



Application of the Scientific Approach in Studying Review Texts at SMAN 1 Mirit during the Covid-19 Pandemic

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Abstract—The scientific approach is a learning approach with the scientific method. This study aims to describe the application of a scientific approach in learning review texts at SMAN 1 Mirit during the Covid-19 pandemic. The learning process is carried out online using Google Classroom media. This type of research is descriptive qualitative research with a case study research strategy. Data collection techniques are carried out by documentation studies, observations, and interviews. The data analysis technique used interactive techniques consisting of data collection, data reduction, data presentation, and data verification. The results of this study are (1) the Indonesian language teacher in class XI has carried out learning planning with a scientific approach, (2) the Indonesian teacher in class XI has carried out the steps of a scientific approach including observing, asking questions, gathering information, reasoning, and communicating but in the implementation not running optimally, (3) Indonesian language teachers in class XI use authentic assessment in assessing the competence of knowledge, skills, and attitudes, during the assessment process the teacher has used scoring guidelines that are adjusted to the competencies to be assessed.

Keywords—Scientific approach, reviews, Indonesian, Google Classroom, Covid-19

I. INTRODUCTION

The world of education is experiencing new challenges in the learning process due to the corona virus that has attacked the entire world, including Indonesia. This virus caused a pandemic which then affected the education sector. The Covid-19 pandemic requires schools to change their learning system from what was originally direct learning to online learning (Onyema et al., 2020:110). Online learning is learning that is carried out remotely by utilizing technology as a learning media (Dhawan, 2020:6). Distance learning is carried out as an alternative for learning, so that teaching and learning activities in schools do not stop. This is in line with the statement of (Febrianto et al., 2020:235) which states that online learning makes it easier for students to get learning material even though it is hindered by distance limitations.

The application of distance learning should still refer to the provisions of the 2013 curriculum which focuses on active

learning using a scientific approach. This is based on Minister of Education and Culture Regulation No. 65 of 2013 related to Process Standards, the scientific approach is used as the main approach that is strengthened by discovery learning, research-based learning (inquiry learning), problem-based learning, and project-based learning.

(Aronson, 2007: 235) explains the scientific approach as a method used to reveal a phenomenon through observation and serves as a means of solving problems. The steps in the scientific approach are carried out in five steps, namely finding facts or information by observing, asking questions, gathering information, reasoning, and communicating (Daryanto, 2014:59). The use of a scientific approach in the learning process can stimulate student activity to gain understanding through observation activities first to processing the information obtained..

The change in the learning system from face-to-face learning to online learning raises various problems (Grammes, 2020:5). This is because online learning is an activity that is rarely or never carried out at all. Changes in learning patterns in students are one of the things that are often found and observed. The first time the implementation of online learning received good enthusiasm from students because students considered learning is at home.

However, along with the development of the corona virus which is increasingly threatening, distance learning causes saturation in students. The boredom arises due to monotonous student activities without any interaction with the teacher or other friends. This is in line with (Setyorini, 2020:98) which states that distance learning creates obstacles that become challenges for students because there is a decrease in communication and socialization between students and teachers.

In addition, the impact of learning in the network raises problems experienced by teachers. The teacher carries out online learning using technology media, but in the learning process the teacher does not use the steps of the scientific approach recommended in the 2013 curriculum. The results of a survey conducted by Indonesian Child Protection Commission (KPAI) and Federation of Indonesian Teachers' Unions (FSGI) 73.9% of respondents admit that the implementation of online learning is not able to create interaction between students and teachers, these results reveal that teachers during distance learning teachers only give and ask for the results of the assignments given (Umar & Mochamad Nursalim, 2020:606). The research shows that online learning that is carried out does not stimulate student activity, in other words the teacher does not apply a scientific approach during the learning process.

The 2013 curriculum recommends the application of a scientific approach to all subjects including Indonesian language lessons. In learning Indonesian, students are directed to be able to communicate properly and correctly and develop language and literary skills through aspects of listening, reading, speaking, and writing. In addition, learning Indonesian is a text-based learning that requires students to be active in developing cognitive skills and psychomotor skills (Mahsun, 2014:95). Therefore, the scientific approach is an approach that can be applied in text-based Indonesian language learning because it stimulates student activity in the learning process.

Based on this explanation, this study aims to determine the application of a scientific approach in learning Indonesian in review text material at SMAN 1 Mirit class XI through *Google Classroom* media in distance learning. The

procedure for applying the scientific approach is carried out by knowing the planning, implementation, and assessment of learning Indonesian language review material through *Google Classroom*.

II. METHOD

This research is descriptive qualitative research with a case study research strategy. A case study is a research strategy used to study and uncover a complex phenomenon. The case study used is a fixed case study because the problem has been determined beforehand (Sutopo, 2006:111). Data collection techniques were carried out by documentation, observation, and interviews. The data analysis technique uses the interactive analysis technique of Miles and Huberman (Miles, et al., 2014:19). The interactive technique is carried out with four activities, namely data collection, data reduction, data presentation, and data verification.

III. RESULT AND DISCUSSION

The results of this study describe the planning, implementation, and assessment of the application of the scientific approach in learning review texts through *Google Classroom* media.

Learning Planning with a Scientific Approach

Based on the results of the study of documentation and interviews with Indonesian language teachers in class XI SMAN 1 Mirit, it was stated that the teacher had prepared a learning plan with a scientific approach as stated in the RPP (Lesson Plan). The preparation of the RPP was carried out together with the Indonesian language MGMP (Subject Teacher Conference) of Kebumen Regency. This is in line with Minister of Education and Culture Regulation No. 81A of 2013 concerning curriculum implementation which explains that the preparation of RPP can be done by the teacher independently or it can also be done together with the Subject Teacher Conference. In addition, during the pandemic the lesson plans used by Indonesian language teachers at SMAN 1 Mirit used the latest lesson plans format. The basis for the preparation of the RPP with the latest format is based on the Circular Letter of the Minister of Education and Culture Number 14 of 2019 which contains an explanation of the preparation of the RPP with the principles of being effective, efficient, and student-oriented.

The process of preparing the lesson plans begins with reviewing the syllabus and then determining core competencies and basic competencies. The contents of the Indonesian language teacher's lesson plan at SMAN 1 Mirit only contain core components consisting of learning

objectives, learning steps, and learning assessments. In addition, in the Indonesian language teacher's lesson plans in class XI SMAN 1 Mirit there are material attachments and evaluation attachments that are used as assessment guidelines. The contents of the lesson plans have been adapted to the material being taught and the learning media used, namely review text material and Google Classroom media. However, the lesson plan does not explain in full the steps of learning using a scientific approach.

Implementation of Learning with a Scientific Approach

The implementation of scientific approach learning in online learning on review text material is carried out using *Google Classroom* media. The learning implementation activities consist of preliminary activities, core activities, and closing activities. Preliminary activities are activities used to create an effective beginning of learning. Based on the results of observations and interviews, the preliminary activity carried out by Indonesian language teachers during distance learning using *Google Classroom* media was to ask students' readiness to learn. The teacher prepares the learning process in *Google Classroom* media and opens the lesson with greetings. In addition, during this pandemic, teachers always remind students to continue to apply health protocols and motivate students to keep their enthusiasm for learning. In the introductory activity, the teacher reminds students to fill out the attendance list via the link provided. Next, the teacher reviews the previous material and gives an apperception about the material to be taught.

The core learning activities play a significant role in achieving the learning objectives that have been determined. This is because learning with a scientific approach is carried out in the core activities. The core activities of the scientific approach are carried out with steps starting from observing, asking, gathering information, reasoning, and communicating. The Indonesian language teacher for class XI SMAN 1 Mirit has implemented steps of a scientific approach in review text material through *Google Classroom* media.

The observing step is a process to observe the information provided by the teacher. At this step, the observation process has been going well. Based on the results of observations and interviews, Indonesian teachers always provide text or voice recordings for students to observe. The Indonesian teacher provides material that is sent through *Google Classroom* for students to observe. Then the teacher gives time for students to observe the material provided in the form of text, images, or sound recordings. This is in line with Minister of Education and Culture Regulation Number 81A of 2013 concerning curriculum

implementation which states that observing activities function to facilitate teachers to provide opportunities for students to make observations through viewing, listening, and reading activities.

The questioning step, in this step the teacher provides the opportunity to ask questions about the information that has been seen, heard, or read. However, based on the observation results of learning review texts using a scientific approach through *Google Classroom*, students did not ask at all. The Indonesian teacher has stimulated students to ask questions by asking some questions, but students are not active in asking questions. Therefore, so that the questioning process continues, the teacher asks questions about the material being studied. The Indonesian teacher for class XI explained that during this online learning, students did not seem enthusiastic in learning. The teacher is exceedingly difficult to make students actively ask questions. Thus, the process of asking questions in learning with a scientific approach through *Google Classroom* was not carried out properly.

The step of gathering information is the third stage in the scientific approach. In this step, students seek information from various sources about the material being studied. Based on the results of observations and interviews, Indonesian language teachers provide learning materials not only with textbooks, but also with modules, texts from the internet, and voice recordings. This shows that students not only collect information through textbooks but also other media. In addition, based on interviews with students, information gathering activities were carried out well because students used the internet to search for the material being taught.

The reasoning stage is the process of processing information that has previously been collected. Based on the results of observations and interviews with the Indonesian teacher class XI, in the reasoning step the teacher invites students to jointly conclude the learning material. The conclusion is the result of processing information obtained when collecting information through various sources. However, at this step it does not work well. This is because sometimes teachers do not stimulate students to conclude learning outcomes.

The communicating step is a step that provides opportunities for students to convey the results of the material being studied. The process of communicating is the process of delivering results in the form of writing, oral, diagrams, charts, pictures, or other media (Hosnan, 2014:39). In distance learning, communication activities are limited. Based on the results of learning observations, communicating activities are carried out by students by uploading the results of student work in *Google*

Classroom. In addition, communicating is also carried out by students by answering questions from the teacher when learning.

Based on this explanation, it can be concluded that learning with a scientific approach carried out through *Google Classroom* has not been carried out properly. This is because the implementation of distance learning is something new, so good planning and design of learning processing is needed. In line with (Karman, 2021:15) stated that the implementation of the scientific approach during the pandemic was not carried out properly due to the lack of mastery of technology and teacher experience in designing distance learning.

The closing activity is the end of the learning series. In this activity the teacher gives assignments to students and reminds them to do assignments. Closing activities in distance learning are not much carried out. This is because the allocation of learning time in the network is extremely limited. Based on observations and interviews, the closing activities carried out by Indonesian language teachers only concluded the material, distributed assignments, reminded assignments, and closed the learning activities with greetings.

Learning Assessment with Scientific Approach

Assessment is the final part after planning and implementing learning. Assessment is one part of the curriculum that is indispensable because assessment becomes a tool to measure learning achievement (Subheesh & Sethy, 2020:1). Based on the results of observations and interviews with Indonesian class XI teachers, in learning review texts with a scientific approach through *Google Classroom*, there are three ways of assessment carried out by teachers. The three assessments include knowledge competence, skill competence, and attitude competence. The knowledge competency assessment system is carried out with a written test. Skill competency assessment is carried out by performance, while attitude competence is carried out by observation during the learning process.

The three assessment methods are in accordance with the authentic assessment in the Minister of Education and Culture Regulation No. 23 of 2016 concerning Educational Assessment Standards. The reason Indonesian teachers only use these three methods in the assessment is due to the limitations of distance learning. In the assessment process, the teacher has used scoring guidelines even though the scoring guidelines used are simpler than the scoring guidelines during face-to-face learning. In addition, in distance learning, students' cognitive, psychomotor, and affective abilities are difficult to

measure. This is due to the lack of enthusiasm of students in learning.

IV. CONCLUSION

Based on the results of this study, it can be concluded that the Indonesian language teacher in class XI of SMAN 1 Mirit has planned to study review texts with a scientific approach through *Google Classroom* media. The planning activities carried out by the teacher are in accordance with the provisions. However, in the lesson plan there is no elaboration of the steps of a scientific approach. In the implementation of review text learning with a scientific approach through *Google Classroom*, Indonesian language teachers have implemented scientific approach steps. However, the implementation of 5M activities (observing, questioning, gathering information, reasoning, communicating) has not been carried out properly. This is because of the limitations of teachers in distance learning. The assessment of review text learning with a scientific approach has used an authentic assessment that is in accordance with the provisions in the assessment of competence, knowledge, skills, and attitudes.

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