

THE IMPLEMENTATION OF SCIENTIFIC APPROACH ON ENGLISH LANGUAGE LEARNING OUTCOMES IN THE CONTEXT OF CURRICULUM 2013 AT SMK PGRI ENREKANG

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ARTICLE INFO	ABSTRACT
<p>Article history: Received: January 27, 2025 Revised: February 17, 2025 Accepted: February 27, 2025 Published: April 30, 2025</p> <p>Keywords: Implementation Scientific Approach Learning outcomes English 2013 Curriculum</p>	<p>The application of a scientific approach in learning English is a teaching method that focuses on the scientific process, which aims to improve students' understanding and skills in English. This research aims to find out how teachers apply a scientific approach in learning English and how students respond to implementing this approach. It is hoped that this research can contribute to the development of more effective English learning methods, while increasing students' self-confidence in learning. The research subjects were two English teachers at SMK PGRI Enrekang who had been interviewed and observed, as well as eight class XII students who were selected as representatives through a random sampling method. Data collection was carried out through interviews and direct observation to obtain in-depth information regarding the learning process based on a scientific approach. The research results show that the application of a scientific approach in English language learning based on the 2013 Curriculum is able to improve students' critical, creative and analytical thinking skills. Through the stages of observing, asking, experimenting, associating, and communicating, students not only learn passively, but also actively apply and develop their language skills in real situations. Although there are challenges in terms of time allocation and student readiness, this approach has a significant positive impact on the quality of English learning in the classroom. Overall, the scientific approach is an effective strategy in improving students' English language skills, as well as supporting the achievement of the 2013 Curriculum objectives of creating relevant, structured and meaningful learning.</p> <p><i>This is an open access article under the CC BY-SA license.</i></p> 
<p>How to cite: Fauziah M, E., Ilmiah, & Junaid. (2025). The Implementation Of Scientific Approach On English Language Learning Outcomes In The Context Of Curriculum 2013 At SMK PGRI Enrekang. English Language Teaching Methodology, 5(1), 58-65. https://doi.org/10.56983/eltm.v5i1.1701</p>	
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INTRODUCTION

Education is an important aspect in developing quality human resources. As a process of teaching, training and research, education aims to transfer knowledge, skills and values from one generation to the next. Based on Law no. 20 of 2003, education is a planned and deliberate effort to create a learning environment and learning process that allows students to develop their potential as a whole. This development includes various aspects, such as spirituality, self-control, personality, intelligence, morals and skills needed by individuals, society, nation and state. English, as an international language, has become the main skill that students must master to compete in the modern era. In Indonesia, English language skills are one of the focuses in developing the national education curriculum. The 2013 curriculum is designed to increase student competence through a scientific approach or scientific approach, which consists of the stages of observing, asking, trying, reasoning and communicating. This approach aims to build critical, creative and active thinking skills, while creating more relevant, interactive and contextual learning.

According to Hosnan, M. (2014), the scientific method remains relevant and modern because it has been applied in science and is now used in various research fields, including English language learning. Through a scientific approach, students learn and produce knowledge through in-depth cognitive processes. According to the 2013 curriculum, all subjects in Indonesia, including English, must be taught using a scientific approach. According to Siregar, M. (2019), the scientific method is a process that involves collecting data, testing theories through experiments, and then making relevant conclusions from the 2013 curriculum-based scientific approach in the teaching process. In line with Kartini, (2019). The scientific method in teaching English is a new method, and social sciences, management and natural sciences are associated with the term “scientific”. This process not only strengthens students' understanding but also becomes the basis for scientific methods, so that English learning becomes more effective, applicable and meaningful for students' lives in the era of globalization. Sani, R. A. (2015) also stated that the scientific approach generally suggests a unique phenomenon and a focused and in-depth investigation to draw broad conclusions. The study of one or more events or phenomena, the gathering of fresh information, or the revision and synthesis of previous knowledge are all considered aspects of the scientific process. A scientific approach often requires several procedures for collecting data, such as experimentation or observation, data processing or analysis, and creating a test hypothesis.

Thus, the application of a scientific approach in learning English provides opportunities for students to be actively involved in a learning process based on real experience and problem solving. This allows students to develop higher-order thinking skills which include analysis, evaluation and creation. Apart from that, this approach also encourages students to become independent learners who are able to explore various sources of information critically. Through the integration of a scientific approach in the curriculum, English language learning

does not only focus on technical language mastery, but also on developing communication and critical thinking skills which are very necessary in the era of globalization.

However, the application of a scientific approach in English subjects still faces various obstacles. Teachers often have difficulty implementing this approach optimally, either due to limited understanding of the method or lack of supporting resources. As a result, learning tends to be conventional and does not involve students actively. This has an impact on low motivation and student learning outcomes in English subjects, especially at the Vocational High School (SMK) level such as at SMK PGRI Enrekang. Apart from that, students often find it difficult to follow scientific-based learning, especially at stages such as reasoning and communicating ideas in English. This obstacle shows the need for evaluation of how the scientific approach is applied by teachers and how students respond to this method. Based on conversations with several students, it was found that they wanted English learning that was more interesting, interactive, and relevant to their needs.

Based on these problems, this research proposes two main problem formulations. First, how do English subject teachers apply a scientific approach in learning based on the 2013 Curriculum? Second, how do students respond to the application of a scientific approach in learning English? This research aims to find out how teachers apply a scientific approach in accordance with the principles of the 2013 Curriculum in learning English. Apart from that, this research also aims to understand students' responses to implementing this approach.

It is hoped that the results of this research can make a positive contribution, especially for teachers, by providing a better understanding of the application of a scientific approach in English language learning. Apart from that, this research is also expected to be useful for students, especially in improving their learning methods, self-confidence and involvement in the learning process. Thus, this research contributes to achieving the goals of the 2013 Curriculum to create learning that is relevant, effective and in accordance with students' needs in the era of globalization.

RESEARCH METHOD

This research is a type of descriptive qualitative research. Researcher use qualitative methods to explore phenomena in depth. According to Fadli M. R. (2021), qualitative research focuses on the quality of interactions, activities, environment, and various resources involved. This is in line with the opinion of Abubakar (2021:7), who states that data in qualitative research is collected in the form of words and sentences, not numbers. This approach aims to provide in-depth insight and solutions to problems based on facts found at the research location. Evaluation is carried out based on events and conditions that occur directly in the field.

Research subjects are individuals who are directly involved in this research activity. The research was conducted at SMK PGRI Enrekang Vocational School with the subjects being two English teachers who were the focus of observation, as well as eight students consisting of two representatives from each class XII. Subject selection was carried out using a random

sampling method to ensure diversity and accurate representation of the data. This approach aims to obtain relevant and in-depth information regarding the application of a scientific approach in learning English at the school.

Data collection in this research was carried out through observation and interviews. Observation is carried out by directly observing the object or phenomenon that is the focus of research, either systematically or not, in order to collect relevant data. As stated by Abubakar (2021: 90-92), observation is the process of observing and documenting facts that are relevant and needed by researcher to support research objectives. Interviews are conducted using a semi-structured guide, which allows researcher to dig deeper into information based on the responses provided. given by participants. According to Abubakar (2021: 67), an interview is a form of verbal exchange between an interviewer and a respondent, which aims to collect information and ideas that suit research needs through directed and meaningful interaction.

The data collection procedure in this study involved several steps. First, the researcher will observe the learning process carried out by the teacher in the classroom to determine the application of the scientific approach in learning English. Next, researcher will conduct interviews to explore students' responses to the teacher's application of the scientific approach. After the data is collected, the researcher will compile and summarize the results, and draw conclusions based on existing findings.

Data analysis was carried out through several stages. First, Data Reduction, which according to Rijali, A. (2018), is an effort to organize data into certain units of concepts, categories and topics. The second stage is Data Display, namely presenting data in a form that is easy to understand, such as tables or graphs. Furthermore, in the Observation stage, Hasanah, H. (2016) explains that observation is a systematic process of observing human activities and body tissues, which occurs continuously from the place of normal activity, thereby producing facts that can be analyzed. The fourth stage is Documentation, which includes recording and organizing information obtained from observations and interviews. Finally, in the Draw Conclusions stage, the researcher will draw conclusions based on the data analysis that has been carried out.

RESULT AND DISCUSSION

Result

1. The scientific approach implemented by teachers in English language learning in 2013 curriculum-based classrooms.

This research aims to find out how the scientific approach is applied in learning English in the classroom based on the 2013 Curriculum. This approach includes observation, asking, experimentation, association and communication. Teachers use an observation approach to make students focus more on learning and help them understand the material more deeply. Although most students pay attention to the teacher, some students still need additional motivation.

a. Observing.

The observing approach in learning English is carried out by inviting students to observe the material provided directly. Observation results show that students become more active and curious in learning, and apply scientific methods to answer problems or questions that arise. In interviews, teachers explained that this approach was successful in getting most students to focus on learning, although some students still needed additional motivation. In his interview, the teacher explained that most students paid attention to the teacher's explanation, but some still lacked attention and needed more motivation.

b. Questioning

Asking is a step in a scientific approach that opens up space for discussion in class. Based on the results of observations, students actively ask questions and discuss the material being taught, which helps them think critically. The teacher explained that many students no longer ask math questions because they can now search on their cellphones. However, there are still network problems in remote areas that hinder the use of internet media. The teacher stated that although many students were able to search for knowledge using cellphones, there were some students who were less enthusiastic and needed a more active approach from the teacher.

c. Experimenting

Experiments in learning are carried out by dividing students into groups to deepen the application of English directly. Observation results show that this step helps students develop their abilities in problem solving and critical thinking. Teachers also explain that students become more challenged and motivated with this approach. In his interview, the teacher explained that with this approach, students were increasingly motivated and able to learn independently using technological applications and devices

d. Associating

Linking in a scientific approach that involves students connecting experimental findings with relevant scientific knowledge or theories. The observation results show that students analyze the results of their experiments and the remaining data obtained with existing theories. This helps students build a deeper understanding and think more holistically. The teacher states that students always try to answer and do the assignments given, and try to understand the material that has been explained well.

e. Communicating

Communicating experimental results or scientific conclusions is an important step in the scientific approach. Observation results show that students are trained to use appropriate and accurate language in discussions. Students can ask questions verbally about the material being taught and discuss the difficulties they face. Teachers state that students often communicate by asking about the assignments given and looking for solutions to difficulties in learning.

2. Students' response to the implementation of the scientific approach in English language learning in class based on the 2013 curriculum.

The scientific approach in learning English based on the 2013 Curriculum has had a significant positive impact on increasing student engagement, critical thinking skills, communication skills, collaboration, and the relevance of real life contexts in learning.

a. Increased Engagement and Interest

Students show a positive response to the scientific approach, especially in terms of increasing engagement and interest in learning. Activities such as observing, asking, experimenting, and communicating make learning more interactive and interesting. Based on interviews with students, they revealed that their interest and enthusiasm for learning increased with the implementation of this approach.

"A scientific approach increases interest in learning," (Interview, Student 3)

"With a scientific approach, we become more enthusiastic." (Interview, Student 2).

b. Improved Critical Thinking Skills

This approach also plays an important role in improving students' critical thinking skills. Students are invited to ask questions, conduct experiments, and connect the concepts learned. A number of students stated that they found it easier to understand the material and were more active in asking questions if there was something they did not understand.

"If I'm confused, I'll ask," (Interview, Student 5), said one student who expressed the importance of clear explanations from the teacher.

c. Enhanced Communication Skills

The scientific approach also has an impact on improving students' communication skills, both oral and written. Through discussions, presentations and written reports, students are used to conveying their ideas clearly.

"We can ask anything," (Interview, Student 1), said a student who felt open to discussing with the teacher.

d. Collaboration and Teamwork

In learning with a scientific approach, cooperation between students is very visible. Students often work in groups to conduct experiments or share observations.

"Learning is more effective and enjoyable," (Interview, Student 6), said students who felt the benefits of group work.

e. Relevance to Real-Life Contexts

This approach helps students relate the material to everyday life. Teachers often provide examples that are relevant to students' experiences to make it easier to understand the material.

"We understand more quickly if examples are given," (Interview, Student 7), explained students who felt learning was more meaningful because of its relevance to real life.

Discussion

1. The scientific approach implemented by teachers in English language learning in 2013 curriculum-based classrooms.

The scientific approach in learning English based on the 2013 Curriculum (K13) in Indonesia aims to develop students' skills actively and holistically through five main steps: observing, asking, trying, associating, and communicating. This process is designed to improve students' critical thinking skills, creativity and understanding, while integrating practical English language skills in everyday life. In the observing stage, students are trained to pay attention to phenomena or learning material systematically, followed by the questioning stage to explore curiosity and critical thinking. The trying stage encourages students to practice and test English concepts in real contexts, while the associating stage helps students connect new knowledge with experiences or information they already have. The final stage, namely communicating, trains students to convey ideas or information clearly, both orally and in writing, so that they can apply English effectively in various situations. This approach not only improves students' English skills, but also builds their social skills, critical thinking, and confidence in using English in everyday life.

2. Students' response to the implementation of the scientific approach in English language learning in class based on the 2013 curriculum.

The scientific approach in learning English based on the 2013 Curriculum has produced various positive responses from students, such as increased engagement, critical thinking skills, communication skills, collaboration, and relevance to real life contexts. This approach emphasizes active learning through scientific steps such as observing, asking, trying, associating, and communicating, which not only helps students understand the material, but also encourages them to think analytically, work together, and apply English in real situations. By connecting learning to everyday life, students feel more motivated and engaged in the learning process, while gaining important skills to face real-world challenges.

CONCLUSION

The scientific approach in the 2013 Curriculum in Indonesia emphasizes active student involvement through five stages: observation, asking, experimentation, association, and communication. The goal is to develop critical thinking, problem solving, and communication skills in English. This approach is effective in encouraging student engagement and the development of practical language skills, despite challenges related to time and student readiness. Overall, the scientific approach helps improve the quality of English learning in the classroom.

The scientific approach in learning English based on the 2013 Curriculum aims to create a more active, critical and experiential learning process through the steps of observing, asking, experimenting, associating and communicating. Although many students experience benefits such as increased engagement, critical thinking, communication skills, and connection to real life, some students face challenges related to time management, the need

for mentoring, and difficulty adapting to more active methods. Overall, this approach has had a positive impact, but requires further adjustments and support to achieve optimal results.

ACKNOWLEDGMENT

I would like to express my deepest gratitude to Allah SWT for all the grace, guidance and strength given so that I can complete this scientific journal. I would like to express my sincere thanks to my beloved parents who have always supported, prayed for and provided invaluable motivation throughout my journey. To my brothers, friends, and all parties who have helped, provided support, and inspired me, I am very grateful for all the help that has been given. Not to forget, I would like to thank the Muhammadiyah University of Makassar (Unismuh Makassar) which has provided education, facilities and opportunities to develop. Without your support and prayers, this achievement would not have been possible. Hopefully the goodness that has been given will be rewarded with abundant rewards from Allah SWT.

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