

ENHANCING STUDENTS' VOCABULARY MASTERY AND CLASS CLIMATE THROUGH INQUIRY-BASED TEACHING

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Abstract

Vocabulary is a crucial component of English language learning, playing a significant role in both active skills like speaking and writing, as well as passive skills like reading and listening comprehension. Proficiency in vocabulary is essential for students to excel in language acquisition and overall language skills development. However, many students encounter difficulties in mastering vocabulary, affecting their academic performance and language comprehension. Moreover, the students have a lack of engagement in the classroom. The study aims to investigate the effectiveness of inquiry-based teaching in improving students' vocabulary. This research used a classroom action research approach with two cycles to address vocabulary-related challenges among fifth-semester English Program students at IAIN Pontianak. Data collection techniques were including observation checklists, field notes, documentation, and written tests. Qualitative data is analysed using inductive categorization, while quantitative data is used to assess students' vocabulary test scores. The result of this study is IBT can enhancing students' vocabulary skills and creating a more engaging and dynamic classroom environment. The post-test results in cycle 2 indicated a substantial increase in students' vocabulary mastery, with mean scores exceeding the set target of score 71. Educators can consider incorporating IBT as an effective pedagogical approach to improve both language proficiency and the overall learning experience.

Keywords:

Vocabulary, Class Climate, Inquiry-Based Learning

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INTRODUCTION

In learning English language, vocabulary is one of important taught in the English Subject. In every skill of language, vocabulary is needed to produce not only in active skill such as Vocabulary and speaking but also in passive skill, reading and listening. When students have a good mastery in vocabulary then it will be easier for them in understanding a language. They need vocabulary mastery in acquiring a language. Vocabulary may help the students develop their language skills which are necessary for success in learning English.

It is difficult to master the other competences without understanding the vocabulary. Mastery of vocabulary is the ability to utilise words both receptively—used to learn meanings in language activities, particularly reading—and productively—by knowing a large number of words. (Fahrurrozi et al., 2020). However, students encountered the problems. Most of them find some difficulties in doing their task given by the lecturers especially in vocabulary task. From the observation done by the researcher,

there are many students neglect this activity. In pre observation at the practicum, usually they learn when they are assigned by their lecturers, or they read only the page they like such as gossip and entertainment news that will have no support in their academic achievement.

Many students become passive when facing a vocabulary text although it is a simple text because they do not mastery the vocabulary. These students need appropriate method to arise their understanding in vocabulary. The lecturer sometimes asks unfamiliar words in the text and then asks them to open the dictionary. The lecturer discusses the text by translating word by word. Other problem is students have difficulty in answering questions dealing with meaning, and spelling such the correct order of words and the meaning in the context. To help the students' problems, it is needed another method in teaching vocabulary. There is a lot of method in teaching; the researcher proposed a method that was "inquiry-based teaching". Inquiry is a teaching method which stimulates the skill in critical thinking to analyze and solve the problems systematically. Inquiry is a very effective method as it can be used to teach the students, solve problems, train critical thinking as well as make a decision.

It is supported by researcher by Ni made Ratminingsih (2009) that results are the Inquiry Learning Model could effectively improve the mastery on Vocabulary of eight grade students of SMP Lab IKIP Negeri Singaraja and the students had a positive response towards the activities developed traced from the findings of observation and questionnaire. Other previous research by Wahyu Trimastuti entitled *The Effectiveness of Inquiry Based Teaching to Teach Reading Viewed from Students' Locus of Control in Surakarta* (2012) concluded that Inquiry Based Teaching was an effective method to teach reading. The effectiveness of the method was determined by the levels of the students' locus of control. Therefore, it was suggested that it was better to apply inquiry based teaching to teach reading to improve students' reading skills, the students are expected to be more active in the teaching and learning process in order to improve their reading skills.

LITERATURE REVIEW

Vocabulary Mastery

All of the words that make up a language are called vocabulary (Gushendra, 2017). Vocabulary should be learned as a prerequisite before studying English language skills. Vocabulary is the basic competence that must be reached by students in order to get other competencies like reading, writing, listening, and speaking. It is difficult to master the other competences without understanding the vocabulary. Vocabulary is very important in learning English because by having many vocabularies someone can be easier to learn English (Munir, 2016). acquisition that takes place when the mind is diverted—for example, while attempting to comprehend a text or utilise language for communication—is referred to as vocabulary acquisition.

One of the most important language items that should be taught to second or foreign learner is vocabulary. Recognizing enough vocabulary will make the students able to communicate and know English at least in a simple way because vocabulary is the core of language. To be able to master the four language skills – listening, speaking, reading, and writing – students must be able to comprehend vocabulary (Nopiyandi et al., 2023). Acquiring proficiency in vocabulary is a prerequisite for learning a language, thus students who possess a large enough vocabulary will find it easier to pick up the language. Furthermore, developing one's vocabulary is essential to learning English. The students must be familiar with the terms and comprehend their meanings, functions, and use.

While teaching advanced vocabulary, there are nine important aspects to take into account (Rahmawati & Harahap, 2023). First, the interpretation. It's critical to grasp the words' meanings precisely and to make sure your pupils get them by having them ask questions. The component of speech comes in second. To utilise a word successfully, students need to know if it belongs in the verb, noun, adjective, or adverb category. Pronunciation comes in third. English language learners may find this element troublesome as there are instances when a word's written and spoken pronunciations mismatch. It is spelt forth. In English, spelling can sometimes be challenging due to pronunciation issues. The fifth is the erratic grammatical patterns of English words, such the irregular and regular verb and the regular and irregular singular-plural form. The word's potential meanings come in sixth. The seventh factor is the context in which the words are used – whether in speech or writing alone, or in formal, informal, regular, or neutral settings. The eighth is how the words relate to other words, lexical sets, antonyms, and so on. The last method is describing objects with collocations. It's critical to emphasise these nine essential components to pupils in order to avoid use errors down the road.

A learner who has mastered vocabulary is able to communicate effectively utilising the entire vocabulary of the language, including knowing how to spell, pronounce, and use words correctly (Nopiyandi et al., 2023). Mastering vocabulary is not spontaneous process. There is a stage on mastering vocabularies includes a stage for the children. Vocabulary mastery is essential part in language learning. Vocabulary is one of component in language which has to be mastered. The lack of vocabulary in learning language could make the students get difficulties in mastering language's skill. Nobody can use language to communicate without having a good vocabulary (Manihuruk, 2020).

From those definitions, it can be said that vocabulary is single unit of word which merges into word and it has meaning on it. Vocabulary is essential in language learning. This becomes the first step which should be passed by the learners in learning a language. It becomes a point or a basic level in language learning especially foreign language. Vocabulary could be

parameter of someone's quality in mastering a language. However, vocabulary mastery could help the learner in learning others skill like listening, speaking, Vocabulary and reading. All skills in language learning is integrated. Those skills cannot be separated from mastering vocabulary itself because written or oral skill in communication is deal with the knowledge and comprehension of the learner use vocabulary.

Inquiry-Based Teaching

With active, independent effort towards solving theoretical and practical problems, inquiry-based language learning involves students engaging more deeply with a given topic (Pop & Zarichanska, 2023). Through a range of learning experiences, inquiry-based learning aims to teach students how to address questions and issues in a number of critical general skills. Teachers must provide students with the necessary direction and feedback both during and after the learning process.

Inquiry-based language learning an approach that places a strong emphasis on student-centered, active learning and inquiry. With this method, students actively participate in their own education via inquiry-based exercises that promote teamwork, critical thinking, and problem-solving (Weiglein, 2023).

In an inquiry-based learning classroom, the tasks and assignments can be set up so that students collaborate or work alone to find solutions to issues including both classroom and fieldwork (Wahono & Zahro, 2021). Moreover, in a guided inquiry approach, the problem and the required resources are provided to the students; their task is to determine the best approaches and tactics for solving the problem (Borg, 2023). In an open inquiry, students exercise complete autonomy; that is, they select the issue to research, select the necessary resources, and determine the best course of action.

The definitions imply that inquiry-based teaching is a teaching method that focuses on students' investigation on questions that are challenging in which the questions will lead students to be active and creative to find the answers. the lecturer is not the core of the whole activities in class. In some cases, lecturer places him or herself as an enabler. It means that lecturer provides initial question that triggering the student self-finding. Lecturer gives students opportunity to learn. Lecturer arranges classroom condition in a way that encourages students to think about the means of solving problems, and lecturer works from the assumption that students should actively seek information rather than passively accept it in lectures. Lecturer, however, is not the only source of information. Students may use other sources to find out the information. Lecturer's role is not transferring knowledge but it is merely enabling, coaching, and supporting students to discover the concept of subject matter by themselves.

METHODS

The classroom action research technique was selected by the researcher as a suitable approach for this two-cycle study. The Tadris Bahasa Inggris (TBI) FTIK IAIN fifth semester students were the subjects of this study. This study included both qualitative and quantitative data collection techniques. The researcher employed an observation checklist, field notes, documentation, and a written test as data collection tools. A checklist for observations is utilised to watch pupils while they are studying. In addition, field notes are ready to document every step of the teaching and learning process, including taking photos and documenting it. In the meanwhile, the reading exam was utilised to determine the students' writing test achievement through the use of clustering. Written assessments are used to determine how well pupils have used the vocabulary text's inquiry approach.

There were two types of data that were analysed in this study: qualitative and quantitative method analysis. The field note and observation checklist would provide the qualitative data. The measuring procedure would provide the quantitative data. The qualitative data used in this study will be analysed using an approach known as inductive categorization, which involves scanning and sorting the data—typically multiple times—to see which categories emerge naturally from the data (Burn, 2009). The score of the oral exam was to be examined using quantitative data in this study.

RESULTS

First Cycle

The condition before the research was identified in pre-research stage. The pre-research was held to gain base line data of the research. The findings of the pre research activity can be seen in Table 1.

Table 1. The Result of Pre-research

Issue	Indicator
Students' vocabulary mastery	<ol style="list-style-type: none">1. Low achievement in vocabulary; Mean = 58.12. Difficulty to grasp the meaning of words.3. Difficulty to spell the words4. Problem in pronouncing the words5. Difficulty to interpret the meaning of the words
Classroom situation	<ol style="list-style-type: none">1. Not inspiring atmosphere2. Low participation of students3. Monotonous teaching technique

Those conditions above were caused by some factors coming from the lecturer and students. As it was identified in the pre-research, the causes from the lecturer were the monotonous teaching learning process; less monitoring, monotonous technique and the confusing explanation of the material. The other causes from the students were their background knowledge and habit. Besides, students had no model during work group activity and independent activity.

The first thing to do was to change the technique of teaching from the conventional technique to the one that could enhance students' vocabulary mastery and put students as active ones. Furthermore, the technique should fulfil the need of the teaching vocabulary. In this case, the researcher used Inquiry-Based Teaching to improve the students' vocabulary mastery.

The strategy was held regularly during English class as a technique to improve their vocabulary mastery. Student active participation in using Inquiry Based Teaching could promote their vocabulary. Therefore, at the end of the research, hopefully 75% of the students were able to achieve score 71 for vocabulary. The research was carried out in two cycles. Every cycle had some steps namely planning, action, observation and reflection. The materials for this cycle were calendar and time & date. The result of the first cycle is considered in the planning of the second cycle.

During the implementation of Inquiry Based Teaching in classroom, the researcher kept Vocabulary notes to see the process of technique application. Starting from beginning until the end of the lesson, the researcher used observation sheets that had been prepared before. The researcher not only used observation sheets, but also used field notes.

There were two things that the researcher observed. They were process of teaching and learning in the classroom and learning progress that the students achieved. Based on the observation of the researcher and interview to the students, the researcher could describe what really happened during teaching learning process.

The teaching and learning process was good enough. When the researcher explained clearly the use of Inquiry Based Teaching, the students got better understanding. The researcher examined that the students' ability to do the Inquiry Based Teaching was more than 50%. Even though the students still made some mistakes in doing the vocabulary tasks.

What bothered a lot was the longer time used in the modelling activity. The analysis of the model of doing the Inquiry Based Teaching spent a lot of time. It was because the model was given orally, the large and noisy class. But there was an improvement in the next meeting. There were some students who began showing up their interest in the class.

Some other important notification was about the students' participation in Inquiry Based Teaching and doing the tasks. Cooperation in work group activities should also be taken consideration. Material selection was easy actually, but because it was given orally then has also been the case.

Inquiry Based Teaching stimulated students in learning. Occasionally, a dominant student would talk too much or tried to control the group. Some

students were slow thinkers and had trouble creating a good score for their group. At the other hand of the talent continuum, some students were so gifted that they got bored working with slower students.

Previously oral explanation dominated the class. And it was tiring moment for the students. Moreover, students found difficulty from where and how to begin the Inquiry Based Teaching when they were asking to do the Inquiry Based Teaching. So, by having Inquiry Based Teaching, they were actively engaged with the class. The assisted group during workgroup activity could have deeper understanding on vocabulary.

The post test was conducted and the students could participate in the post-test since the researcher informed in the meeting before. The students' vocabulary mastery in post-test improved compared with that in the pre-test. Based on the result of post- test, the researcher concluded that there was improvement on students' vocabulary mastery in cycle 1. There was an increase in the achievement of the score. The highest score gained by the students increased from 58.1 in pre-test into 67.6 in post-test in cycle 1. In brief, the post-test score in cycle 1 could be showed in a table as follows:

Table 2. The Students' Score of Post-Test in Cycle 1 Viewed from each Element of Vocabulary

Element of Vocabulary	Score of Post Test in Cycle 1
Meaning	66.9
Spelling	71.1
Pronunciation	67.8
Mean Score	67.6

It was clear that students' vocabulary mastery results improved in cycle 1. However, the researcher still felt that it was still not satisfying. There were some weaknesses during the implementation since it was given in spoken way, so the students had less attention to the researcher's explanation. Furthermore, group work activities and students' courage in asking and responding questions were such problems that should be placed as important consideration.

Second Cycle

In general, the teaching and learning process had run better than the first cycle. It could be seen in the class activities which had been going on conductively and enjoyably for the students. Most of the students were more active, not only in paying attention to the lecturer's explanation but also in

answering the lecturer's questions. Even some of them were more courageous to express their difficulties to the lecturer. The practice activity in this cycle was different significantly than in cycle 1. Students' interaction was more living. Students opened their mind for questions and responded better. The score in cycle 2 improved and fulfilled the *KKM*. It was because of the lecturer's drilling in vocabulary and doing the task.

Students showed improvement in vocabulary mastery. When the students were actively involved in class and participate in the class Inquiry Based Teaching, automatically it involved the aspect of vocabulary such as meaning, context, pronunciation, and spelling. Inquiry Based Teaching stimulated students in learning.

The Inquiry Based Teaching done in group could assist the students to discuss, to share knowledge, and to work together so that there were no students who were too dominant or too inferior.

After examining the result of the students' vocabulary in post-test, the researcher concluded that there was improvement on students' vocabulary mastery. There was increasing in the achievement of the score. The average score between post-test in cycle 1 and post-test in cycle 2 also improved from 67.6 into 74.8. In brief, the post-test in cycle 2 could be showed in table 3 as follow:

Table 3. The Students' Score of Post-test in Cycle 2 Viewed from each Element of Vocabulary

Element of Vocabulary	Score of Post Test in Cycle 2
Meaning	72.9
Spelling	81.1
Pronunciation	74.4
Context	68.9
Mean Score	74.8

There were some positive improvements. First, the students' interest toward the material increased. In Preliminary Research, the researcher found that the students did not have strong motivation and interest to the lesson. They thought that English was difficult lesson, so they only talked to their friends when they were asked to do the task. After conducting the research, the students had stronger intrinsic motivation, greater interest in the topic, and more cognitive activation and involvement. Students were more involved and more interested in the material in the cooperative learning setting of the Inquiry Based Teaching class. It also provided students with different options

of interests. This condition generates students' eagerness to ask and respond questions. Furthermore, Inquiry Based Teaching provide more chances for students to actively develop themselves.

Second, Inquiry Based Teaching help students to participate actively in lesson. Previously, the students were not active students in this lesson. They just keep silent when the lecturer asked them some question. Furthermore, they felt shy to do the task in front of the class.

They minded their personal business; drawing, playing a pen, and doing other lesson homework. To solve the problem, the new given technique provides students with different options of interest. Inquiry Based Teaching provide more chances for students to actively develop themselves. This condition helps them better in participating during the class. It improved the students' participation well.

The last improvement of class climate was the students able to work either in group or individually. At the first, the researcher found that the students had difficulty to do the tasks. Some of them prefer to cheat other students' task. Meanwhile, when they asked to do the task in group, they could not cooperate well. The incorrect choice of choosing the members of each group would conflict the members that would not promote better learning, improve students' motivation and decrease enjoyment of learning experience. One advantage of Inquiry Based Teaching is they are flexible and widely applicable. They January be tailored to fit the needs of different subjects, various types of information, and different levels of competence.

DISCUSSION

Based on the findings above, it can be theorized that the use of Inquiry Based Teaching can help improve the students' vocabulary. The improvements were identified from score to score in each cycle. Besides, Inquiry Based Teaching can help students come up with the ideas to do the task. Inquiry Based Teaching improved the students' vocabulary mastery in the element of meaning. Previously, most of students found difficulty how to start with their vocabulary test. They could not identify the meaning of vocabulary. By having Inquiry Based Teaching, the students will get an idea about their vocabulary. The observation on the effectiveness of Inquiry Based Teaching to improve the students' vocabulary mastery was on the students' ability of developing the idea into spoken and written tests. Inquiry Based Teaching enable the students to find their idea. When it comes to language learning, where students must interact with the language in real-world situations in order to become proficient, this method can be very useful (Pop & Zarichanska, 2023).

Inquiry Based Teaching improved the students' vocabulary mastery in the element of pronunciation. By answering the questions in Inquiry Based Teaching, the students practiced using correct pronunciation. It caused the improvement of the pronunciation in their vocabulary. Inquiry

Based Teaching are at the center of child's world.

Inquiry Based Teaching improved the students' vocabulary mastery in the element of spelling. In Inquiry Based Teaching, students' vocabulary improved due to the fact they had provide the missing letters to construct correctly spelled words. They also arranged jumbled letters into the correct spelling. It improved the students in spelling the words correctly. The language-specific focus of inquiry-based teaching may include specific vocabulary words, structures, or functions. Any of the four primary language skills—speaking, listening, reading, and writing—could be the emphasis of the language study, with a concentration on spelling and pronunciation more specifically. Students may benefit greatly from inquiry-based learning opportunities by strengthening their comprehension of scientific methods and linguistic content (Alameddine & Ahwal, 2016).

Inquiry Based Teaching improved the students' vocabulary mastery in the element of context. By applying Inquiry Based Teaching, the lecturer also trained the students' vocabulary mastery. In answering the questions in Inquiry Based Teaching, the students had to choose the appropriate vocabulary. Therefore, the choice of words became more varied as they were trained to think creatively to choose the appropriate words. With the use of prepared questions, the lecturer may use this strategy to get their students ready for the lecture and inspire them to "inquire" and "seek the truth" (Alameddine & Ahwal, 2016).

The students had stronger intrinsic motivation, greater interest in the topic, and more cognitive activation and involvement. Students were more involved and more interested in the material in the cooperative learning setting of the Inquiry Based Teaching class. It also provided students with different options of interests. However, physically active Inquiry Based Teaching can be a lot of fun, and lead to a lot of learning. Students are more likely to remember and feel good about what they are learning when they are moving around or throwing objects around.

Inquiry Based Teaching helps students to participate actively in lesson. The new given technique provides students with different options of interest. Inquiry Based Teaching provide more chances for students to actively develop themselves. This condition helps them better in participating during the class. The important thing is for the children to feel deeply involved in the lessons. Inquiry Based Teaching are one of the best ways of achieving this. Students took pleasure in learning and completing their challenging assignments (Alameddine & Ahwal, 2016). Furthermore, Inquiry Based Teaching provide more chances for students to actively develop themselves. This condition helps them better in participating during the class. Engaging students as active participants in their education helps to achieve this (Alameddine & Ahwal, 2016). By using inquiry-based teaching techniques carefully, the lecturer may maintain the students' interest in the subject matter. They derive enjoyment from the process and are able to simulate the struggle of learning English, which gets harder and harder.

Inquiry Based Teaching are helpful for workgroup and independent activities. Inquiry Based Teaching stimulated the students in learning. It also became an efficient way to learn the material. Students took some benefits by the use of Inquiry Based Teaching s in the case of workgroup and independent activities. As they are assigned in a certain Vocabulary task, Inquiry Based Teaching facilitate them both in workgroup independent activities. The advantages of Inquiry Based Teaching are they are flexible and widely applicable.

CONCLUSION

Based on the discussion in the previous chapter, the findings of the results show the positive improvements in the students' vocabulary mastery and class climate. In conclusion, the final discussion in the previous chapter can be drawn into two conclusions. Firstly, the use of Inquiry Based Teaching s improves the students' vocabulary mastery. Secondly, the implementation of Inquiry Based Teaching s in vocabulary mastery refines the class climate.

The use of Inquiry Based Teaching improves the students' vocabulary mastery. The result of the research showed that the use of Inquiry Based Teaching is able to improve the students' vocabulary mastery that covers (1) students understand the meaning of words; (2) the students had fewer mispronunciations; (3) the students could spell the vocabulary correctly; (4) the students could apply the vocabulary in appropriate context of situation. The improvement of vocabulary mastery can be seen from the test results. The mean score increased from cycle to cycle. The mean score of pre-tests is, 58.1, the mean score of post-tests in cycle 1 is 67.6, and the mean score of post- tests in cycle 2 is 74.8.

The implementation of Inquiry Based Teaching s in vocabulary mastery refines the class climate. Referring to the research findings, the class got better readiness at the beginning of the lesson. The improvements are indicated by (1) the students' interest toward the material increased. They had stronger intrinsic motivation, greater interest in the topic, and more cognitive activation and involvement; (2) the students' active participation in class. The new given technique provides students with different options of interest. Inquiry Based Teaching s provide more chances for students to actively develop themselves; (3) the students could work either in group or individually.

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