



**The Implementation of Scientific Approach
in Online Teaching Reading Comprehension at Mtsn2 Medan**

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ABSTRACT

This study focused on the investigation of implementing Scientific Approach in teaching online reading comprehension at MTsN 2 Medan. The research problem was based on the implementation of Scientific Approach as one of teaching strategies in the application of curriculum 2013 in selected school. Scientific Approach consists of several stages which somehow were not applied optimally in teaching and learning activity. The research was conducted by using qualitative descriptive design. The data were collected by observing and interviewing subjects of the study. The subjects were three teachers who used to teach reading comprehension at MTsN 2 Medan in grade eight in junior high school education level. The objectives of the research were to find out; 1) the implementation of scientific approach in online teaching reading, 2) how the strategies are realized to be implemented in online teaching reading, 3) the reason of the strategies of implementing scientific approach are realized in online teaching reading. Based on the analysis of the data. The findings of the research were: 1) teachers had applied the implementation even though it was not optimal, 2) the strategies used of the approach in order to encourage students during learning process, 3) teachers had reasons to implement scientific approach (observing, questioning, experimenting, associating, and communicating) as a teaching strategy. The result of the research would be a reference towards further study and help other teachers in applying teaching strategy of learning process.

Keywords: Scientific Approach, teaching strategy, teaching online, reading comprehension

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INTRODUCTION

Scientific approach (SA) has been adopted into teaching and learning process as government has introduced curriculum 2013 (K-13). In keeping by Fauziati (2013) “scientific approach could be an educational approach utilized in classroom in which the approach in teaching is proved consistently in science at its truth and it includes strategy of learning to have students’ interaction in the process of knowledge and teaching method is scientifically assessed and shown to succeed in various students”. The curriculum 2013 emphasizes scientific approach (SA) for teaching within the learning session, because it's considered effective for students to be competence in knowledge supported by the experiences of students in learning language.

The Minister of the Education and Culture as the representative of government applies a program so - called the test for the curriculum 2013 (K13), and it's used from the level of primary school to senior high school. The curriculum 2013 emphasizes scientific approach (SA) for teaching in classroom activity, since the effectiveness is considered to support the experience in gaining knowledge for higher education students.

The scientific approach (SA) could be a new approach in teaching supported the curriculum 2013 (K-13). In fact, an approach maintains to grow and develop in each period of time. It is known that Scientific Approach consists of five stages, as following: (1) observing, (2) questioning, (3) experimenting (4) associating, (5) communicating. Those steps need to be realized by teachers in each teaching or learning process. In keeping with Marina, et al (2013) stated that the aim of Indonesia’s curriculum has its target in junior high school (SMP) and senior high school (SMA) to improve their competence, knowledge, personality, modesty, and skills in order to accomplish into higher level of education. Government exclusively pointed several school to apply the curriculum 2013.

Online learning definitions in literature has been widely determined as it reflect the difference of practice and associated technologies. Carliner (1999) determines the presentation related to lesson which is used computer tools as part of online learning. Khan (1997) said online teaching and learning process as an innovative strategies to carry unreachable audience using medium such as web.

According to Halina (2016) to apply online learning, the involvement does not only include the demonstration and distribution of materials through network, the learner and learning process are supposed to emphasized on online learning. Teaching using direct interaction in classroom and teaching online are similar and basically has the same fundamental of teaching, yet they are qualitatively different. Online education systematically begun when the classroom is moved from traditional situation into online classroom. Despite some similarities, there are also several

differences they have as stated below:

1. The online teacher plays the role of guiding students through one or more online learning experiences. These experiences are occasionally designed and planned long before the lesson starts in order to get teacher prepared the material effectively and well. By doing this role, the teacher guides and attract the attention of learners toward fundamental concepts and ideas.
2. Learning is a struggle and studying online can eventually remoted, challenging, perplexing, or depressing without any guide and instruction.

The result is, initiative online teacher needs to build well intentional efforts to interact obvious encourage messages to individual learners and the whole group. Furthermore, besides giving constructive feedback, teacher as supporter also provides positive comments, suggestion and critiques. To maintain positive environment in classroom, encouragement and welcoming support are important approach to use. Learners may feel unmotivated and humiliated occasionally about themselves, the class, or their peers (even the instructors). Teacher as the instructor give best effort to encourage students in the way to listen, respect learners' difficulties, and also help the, to realize the situation in a manner that students are more active and creative.

3. Teacher as a role model and hold a valuable matter. This role is as important as learners' wants to improve high levels of competence and confidence. The online teacher must move beyond just modeling a depth inspiration for the subject and individual ability with the content. The mentor needs to discover ways to hand the matter over to the students to do something with it. Applied projects and papers work well for this, and it leads the teacher an opportunity to be a coach and advisor.
4. Learners requires some suggestions and motivational critiques related to their work. How are they doing? Are they getting closer to meeting the learning objectives or not? Online teachers effectively can discover ways to give thoughtful feedback to personal learners and, when appropriate and group of students.
5. Online learning could be uninterested and impersonal if it is done without eager to create positive environment. The result shows that, the online teacher supposed to present and provide learning as the encouraging host, facilitating introduction, using discussion starters to enable conversations amon students and taking the time to get to know students andreferencing that knowledge in interactions with them.
6. Online course saves the documentation during the process. The data from online class records the number of students' attendance in the course, the pages were viewed or not,

and the frequency of discussion posts the students participated in, and many more. It can be abused, yet it can also become justification and informed decisions by an online teacher. If a student is not logged in or getting failure to visit the pages in the course with direct instructions, to instructions asks the learners or reorganizes the content so that it is easier to discover.

7. The good point of online courses is the content rich and at some moment students can get misled in all content. The teacher as a regulator intentionally releases content in amount that are appropriate for educated people. It is often that the content of the course published weekly. Other times, teacher shared the all content once at a time but students only focus on individual part at a time. Another significant point is to break content into smaller part.
8. A good teacher realizes that he / she is a lifelong learner, and they can adapt that learning for students in many ways in online classroom. Teacher can be active in portion as he / she also invites the students to be interactive in class participation through discussion, sharing ideas related to the subject learning, even complete all assignments and sharing their work to other students. This process done along the way to make an exciting and dynamic online learning environment in which the member of community commits to exemplifying the qualities of a lifelong learner.

Teacher must know the necessary term in teaching called as technique. By understanding the techniques in teaching which is used by native teacher to teach their students is also important. Nation (2009) classified several teaching techniques in teaching native speaker including shared reading, guided reading and independent reading.

1) Shared Reading. This activity can be done by teacher to read a story from a large book and shown the pictures and written words to students. They surround the teacher while he / she reads the story like a parent read the bedtime story for the children. They get involved as teacher ask what will happen next in the story and give comment on the story. They are allowed to read the words aloud together.

2) Guided Reading. It can be done in silence or by reading aloud to a child. Learner and teacher talk about the book before it is read.

3) Independent Reading. In independent reading the learner chooses a book to read and quietly gets on with reading it. During the learning process, teacher will invite each students individually to read to the teacher. Teaching techniques are necessary terms that the teacher has to know, especially when applying the approaches of teaching reading. It will help teacher in using approaches to explain lesson to the students.

METHODOLOGY

The research was conducted by using qualitative descriptive design in order to describe the scientific research done by the teacher. According to Bogdan and Biklen (1992) qualitative research was as direct source of the data and the researcher was the key instrument, qualitative means to find out how a theory works in different phenomenon whose data collected are in the form of words rather than number and qualitative research has the natural setting as the direct source. It means qualitative research was study things in their natural settings, attempting to make sense or to interpret phenomena terms of the meaning people bring to them.

This research applied descriptive design because the research due to the factors that descriptive study was used to get certain information about certain phenomenon that happen when a research conducted. This study examines the scientific approach done by the teacher in teaching junior high school.

The subjects of the study are three teachers that used to teach Junior High School. The data of this study were the utterances of language by the teachers. The utterances considered as data or treated became the data of the study. The sample was taken by using random sampling. The setting of this research would be in the classroom, the participant were the teachers to student, student to teacher. The goal was to analyze the implementation of scientific research by the teacher, the act or event is when they are studying in classroom.

The data source of the research were English teachers. There were three English teachers who teach 2nd grade in MTS N 2 Medan, they are Rahmi Wardah, S.Pd., Zuarniwati S.Pd., and Masdiyah Rambe, S.Pd.

The technique of data collection by using documentary technique, in which only the data that support research question were taken. The data of this research were taken from the courses. In collecting the data, the researcher used some stages, such as; observing, recording and making a note. It carrying out by the following steps; first she observed the subject inside the class naturally when they make interaction with students and decide the subject by interview the teacher. Then, the researcher came to the subject every day in order to directly observe and record their utterances while teaching. The researcher observes and record spoken language by the subject naturally, recording technique is used to obtain the data, recording without any conditioning within certain signs. The research role was a key of instrument. Recording walk naturally, there is no controlling or manipulating to arrange the conversation among the subjects. The utterance of request something which are produced by the subject of research are recorded. The data collection and the analysis are conducted at the same time during the research.

The instrument of this research was the researcher itself. As Bogdan & Biklen (1992) state

that qualitative research had the natural setting the direct source of data and the researcher was the key of instrument. The other instruments which are used in this research are recording. The tools were used are enough in collecting the data as the utterances that produced by the teachers. The researcher would also distribute some questionnaires to teachers.

FINDINGS AND DISCUSSIONS

Based on the analysis of the data. The findings of the research were: 1) teachers had applied the implementation even though it was not optimal, 2) the strategies used of the approach in order to encourage students during learning process, 3) teachers had reasons to implement scientific approach (observing, questioning, experimenting, associating, and communicating) as a teaching strategy. The result of the research would be a reference towards further study and help other teachers in applying teaching strategy of learning process.

Table 1. Finding Result of Problems towards Teacher 1, Teacher 2 and Teacher 3 in implementing Scientific Approach in online class

The steps of scientific approach in reading comprehension	Teacher 1	Teacher 2	Teacher 3
Observing	Students were inactive to answer the question from teacher. The didn't unmute or respond. When teacher asked students several times, some of them responded and told they had connection problems.	Teacher picked some students to read the text loudly in Zoom meeting, the problems that faced was students' pronunciation in certain words.	Students didn't focus on the text. They seemed were not interested in the lesson and occasionally got lost in which part they should read after their friends finished. Teacher asked them to get main idea of the text. They responded slowly and some students try to answer in Bahasa Indonesia.
Questioning	Students seemed quiet and inactive. They muted the	Students were given time to make their own question from	Students were asked to make a question if there's

	microphone and some of them turn off the camera. There was no question stated by students in the Zoom meeting.	the text. Some students tried to ask and some other encouraged to answer.	something they don't understand. Students were not active and lack of participation.
Experimenting	Students didn't tell what words they don't understand. It took long time for them to finish this process. Teacher didn't want to waste time and asked them directly with loud voice.	They couldn't decide what new vocabularies they might find. Yet, they were lack of intention to ask. The meeting was silent until teacher told them the difficult words.	They were silent and seemed clueless. Students didn't understand the meaning of the word and teacher explained.
Associating	Students took long time to find their pair. They admitted they hadn't found any pair and hadn't made the summary in the second meeting.	Students didn't know how to compare and analysed previous and current lesson. Some of pairs didn't want to respond and left the meeting when it came to their turn.	The written report was handed successfully to the teacher by sending it to WA the day before. Even though some of them were late to collect it. Some of the reports or conclusions of text was too short.
Communicating	It took long time to get students' responses while they were asked to present the result. To answer the question, some students used Google translate.	Students presented the report but the fluency is not good. Some students were going in and out from the meeting room occasionally because of connection problems.	The meeting started late since the class waiting for other students to join the meeting room. Teacher begun the class with incomplete student members in the Zoom room. No students wanted to participate in question and answer session.

The stages of Scientific Approach were implemented by the teacher in two meetings. In

the first meeting, teachers implemented three stages which are Observing, Questioning and Experimenting. In the second meeting, teachers implemented the stages of Discussion and Communicating. It was done in order to fulfill all the stages in implementing Scientific Approach in online reading comprehension.

The stages were divided into two meetings and all of them were implemented successfully. Though in the implementation itself teachers faced difficulties such as insufficient time allocation, unresponsive students, and connection problems.

Based on the analysis of the research, the researcher presents the conclusion and the suggestion to develop the implementation of Scientific Approach in teaching reading as the following:

CONCLUSION

Based on the finding, the researcher draws conclusion of the research as follow:

1. The teaching and learning process has been carried out by the teacher using Scientific Approach which include activities to observe, ask, collect information, associate, and communicate. The implementation of the learning activity has been done but not optimally. Teachers had tried to implement and develop the scientific approach however the students do not understand and participate very well in the class activity using Scientific Approach.
2. Teachers use strategies in the implementation of Scientific Approach in order to encourage students. Even though students are still lack of participation and not active enough in classroom activity particularly in vocabulary mastery and critical thinking. The strategies used by the teachers to solve the problems and motivate students to be more active in learning.
3. The reasons of implementing Scientific Approach in the process of teaching and learning because this strategy will guide students to be more active and critical in looking for the material, understanding the lesson. The strategy also helps students in building communicating among students.

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