learning English at SMP Negeri 2 Sungguminasa so as to find the results to be achieved. The research instruments used in this research are as follows The process of data collection to be carried out in this research includes the steps are as follows:

1. Questionnaire

Questionnaire is a data collection technique that is done by giving a set of questions or written statements to respondents to answer. Sugiyono (2005:162).

Sugiyono (2005:157) also expresses the opinion of Sutrisno Hadi who says that the assumptions that need to be held by research in using the Question method and also the questionnaire are as follows:

- a. That the subject (respondent) is the person who knows best about himself
- b. That what is stated by the subject to the researcher is true and can be trusted
- c. That the subject's interpretation of the questions asked by the researcher to him is the same as that intended by the researcher.

. And in using the Questionnaire, the researcher was supported by the content of the theory in chapter 2 regarding the types of question strategies. Then it is then made in the form of 4 tables and each of them will be filled in by students by giving a check mark for answers that are in accordance with their tendency to use the types of questions that students often use..

2. Interview

Interviews are used as data collection technique if the researcher wants to do a preliminary study determine the problem to be studied, and also if the researcher wants to know more about the respondent's things.

Sugiyono (2016: 194)

Interviews can be viewed as a method Data collection by means of question and answer was carried out unilaterally systematically and based

on the purpose of the investigation. In this case, the researcher used a structured interview. Hadi, (1993: 39)

In the activity of giving interviews to students. The researcher focuses on what impacts are felt by students after asking questions during the learning process and after asking what questions have a big effect on students' higher order thinking skills.

F. Data Analysis Techniques

Data analysis is an effort made directly by researcher to accurately collect data. After collecting data, researcher understand more deeply the data. This can be categorized as the process of analyzing the data needed from the results of the study. Qualitative data is needed from the results of the study. Qualitative data is obtained from field notes, observations, Questionnaires, questionnaires for SMP Negeri 2 Sungguminasa students were analyzed by data triangulation.

Data is analyzed through the following steps:

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the learning process and after asking what questions have a big effect on students' higher order thinking skills.

According to Sugiyono (2012: 246-252), activities in data analysis are:

a. Data Reduction

The data obtained from the research location is fairly fulfilled and must be done careful and detailed records. As expressed, the longer the researcher's time conducting research, the greater the amount of data, the more complex and complicated. Therefore, it is necessary to carry out a data analysis process through data reduction. Reducing data means shortening, choose important indications, focus on the important things to look for the themes and patterns of the research. Therefore, the reduced data will provide a focused view, and make it easier for researcher to do further data collection, if in the future look for other data if needed. Data reduction can assisted by electronic equipment such as media in the form of a mini computer, with coding on certain aspects Sugiyono, (2012: 247).

b. Data Display (Data Presentation)

If the data reduction has been assembled, the next process is to display the data. In qualitative research, data presentation can be done in the form of brief descriptions, charts, relationships between categories, flowcharts, etc. Techniques that are often used to present data in qualitative research is narrative text (Sugiyono, 2012: 249). By displaying the data, it will be easier to understand what is happening in the research and can show the plans that will be implemented in the future. Furthermore, it is recommended, in displaying data, in addition to

narrative text, it can also be in the form of graphics, matrices, network (work network) and graphics (Sugiyono, 2012: 249).

c. Conclusion Drawing/verification

The final step in analyzing qualitative data according to Miles and Huberman is drawing conclusions and verification. The conclusions from the data presented are still temporary, and will change one day if there is no strong supporting evidence at the next stage of data collection. But if the conclusions raised at an early stage are supported by consistent validity and evidence when researcher return to the field to collect data, then the conclusions put forward are credible (Sugiyono, 2012:252). Therefore, conclusions in qualitative research are possible to answer the formulation of the problem that was formulated from the start, but maybe not, because as stated that the problem and problem formulation in qualitative research are still temporary and will develop after research in the field (Sugiyono, 2012). : 252).

In this case, the conclusion in qualitative research is a new finding that has never existed before. Findings can be in the form of a description or description of an object that was previously unclear but after the research became clear, it could be a causal or interactive relationship, hypothesis or theory (Sugiyono, 2012:253).

CHAPTER IV

FINDINGS AND DISCUSSIONS

This chapter discusses the findings and discussion. This finding describes the results of the data collected from questionnaire and interview discussion processes explain and interpret findings. The results of this study on Students' question strategy and their higher order thinking skills (HOTS) in learning English is be described in this chapter.

A. Research Findings

1. Types of question strategy used by students

Based on the data. The researcher found ten students from IX.4 dan IX.5 who tended to use inferential question types compared to other types of questions. The students from IX.4 who represents the other classes. In using questions in English class. Some of these students tend to use inferential questions rather than other types of questions. According to the data, students on average prefer interpretation questions, rather than other question strategies..

From the samples as representatives of each class, 9 other students from class IX.4 and IX.5 had a tendency to use more inferential questions; this was seen from the questionnaire instrument given to students in grades IX.4 and IX. 5. The results showed that about 65% of students chose inferential questions, 22.5% interpretation questions, 7.5% transfer questions and 5% hypothetical questions. For more details, the data can be seen in the following table: this was followed by 9 other students from grades IX.4 and IX.5 who had a tendency to use inferential

questions more and this could be seen from the questionnaire instrument given to students in grades IX.4 and IX.5. The results show that about 65% of students choose inferential questions, 22.5% Interpretation questions, 7.5% Transfer questions and 5% for Hypothetical questions. For more details, the data can be seen in the following table:

Table of tendencies of students IX.4 and IX.5 percentage in choosing question strategies.

No.	Question Strategy	Percentage
1.	Inferential questions	65%
2.	Interpretation questions	22.5%
3.	Transfer questions	7.5%
4.	Hypothetical questions	5%

From this, the researcher can notice that the selection of inferential questions as questions is expressed because this type of question is more relevant to the habits of students in the classroom where this type of question tends to be questions that are being answered immediately after students make observations and assessments of the material provided by the teacher and they do that quite often in English class

2. The question strategy used by student that investigated their higher order thinking skills

Based on the data. The researcher found that on average students felt more involved in the teaching and learning process in English class when asking questions and the investigate they felt was that this was quite influential on their HOTS investigation; therefore the investigation of the question strategy was quite effective in investigated students' HOTS.

From the data obtained in IX.4. The researcher can see that the role of the question strategy is very influential in investigate students' HOTS with the enthusiasm of students who believe that after asking students feel more confident in their ability to learn English and from the data it also shows that by using a questioning strategy to investigate their HOTS in English, these students feel more able to explore their English language skills. While the data obtained in IX.5 it also has good feedback, where the researcher can also see that the role of the question strategy is very influential in HOTS investigation for these students. For the students, they feels that the investigate of the question strategy for HOTS investigation has investigated them to learn English more deeply and as a result, these students feels better than before when they were not giving a questions.

B. Discussion

1. Types of questions strategy are used by students to investigate their higher order thinking skill

Based on the data that has been compiled, it can be seen that the investigate of the question strategy for HOTS in learning English for students in grades IX.4 and IX.5 at SMP Negeri 2 Sungguminasa is quite satisfactory and is in accordance with the researcher's assumption that by asking questions students can see their HOTS in learning English. This is indicated by the selection of inferential question types that dominate other types of question strategies such as interpretation questions, transfer questions and hypothetic questions, although the purpose of these types of questions has the same goal of investigating

higher-order thinking skills and and only differ under certain conditions and times for the selection of these types of strategy questions.

It can be seen from the data. The researcher found that 10 students from class IX.4 and IX.5 who became the sample had a tendency to choose inferential questions and the percentage was at 65%, the use of interpretation question strategies was at 22.5%, transfer questions was at 7.5% and finally the hypothetic question which is at the lowest number, which only reaches 5%. The researcher can explain the dominance of the inferential question which reaches 65% as a result; the students relate more to this question because the form of this question is more concise and tends to be used when students ask spontaneous questions in class. While interpretation questions are at 22.5%. Where this type of question is also quite often used when providing material such as additional material that is still unclear and learning material that students want to explore more deeply about the completeness of points that have been missed in the material provided by the teacher. Followed transfer question strategy which is at 7.5%. To explain the reason why students rarely use this question, the researcher can see that this question is indeed quite complex compared to others because this question refers to how students distinguish one thing from another and it is felt that junior high school students have not been able to provide an explanation about different from one thing because of the theory that they have not covered in junior high school, there are some who use this question but not as much as the inferential question and interpretation question th]at more simpler. And the last is hypothetical question that has the lowest score, which only covers 5% of

the other three question strategies. In accordance with the theory, this type of question is also quite complicated because to give this question, students must know about hypotheses, generalizations, and conclusions. For students it is quite time consuming because they have to know how to assemble hypotheses, generalize and conclude everything before asking questions regarding the material given, plus the form of this question is quite long compared to other types of questions.

According to the data, there are several variants of investigate regarding the investigation of question strategy to investigate students' HOTS. Some of these investigates are that students are more involved in the learning process and this also helps students to be more expressive by expressing what they want to ask through the form of a question strategy related to the material provided by the teacher. Therefore, this is what causes students' HOTS to be investigated because they can issue something in their minds in the form of question strategies according to their perceptions and this can explore students' English skills more broadly.

While another investigate is on students who rarely ask or never ask questions at all. The investigate for students who are less involved in the learning process, especially in giving a question to investigate students' HOTS in learning English is that the student cannot express what is actually lacking in the material given because even a teacher sometimes misses something in the learning material or students those who rarely ask questions, their knowledge will be just like that without being expanded by asking questions in class.

Therefore, with the habit of rarely asking questions in class, students' learning styles will tend to be monotonous, less dynamic and seem contextual because they just listen without being clarified or expanded by asking a question. And this can affect students' HOTS in learning English which will be less.

Based on the data results, it shows that the investigating of the question strategy has indeed succeeded in investigate students' HOTS in learning English and this is due to the factors contained in the type of question strategy expressed by students which can trigger students to think more cognitively, creatively, critically, imaginatively and can issue ideas according to their perception and it is a form of HOTS. Therefore, this is the reason that by using the question strategy students are able to investigate their HOTS to learn English more broadly than just relying on books and listening to the teacher without asking any questions.

2. The question strategy used by student that investigated their higher order thinking skills

The investigating of question strategy in grades IX.4 and IX.5 at SMP Negeri 2 Sungguminasa is really able to help students in investigated students' higher order thinking skills when learning English. This can be seen from the data made. According to the data, the researcher found that most students felt the tremendous investigate of investigating this strategy to investigate the students' higher order thinking skills in learning English. The form of the investigate is that students feel more confident, independent, creative, and critical, relieved, a more developed curiosity and other positive things that can

build students' motivation to learn, especially in learning English. To maintain this positive habit, it is hoped that the teacher will consistently allow this to happen or even motivate the students themselves to be more confident in asking questions related to learning materials, especially learning English. Because this extraordinary impact significantly shows that students can bring out the best potential that is within themselves through the use of question strategies to investigate higher order thinking skills in learning English.



CHAPTER V

CONCLUSION AND SUGGESTION

This chapter consists of two parts, the first part discusses the conclusions of research findings and the other part discusses suggestions related to Students' question strategy and their higher order thinking skills (HOTS) in learning English in grade 3 SMP Negeri 2 Sungguminasa.

A. Conclusion

Considering to the analysis of the data found in the instrument which was arranged between the questionnaire and the interview along with the discussion in the previous chapter, the researcher put forward the following conclusions:

1. The types of questions strategies are used by students to investigate their higher order thinking skills in learning English shows quite satisfying result in grades IX.4 and IX.5 of SMP Negeri 2 Sungguminasa and this is shown through the data that has been compiled in the form of a questionnaire containing four types of question strategies. And this result shows the tendency of students to use inferential questions rather than interpretation questions, transfer questions and hypothetical questions, all are the same only the form and conditions that distinguish these questions and this at least helps students to be involved in the learning process, especially in learning English and this need to get the attention of both teachers (educators) and surrounding environment.

There are some investigates shown by students in giving question strategies to investigate their HOTS. Depending on how often students

ask questions, the more they ask it makes them more involved in the process of learning English and if there are students who rarely ask questions because of doubt, it is hoped that these students are also motivated to be able to ask questions because with this strategy students can find clearer information about the learning materials provided and they are more able to explore English language skills according to their perceptions because it investigates HOTS students in the learning process, especially in learning English.

2. The question strategy used by students in influencing the higher-order thinking skills of grade IX.4 and IX.5 SMP Negeri 2 Sungguminasa from the data shows that this affects students and the form of its investigate is by asking questions, most students feel more confident, brave, creative. They are critical and can explore their English independently based on their way of thinking and do not always rely on books alone which will make their learning style classified as textual and not as dynamic as a learning style that relies on the students' own mindset. In addition, this has also been explained by Narayanan (2015) that the question strategy can aim to look at students' higher-order thinking skills, and is supported by Anderson and Krathwohl (2002)¹⁰ with this covering knowledge as factual knowledge, conceptual knowledge, procedural knowledge, and meta-cognitive knowledge. It remembers, understands, analyzes, evaluates, and rearranges dimensions of cognitive processes. Therefore, it can be concluded that the HOTS investigation question strategy is very

effective in learning English for students at SMP Negeri 2 Sungguminasa because it greatly investigates students in learning considering that HOTS can determine students' mindsets regarding the material given, especially English. and it has been explained by Mustika (2020) that HOTS is a sensible and reflective thought that focuses on deciding what to believe or do. HOTS is a reasonable thought because it requires us to have good reasons for our decisions and this greatly affects the mindset of students at SMP Negeri 2 Sungguminasa.

B. Suggestion

Based on the results of this research process, the researcher provides several suggestions as follows:

- a. For prospective researchers who are interested in conducting research on HOTS, this research can be used as a reference for prospective researcher to support their research. For additional suggestions, it is hoped that other researcher is take samples from schools that have students with maturity levels in HOTS to facilitate the research process. In addition, it is also recommended to conduct research for a longer time in order to obtain more, valid and reliable data.
- b. The purpose of this research is to identify students' question strategy and their higher order thinking skills (HOTS) in learning English at SMP Negeri 2 Sungguminasa, furthermore this research is expected to encourage other researcher who want to conduct research related to question strategies and HOTS to research it more deeply so that the results

can be reviewed broader and its application is pursued because of its very influential impact on the learning process, especially in the English class.



BIBLIOGRAPHY

- Afandi & Sajidan. (2017). *Stimulasi keterampilan berpikir tingkat tinggi: konsep dan aplikasinya dalam pembelajaran abad 21*: UNS Press.
- Anderson & Krathwohl. (2001), Thompson. (2008). *HOTS is defined as an incision between the top three levels of ability in the cognitive dimension (analyzing, evaluating, creating).*
- Ariyana Y, Pudjiastuti A, Bestary R, Zamroni (2019). *Buku Pedoman Pembelajaran HOTS 2019*: Dirjen GTK
- Ariyana Y, Pudjiastuti A, Bestary R, Zamroni, Akyol & Garrison, (2011); Limbach & Waugh. (2010). *Active learning and student-centered learning are activities for training about HOTS.*
- Aydin. (2016). *Exploring Pre-Service Science Teacher Methods and Strategies for The Driving Questions in Research Inquiry: From Consulting an Instructor to Group Discussion.*
- Bartell T. (2012). *Learning to teach mathematics for social justice: Negotiating social justice and mathematical goals.* National Council of Teachers of Mathematics, 44 (1), 129–163.
- Batmanabane V. (2017). *Qualitative Data Collection Questionnaires.*
- Bertema.com. (2019). *Kompetensi Keterampilan 4Cs dalam Pembelajaran.*
- Bialik. (2015). *Character Education for the 21st Century: What Should Students Learn Center for Curriculum: Redesign Boston, Massachusetts.*
- Brookhart, Susan M. (2010). *How to Assess Higher-Order Thinking Skills in Your*.
- Chesley J. (2008). *Questioning Techniques: Research-Based Strategies for Teachers.*
- College of English Language (CEL). (2020). *Eight types of learning language In general.*
- Djamarah. (2010: 399). *The Understanding of The Learning Method Starts With A Question.*
- Fadhillah. (2020). *How to Teach English for Beginners That Every Teacher Should Apply.*
- Gigerenzer, Gerd. 2014. *Risk Savvy: How to Make Good Decisions.* New York: Penguin.

Goethals, P.L. 2013. *The Pursuit of Higher-Order Thinking in the Mathematics Classroom: A Review*. Review submitted in partial fulfillment of the Master Teacher Program, a 2-year faculty professional development program conducted by the Center for Faculty Excellence, United States Military Academy, West Point, NY, 2013.

Hamruni (2009: 276) *Learning Starts With A Question*.

Heong, Y.M., Yunos, J. B., & Hassan, R. B. (2011). *The perception of the level of higher order thinking skills among technical education students*. Paper presented at the 2011 International Conference on Social Science and Humanity, IPEDR vol.5, 2011. DOI: 10.7763/IPEDR.

Ichsan I., Sigit D. V., Miarsyah M., Ali A., Arif W. P., Prayitno T. A. (2019). *HOTS-AEP: Higher Order Thinking Skills from Elementary to Master Students in Environmental Learning*.

Jailani & Retnawati. (2016). *The obstacles they encountered included difficulties in developing HOTS-based problems and finding suitable learning*.

Jennings T. (2016). *Using Attention Signals in the Classroom*.

Joynes. (2019). *21st Century Skills: evidence of issues in definition, demand and delivery for development contexts*.

Kahneman. (2003). *Research on assessment and decision making describes the view of decision-making abilities*.

Kerry. (2002). *Explaining and Questioning. (1st ed.)*. London: Nelson Thornes Ltd..

Khansir A, Ali (2014) *The Effect of Question-Generation Strategy on Iranian EFL Learners' Reading Comprehension Development*

Kim H., Yi P., & Hong J. (2020). *Students' Academic Use of Mobile Technology and Higher-Order Thinking Skills: The Role of Active Engagement*.

King, Goodson & Rohani. (2006). *Prepare a real situation that can investigate the higher-order thinking*.

Knowledge Maverick website. (2019). *Knowledge Transfer Questions*.

Lester S. (1999). *An introduction to phenomenological research*.

Lewis & Smith. (1993). *Establishing thinking activities with content through collaborative material, making conclusions, building representations, analyzing, and building relationships between concepts*.

- Loftus, Elizabeth F. (1996). *Eyewitness testimony*. Cambridge, Mass: Harvard University Press.
- Look M. (2011). *Effective Instructional Strategies Series*.
- Marie D., Narasumanin S. (2020). *Investigating Teachers' Implementation and Strategies on Higher Order Thinking Skills in School Based Assessment Instruments*.
- Milawati & Suryati N. (2019). *EFL Teacher's Oral Questioning: Are Questions and Strategies Effective*.
- Miri, David, & Uri. (2007). *Group discussions and complex and interdisciplinary problem solving in the learning process are important activities to train HOTS students*.
- Mohd J. & Talif R.. (2005). *Questioning Strategies and the Constructions of Context In Classroom Talk*.
- Mokhtar, Tarmizi, Job, & Nawawi. (2013). *Active learning and student-centered learning such as problem-based learning (PBL)*.
- Mustika N. (2020) *Investigate of Questioning Techniques In EFL Classes On Developing Students' HOTS*
- Narayanan, Sowmya (2015) *Analysis Of Question Papers In Engineering Courses With Respect To Hots (Higher Order Thinking Skills)*
- Orlich, Harder, Callahan, Trevisan, & Brown. (2010). "Learning discovery, and inquiry-based learning".
- Osborne J. (2021). *Acknowledge Every Student, Every Day*. Price. (2012). *Interpretive Questions for Comprehension*.
- Purwanto. (1999:17). *Process to go through new events using certain strategies, methods, or techniques*.
- Quieng, M. C., Lim, P. P., & Lucas, M. R. D. (2015). *21st century-based soft skills: Spotlight on non-cognitive skills in a cognitive-laden dentistry program*. *European Journal of Contemporary Education*, 11(1), 72-81
- Resnick. (1987). *Education and Learning to Think*.
- Rowe. (1986). *Wait times: Slowing down may be a way of speeding up*. *Journal of Teacher Education*. 31(1), 43-50.
- Rumohr. (2013). *Reflection and inquiry in stages of learning practice*. *Teaching Artist Journal*, 11(4), 224-233.

- S. Flaherty and L. Newman. (2012). *Questioning Strategies to Engage All Learners*.
- Salirawati. (2021). *Critical Thinking Ability of High School Students in Daily Life Acid-base Concept*.
- Sawyer. (2021). *126 Hypothetical Questions That Will Make Your Conversations More Interesting*.
- Silberman, Melvin L. (2006). *Active Learning: Strategi Pembelajaran Aktif*. Jakarta: Nusamedia.
- Sugiyono. (2012). *Metode Penelitian Kombinasi (Mixed Methods)*. Bandung: Alfabeta.
- Sugiyono. (2005). *Memahami Penelitian Kualitatif*. Bandung: CV. Alfabeta.
- Sugiyono. (2011). *Metode Penelitian Pendidikan Pendekatan Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Suprijono. (2010). *Cooperative Learning*. Yogyakarta. Pustaka Media
- Susanto (2012:48). *Definisi Kognitif Dalam Keterampilan Berpikir Tingkat Tinggi*.
- The Write Connection. (2018). [PDF] *Tackling Inferential Question*.
- Thomas, A., & Thorne, G. (2009). *How to Increase Higher Order Thinking*.
- Timothy J. (2008). *The Effect Of Reused Questions On Repeat Examinees*.
- University of Rochester. (2013). *Research Subjects Are Individuals Who Take Part In The Research*.
- University of Waterloo article. (2015). *Question Strategies for The Student*.
- Victoria D. Smith, Janet W. (2015). *Encouraging Student Autonomy through HOTS*.
- Vidergor & Gottlieb K. (2015). *Higher Order Thinking Skills Project-based learning (PjBL)*.
- Vijayaratnam. (2012). *Effective questioning by combining higher-order thinking skills (HOTS)*.
- Wall Street English. (2020) *The advantages that can be obtained by learning English*.
- Wichtowska S. (2019). *Develop higher-order thinking skills to future-proof your organization*.