TRANSCRIPT-BASED REFLECTION OF ONLINE LEARNING ON 8TH GRADE STATISTICS AT SMPN 2 TANJUNGSARI

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Abstact: Government of Indonesia has cancelled the face-to-face learning process at schools in since March 2020 Covid-19 pandemic. However, the learning process must go on to facilitate student learning. Online learning through Zoom is a solution for supporting student learning in the Covid-19 pandemic. The this study aims to obtain information of student learning on statistical concepts (mean, median and mode) and statistical at 8th grade junior high school students as a self-reflection for improvement of subsequent learning. Data were collected through written tests and video Zoom recording during online learning. The video zoom recording was transcript for further analysis to obtain information of student speech. Number of the speech characters of teachers and students are presented in bar graphs for further analysis of learning tendencies. Written test was analysis to obtain information of student understanding on statistics concept. It was found that 95% of students can answer the written test correctly. Based on the analysis of the transcript data, it was found that learning tends to be teacher-cantered. Teacher realized that does not give students the opportunity to express their opinion, the sequence of the discussion. This article describes a plan for improving the learning

Keywords: Pandemic, Online, Learning Transcripts, Statistics

INTRODUCTION

Learning is one form of effort in realizing the noble educational goals, namely to create a nation that is intelligent, virtuous, and devoted to God Almighty. Students in the future are expected to be recipients of the baton of the mandate in managing the Indonesian nation state for the welfare of the Indonesian people in accordance with their respective capabilities and capacities. Face-to-face learning in the classroom may be an effective form of learning in normal situation because the teacher as a facilitator of learning can manage the class well. A teacher can directly unify the entire learning process by looking at all student activities, attitudes and behavior of students, so that if it is felt it is not in accordance with the objectives.

Covid-19 is a type of disease caused by a virus, the spread of this virus is very fast so the government has taken several policies including imposing a lockdown to prevent the spread of the virus. Along with the rapid spread of the virus, teaching and learning activities must still be carried out, but of course the implementation of face-to-face learning in the classroom can no longer be done freely. There are several ways can be done to carry out learning process to substitute face-to-face learning in the classroom with comparable effectiveness, one of which is through virtual or online learning that can utilize technology, with the hope that students can still receive good learning.

Virtual learning is a process of teaching and learning activities that are not carried out through direct face-to-face but by utilizing internet media that connects students and teachers in a learning

activity [1]. There are many ways and media, all of which are based on the use of information technology. The facilities used can take advantage of devices with various supporting applications, including zoom, whatsapp, googlemeet, classroom, googleform and others. The choice of this method or a combination takes into account the effectiveness and efficiency of students' circumstances and abilities because some students still have problems participating in online learning including internet connection, full cell phone memory, and there are even students don't have cellphones.

The current educational paradigm has begun to shift teachers are no longer the center of learning. In fact, it has been a long time since the term active student learning (CBSA) was introduced. The teacher-student-centered learning system is no longer the main source of learning, to enable students to learn, the teacher must create conditions for the interaction process between students and teachers, students with learning resources and media, as well as students and students. The main media for interaction to occur is the existence of questions, observation activities, or problems that must be solved, namely student-centered learning [2].

The student-centered learning method has advantages compared to teacher-centered, including students are more likely to understand the learning material in their own way, therefore students will understand more quickly and at the same time improve memory about the material provided. The way to obtain information about learning tendencies is by analyzing learning transcripts. Analyzing learning transcript is a method of analyzing learning outcomes using transcripts of student-student conversations, students and teachers in learning activities by conducting in-depth observations (Nugraha Sudars). By analyzing the learning transcript data, the teacher obtains data-based information for self-reflection and learning improvement. Learning reflection is a component of activities carried out after the learning process with the aim of assessing and observing what has happened during the learning process [4]

Statistics is a collection of methods and rules relating to the collection, processing (Analysis), drawing conclusions, on data in the form of numbers using certain assumptions [5]. The purpose of this study was to obtain information about statistical understanding (mean, median and mode) and statistical learning tendencies of 8th grade junior high school students as a self-reflection for the improvement of subsequent learning.

RESEARCH METHOD
Research Subject

The subject of the research is the students of grade VIII D and VIII E which consists of 43 students.

Activity of Research
a. March 15, 2021 Meeting with the Principal (Mr. Sofwan Gozali, S.Pd., M.Pd) and Mrs. Helsy, M.Pd about the possibility to become a model teacher in the implementation of the open class
b. March 16, 2021 Discuss with the Principal and Mrs. Helsy about the material to be delivered at the open class activity
c. March 17, 2021 Carry out a school subject teacher meeting (MGMP) to make learning designs
d. March 18, 2021 Conducted Zoom with the Expert Team from UPI and attended by 2 schools namely SMPN 2 Tanjungsari and SMPN 1 Jatigede for the delivery of learning designs
e. March 22, 2021 Discussion attended by the Principal, teachers of science, Indonesian and mathematics to revise the learning design
f. March 24-25, 2021 Data collection on the weight of students
g. March 26, 2021 - Trying out learning design at grade VIII G through googlemeet
   Conduct reflections with the Head and Mrs. Helsy about the lessons that have been carried out
   Revise learning design
a. March 30, 2021 - Carry out learning in grade VIII F through ZOOM which was attended by a TEAM of Experts from UPI, the Principal, and other teachers.
   Conducting reflections on the lessons that have been implemented
   Revise learning design

b. April 3, 2021 Carry out a zoom with the Principal, Mrs. Helsy, Bu hj Iis and Pa Cecep to prepare for the implementation of the open class
c. April 5, 2021 Implementation of open class via zoom in at grade VIII D and VIII E

Data collection technique
Data were collected through written tests and Zoom recordings during the online lesson on Monday, April 5, 2021. The Transcript Based Lesson Analysis (TBLA) technique was applied to analyze the data. Many of the speech characters of teachers and students are presented in bar graphs for further analysis based on teacher learning and reflection (self-reflection)
Learning materials
The subject presented in the open class was Statistics with the aim of learning through discussion students, can read, analyze and observe data correctly. This learning emphasizes that students can find the mean, median and mode.

RESULTS AND DISCUSSION
The open class was held at grade VIII D and VIII E on April 5, 2021, which was observed by teachers and parents The implementation of the open class consists of several stages including introduction, main activities and closing. At the main activity, students got 30 data about body weight. The teacher asked the students to present the data in various forms. As a result, the presentation of the body weight is shown in Table 1 :
Table 1. Presentation of body weight

No	Form of Presentation	Number of students %
1	Table	48,9
2	Bar Charts	4,6
3	Sorted from smallest to	23,3
4	Tables and use of a tour	11,6
5	Not answered	11,6

Thirty eight out of 43 students who took part in the lesson, sent the answers by WhatsApp, The remaining 5 students did not send their answers because they had technological problems, such as internet connection. Another obstacle is an inaudible voice so that students did not hear what the teacher is telling about.

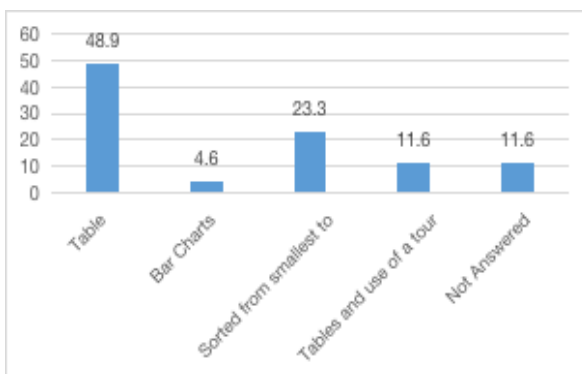If we present the data in graphicalform, then the picture of the data can be showed 'Fig 1"

Fig 1 : Presentation of body weight

In the main activity, teachers and students also had questions and answers session to discuss how to determine the mean, median and mode. Based on observations of the learning process on statistics, it is easier for students to understand or solve the mean and mode problems instead of the median problem because students did not sorted first the data, even though the sequence of work to solve the problems by analyzing the data has been explained.

The learning patterns that have taken place when made in the form of a chart are: (?)

In the closing activity, students were given two links of the google form, the first link was about the impression survey after studying the lesson. Based on collected responses by google form, almost all students understand the material concepts that had been studied. The second link contains a problem to exercise about finding the mean, median and mode. As a result 95% of students were correct in answering the mean and mode. With regard to, the median problem, students still had difficulties, as shown 90% of students answered correctly.

The speech characters of teachers and students that have been made using learning transcripts are then presented in a bar chart to determine learning tendencies. Below is a snippet of the online learning transcripts that have been implemented:

Time		Speaker	Index	Speech
Minutes	Seconds	Teacher/ Student		
0	15	T	1	Assalamualaikum my children are all healthy?
0	15	S	2	waalaikumsalam Alhamdulillah ma'am in good health
1	20	T	9	My children, for smooth learning, so that your knowledge will be useful, let's pray first, let's start praying. Pray finished. we pray that the sick get well soon and those who have problems hopefully can follow the next lesson, Amen
3	6	T	13	Before continuing the lesson, the mother will convey the rules for today's learning, including: turning on the camera during learning, deactivating the microphone, activating the microphone when answering, directing the camera during exercise and sending answers via whatsapp
10	45	T	16	Video about weighing Mrs
11	22	T	19	If there is data like this, what

				would you like to know?
11	25	S	20	Knowing the lightest weight Mrs
20	10	T	40	Yes that's right 53 kg. 53 kg is called the mode. Why isn't the 47 kg one called the mode?
22	10	T	44	yes, what is the easiest way to find the data?
24	5	S	48	Create a bar chart
24	5	S	49	Create a pie chart
24	6	S	50	Count made down
26	15	T	54	Siip smart. To make it easier for you to read, analyze and interpret the existing data, try presenting data about the weight of the 30 students, which you usually send via WA
34	0	T	58	Thank God someone has entered WA. There are already several others who have entered Wa. There were a few more that came in. My children can pay attention first, let's discuss the results of your friends, okay? This is the result of Nuralya's presentation, thank you, yes, it's great, yes, this is arranged from the smallest, yes, this is not 30, right, Nur has 30 data? It's a little less, Nur? It's okay, thanks Nur
74	5	G	134	Alhamdulillah done, my children, you will fill in 2 links in the google form, the first link is about the impression of today's learning and the second link is about exercises about finding the mean, median and mode. To find out today's learning feedback or feedback, this is the link to this one, ma'am, wait, here's the link: https://bit.ly/UmpanBalikKesan

74	55	S	135	Yes maam
74	57	G	136	This is the second link, I will share it in the class group, okay? https://bit.ly/LatihanSoal_Statistik
74	3	S	137	Ya maam
74	5	G	138	Alhamdulillah, today's learning has been completed, hopefully you will be healthy, greetings to the family at home, let's close it by reading Hamdallah

Transcript of video recorded was analysis according to number of character poses to obtain information about tendency of student centered or teacher centered learning. By plotting number of characters as Y axes and index as X axes representing time of learning process, it was found that positive Y axes is more dominant than that of negative Y axes (Fig 2). This means that lesson tend to be teacher centered learning.

I realized that in the main activities, teacher and students had questions and answers session to find the mean, median and mode. From these activities the teacher more often provokes students with questions that lead to the desired answer, so that seen from the graph below the teacher talks more.
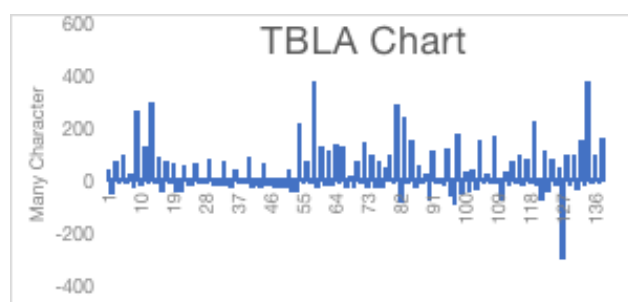

Fig 2. Bar Chart of Learning Trend Based on TBLA

Based on the analysis of the learning transcript data presented in the bar chart above, it was found that learning tends to be teacher-centered even though students are quite active in responding to the stimulus posed by the teacher in the form of questions, requests for opinions or students' perceptions related to the concepts presented. Reflecting on the learning that has taken place is one solution to improve the quality of further learning, the teacher can find out the weaknesses and strengths of the learning that has been carried out. With transcript analysis, teachers obtain the data-based information for self-reflection. Reflections and improvement plans for further learning based on the lessons carried out on April 5, 2021 are as follows:

Indeks	Many Characters	Teacher's Speech	Reflection	Revision Plan
13	290	Before continuing the lesson, the mother will convey the rules for today's learning, including: turning on the camera during	This order is important to convey to students because	Can we make a deal? turn on the camera while studying, turn off the microphone, activate the microphone when

		learning, deactivating the microphone, activating the microphone when answering, directing the camera during exercise and sending answers via whatsapp	students are not used to using online technology.	answering, point the camera during practice and send answers via whatsapp
58	371	Thank God someone has entered WA. There are already several others who have entered Wa. There were a few more that came in. My children can pay attention first, let's discuss the results of your friends, okay? This is the result of Nuralya's presentation, thank you, yes, it's great, yes, this is arranged from the smallest, yes, this is not 30, right, Nur has 30 data? It's a little less, Nur? It's okay, thanks Nur	I repeat a lot of words but do not give students the opportunity to comment. I feel the position should be above the index twenties	Thank you Nuralya for sending WA a summary of the student's weight data. Who wants to comment on Nuralya's findings?
134	371	Alhamdulillah done, my children, you will fill in 2 links on the google form, yes, the first link is about the impressions of today's learning and the second link is about exercises about finding the mean, median and mode. To find out today's feedback or learning feedback, now you fill in this link, I'm waiting, here's the link: https://bit.ly/UmpanBalikKesan	repeat the same words, this speech should be said between index 13 and 15	Reducing the same words, immediately explaining what to do, namely filling in two links

CONCLUSIONS AND SUGGESTIONS

Conclusions

1. Online learning through zoom combined with the WA application as a distance learning method, can be one solution in maintaining the achievement and running of the learning process during the pandemic where the implementation of face-to-face learning directly is not possible, this can be seen from the results of the work of Student exercise. In case of statistical concepts, students can solve problems in finding the mean, median and mode correctly.
2. Based on transcript data analysis (TBLA) it was found that learning tends to be teacher-centered. Teachers obtain data-based information for self-reflection and improvement of

learning. The self-reflection found especially does not provide opportunities for students to express opinions and present the results of students' work.

SUGGESTION

1. During a pandemic where face-to-face learning is impossible, the learning process must continue to be carried out, the way that can be done is the distance learning process. There are many ways and methods that can be done, one way is apply virtual learning by using the zoom application combined with the WA application. The zoom application can represent face-to-face learning remotely (virtually) so that teachers can observe the expressions and activities of students, even at the same time evaluating the learning achievements of students.

2. To shift the teacher centered learning to student centered learning, it is necessary to select relevant learning methods, by increasing student activity, among others, by creating student study groups so that the teacher does not domination will be reduced.

3. Students are given the opportunity to express opinions and present the results of their work.

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