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EFFORTS TO IMPROVE THE EFFECTIVENESS OF LEARNING MODELS (A Case Study Using Faststone in Online Learning at SMK NEGERI 1 Juwiring)

Upaya Meningkatkan Efektivitas Model Pembelajaran (Studi Kasus Penggunaan Faststone dalam Pembelajaran Online di SMK Negeri 1 Juwiring)

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Abstrak: Pembelajaran online merupakan proses belajar untuk mendapatkan ilmu pengetahuan melalui seperangkat alat elektronik dengan program aplikasi yang relevan dan terhubung dengan internet. Guru harus mengembangkan berbagai model pembelajaran yang efektif selama pandemic. Pembelajaran online perlu dilakukan selama tidak dilaksanakannya pembelajaran di kelas, salah satu program yang bisa diaplikasikan adalah faststone. Tujuan penelitian untuk memperoleh gambaran efektivitas pelaksanaan pembelajaran online menggunakan faststone. Subjek penelitian adalah siswa kelas XI pada jurusan akuntansi keuangan yang berjumlah 69 siswa melalui pengumpulan data observasi, dokumentasi, dan pemberian angket. Metode deskriptif kualitatif diterapkan untuk menganalisis data yang dikumpulkan. Hasil penelitian menunjukkan bahwa penerapan model pembelajaran menggunakan faststone lebih efektif selama pembelajaran online. Model belajar dengan menggunakan faststone bisa diterapkan oleh para guru guna meningkatkan kemandirian belajar, minat dan motivasi, dan keberanian mengemukakan gagasan selama pembelajaran online.

Kata Kunci: faststone, model pembelajaran, pembelajaran online, pembelajaran efektif

Abstract: Online learning is learning process to gain knowledge through a set of electronic devices with relevant application programs and connected to internet. Teachers must develop various effective learning models during pandemic. Online learning needs to be done as long as there is no classroom learning, one program that can be applied is faststone. The purpose of study was to obtain overview effectiveness the implementation of online learning using faststone. The research subjects were students of class XI in financial accounting department totaling 69 students through data collection of observations, documentation, and giving questionnaires. Qualitative descriptive method was applied to analyze the collected data. Results showed that the application of learning model using faststone was more effective during online learning. Learning model used in this study can be applied by teachers to increase learning independence, interest and motivation, and courage to express ideas during online learning.

Keyword: faststone, learning model, online learning, effective learning

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INTRODUCTION

In line with responding to global pandemic situation, it is able to provide challenges for teachers to innovate (Scavarda et al., 2021; Sumarjo et al., 2021). Policies that have been issued by government include prohibiting crowds, need for social distancing and physical distancing, wearing masks and washing hands in response to pandemic (Dzisi & Dei, 2020). The pandemic condition has forced teachers to change their teaching and learning strategies (Maqableh & Alia, 2021; Sari et al., 2021). The pandemic created the biggest disruption to education system in human history, resulting in the closure of schools, institutions and other learning spaces in more than 94% of the world's student population (Pokhrel & Chhetri, 2021). Online learning encourages the emergence of social distancing behavior and minimizes the emergence of crowds so that they are considered to reduce the potential for spread of disease (Lemay et al., 2021; Yuliana, 2020).

Ministry of Education and Culture has implemented policy whereby educational institutions do not carry out classroom learning and conduct online learning. Learning must be carried out with scenarios that are able to prevent physical contact, use of digital technology can allow students and teachers to carry out the learning process even in different places. This form of learning that can be used as solution during pandemic is online learning. Online learning is a solution for implementing social distancing to prevent the chain of spreading virus (Handarini & Wulandari, 2020), but in reality online learning is not optimal for deepening material, resulting an ineffective learning process (Widiyono, 2020).

Online learning is learning experience in synchronous or asynchronous environment using electronic devices such as laptops and mobile phones with internet access (Dhawan, 2020), type of teaching and learning in which the process of delivering teaching materials to students using internet (Fuadi et al., 2020). Online learning utilizes internet to access lessons built by educational institutions (Walker, 2021). Online learning is learning that uses internet network with accessibility, connectivity, flexibility, and ability to bring up various types of learning interactions (Saha et al., 2021; Ro'fah et al., 2020). The use of internet and multimedia technology is able to change the way knowledge is delivered and can

be an alternative to learning carried out in conventional classes. Online learning is learning that is able to bring together students and teachers to carry out learning interactions with the help of internet network (Jogezai et al., 2021; Efriana, 2021). In its implementation, online learning requires support of mobile devices that can be used to access information anytime and anywhere (Nath & Das, 2020). Schools during the learning period from home need to carry out strengthening online learning which has become demand for education during the current pandemic (Reimers et al., 2020). Online learning has flexibility in its implementation and is able to trigger independent learning and increase learning motivation (Sadikin & Hamidah, 2020). Online learning that utilizes information technology provides positive values for students and teachers.

Faststone capture is an application that serves to make video recordings of activities on the monitor screen (Fauzi, 2021; Meliana, 2020). The faststone application is expected to make the learning process more effective, interesting, easy to understand so that it is expected to improve the learning outcomes achieved (Ruman & Pokładnik, 2020; Sulistyani & Riwayatiningsih, 2020). Faststone application requires students to be able to interact with internet by accessing extensive information, triggering student activity in the form of challenges, availability of material for learning, and being able to feel like learning directly with teacher in class (Fauzi, 2021). Referring to phenomenon, it is necessary to conduct research to reveal how effective the application of faststone is to student learning process by utilizing online learning. This is important to study because teachers must be able to transfer basic abstract concepts to students. The purpose is to find out how effective learning mathematics is using the Faststone application. Online learning is the best solution for continuing education during pandemic (Dong et al., 2020; Mahyoob, 2020).

METHOD

This study aims to determine the effectiveness of implementing faststone applications in online learning. The type of research used is descriptive qualitative which is applied to online learning. Research method used is one-shot case study. Experimental method used to determine the effect of how effective learning through faststone application during

pandemic was carried out by online learning. The process of compiling and analyzing data to get a picture in accordance with what is expected requires an appropriate data source. Population in this study was all students of SMKN 1 Juwiring, and research sample was class XI students of financial accounting with totaling 69 students.

The preparation of treatment action plan that will be carried out on two basic knowledge competencies consists of analyzing the rules of enumeration, permutations and combinations in contextual problems, and determining the probability of occurrence. Treatment action planning to see the effectiveness of online learning with learning methods using faststone application.

Researchers carry out online learning actions that have been prepared previously by sending learning materials according to schedule on opportunity competencies through the faststone application 6 times. Every time a video recording is sent, the material can be used for the next 2-3 math learning schedules so that students don't feel bored and to save quota. After giving treatment, it was continued by giving assignments online through microsoft office on google forms to find out students understanding of material provided online and to observe how effective the treatment was. Giving several treatments or online learning experiments using video recordings through Faststone application, then measurements were made using questionnaires sent to students via microsoft office on google forms for students who had received treatment.

To help students understand the material, video recordings of learning through the faststone application use power point and Microsoft word is added to show the process of discussing questions using contextual language or verbal language so that students are able to analyze each question given in the form of practice questions or daily assignments. Besides that, a flowchart is also prepared to understand the flow in doing the given task. The flowchart made aims as a concept and guide in online learning through video recordings of learning with the faststone application.

Collecting data are using observation, documentation, and giving questionnaire. Observations and documentation are used to get an overview of activities carried out by students during the online mathematics learning process. Giving questionnaires to students is used to determine student responses regarding

effectiveness of the application of online learning models with video recordings through faststone application. Data analysis used descriptive qualitative method by presenting data in the form of descriptions and discussions based on research results. Research data obtained are in the form of questionnaire answers containing student responses.

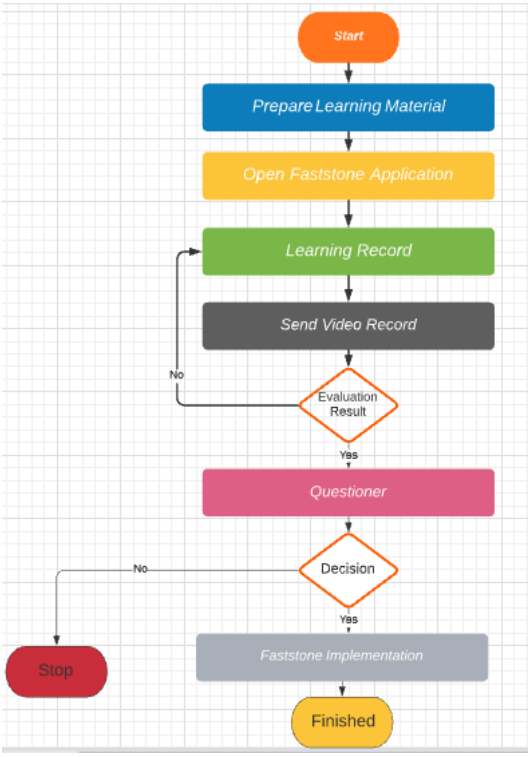


Figure 1. Online learning design flowchart using the faststone application

Indicators of success include students actively participating in each lesson through video recording in faststone application by seeing student participation in understanding the display of recorded video until it is finished in video application, it can be seen from number of people who have seen learning recording video that has been uploaded on youtube channel and are able complete daily tasks online well. In addition, it is necessary to pay attention for percentage of respondents from students after observations, if student's response to agree exceeds 60%, it is stated that learning through video recordings is successful or effective for solutions in online learning

RESULTS AND DISCUSSION

Learning is process of activity that is carried out intentionally to change attitudes and behavior (Setiawati, 2018), process of changing behavior and knowledge (Pane & Dasopang, 2017). Learning that adopts the results of thought and design of an idea that is realized in certain products and provides convenience in learning becomes an understanding of learning technology (Khayati & Sarjana, 2015). Learning is process that is built to develop students creative thinking and held as effort to improve students thinking skills, ability to construct new knowledge, and ability to understand the subject matter well, and held with the aim of helping students to learn as well as possible. Along with the

development of science and technology, the application of learning also changes through use of information and communication technology in learning. Teachers are required to be able to prepare a generation by placing three main subjects in learning including learning and innovation skills, skills in utilizing information, media, and technology; and life and career skills. Teachers have great responsibility to deliver students to desired educational goals (Sarjana & Khayati, 2016).

Online learning is able to foster independent learning (Firman & Rahman, 2020). Online learning emerged as form of learning pattern in information technology era. Online learning is form of interactive learning activity that can be done only online, or combined with direct learning known as blended learning. Term online means connected to internet network. Online learning means learning that is done online using learning applications and internet networks. During the implementation of the online mode, students have the flexibility of time to study. Students can learn anytime and anywhere, without being limited by space and time. Students can also interact with teacher at the same time, such as using video calls or live chat. Online learning can be provided electronically using forums or messages. Multimedia-based learning by utilizing computer technology and computer programs as well as online learning media is an alternative to learning process to make it more fun and easy to understand and is expected to be a meaningful learning (Sarjana, 2014a).

The problems and obstacles experienced in online learning include students being inactive due to network constraints, absence of quotas, not having their own means of communication, and decreasing enthusiasm for learning (Tsuroya, 2020). Teachers are required to be innovative in using online learning models (Anugrahana, 2020). Online learning model uses three alternative including full involvement of tutors and participants; involving participants, mentors and advocates; and participants conduct online and face-to-face learning interactions. In learning that involves instructor and participants fully, participants conduct online learning by accessing and studying all teaching materials by working on worksheets and discussing with teacher. During the learning process, participants are fully facilitated online by facilitator. While learning involves participants, and

mentors, learning is carried out fully online by combining interactions between participants, and mentors with mentoring model. The facilitator accompanies mentor and interacts with mentor online. Mentors accompany, discuss, and coordinate with participants online. The facilitator facilitates and communicates with participants online. In the combined online mode, participants engage in online and face-to-face learning interactions. Online learning interactions are carried out independently by utilizing information technology and learning materials have been prepared electronically. Face-to-face interactions are carried out at mutually agreed times and are facilitated by mentor. Teacher professionalism must be continuously developed with efforts to obtain new information and develop creative ideas (Sarjana, 2014b).

Effectiveness of learning refers to the ability to have right goals or achieve learning goals that have been set, with the characteristics of successfully delivering students to achieve goals that have been set, providing an attractive learning experience, having means that support the teaching and learning process (Supradnyani et al., 2013). Effectiveness is activity, usability, and conformity in activity of people carrying out tasks with intended target. Based on the description above, it can be concluded that effectiveness is condition that indicates the extent to which the plan can be achieved. The more plans that can be achieved, more effective the activity will be, so that effectiveness can also be interpreted as the level of success that can be achieved from certain method or effort in accordance with objectives to be achieved. Teachers must be able to utilize all available educational resources in effort to achieve educational goals (Sarjana, 2012).

Mathematics is science of regularities, study of organized structures ranging from elements that are not defined, to elements that are defined to axioms or postulates and finally to propositions (Ruseffendi, 1980; Pedrero & Manzi, 2020). Understanding the concept and structure of material makes material understood more comprehensively. So by understanding the concept and structure will facilitate the transfer. Learning mathematics is attempt to help students construct knowledge through the process (Sun et al., 2021; Afifah, 2012). While indirectly learning mathematics related to subject matter is obtaining changes in

understanding, attitudes and skills which are use or application of material studied, in other words being able to deal with changing circumstances in changing world of life, through thinking exercises logical and rational, critical and creative, objective and functionally calculated in everyday life and in achieving knowledge.

Faststone capture is powerful and lightweight tool that helps to capture various things that are on the screen, it can capture anything easily, such as windows and objects. Choose the picture mode, full screen, rectangular area, and even scroll windows or web pages. Next, teacher need to do editing process, create a JPG, GIF, or BMP file, send the file via email, and upload it on website. The editing tools aren't very sophisticated, but they're good enough for making minor changes to screenshots.

This research is to find out how effective online learning during pandemic using video recording with Faststone application in mathematics for class XI students majoring in financial accounting. This study uses two experimental classes in financial accounting as class that will receive learning using video recording method with faststone application

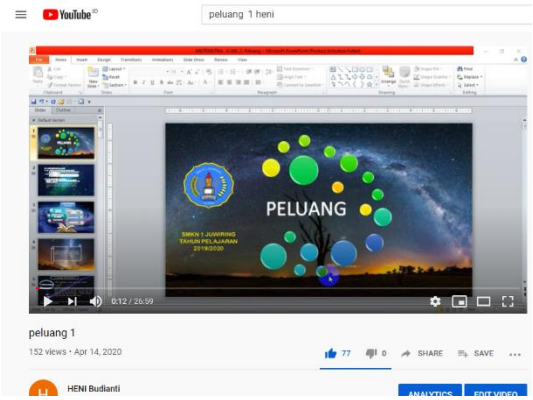


Figure 2. Screen Recording Video with Faststone App on Opportunity Theme.

Students get link information related to learning video submissions on the first theme, which is about opportunity and counting rules that have been uploaded by the teacher, so students can access learning videos anywhere and anytime. If students have difficulty understanding in viewing the recorded video, students can still repeat the learning video until they understand it. Students can open videos through gadgets and do not have to use laptops so that they are not burdensome. Furthermore, students can understand the teacher's explanation which has similarities with face-to-face learning. After studying learning videos, students are expected to be able to complete daily assignments or tests well so that online learning does not reduce student achievement. There are no lags in learning when permission or sick because

they can access learning at other times and are more flexible. The learning video with the model presented is assumed that students have studied the material well and learning is considered complete (Zhang et al., 2017).

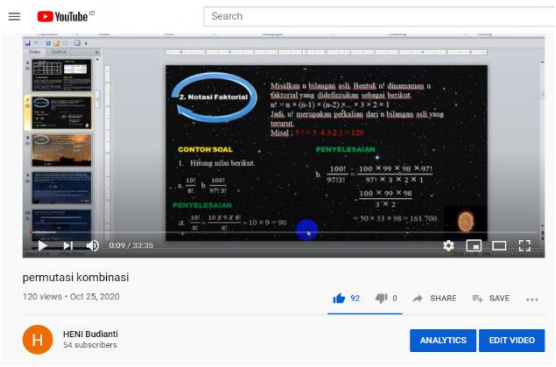


Figure 3. Screen Recording Video with Faststone App on Permutations and Combinations Theme.

For the second stage of learning, students get link information related to sending learning videos on theme of permutations and combinations that have been uploaded by teacher, then students are asked to access learning videos to understand learning material. Repetition of accessing learning videos can be done if it is felt that the learning material has not been understood. Assignments and daily tests are expected to be done by students properly and correctly after understanding the learning video. Access to learning can be done anytime and anywhere so it is more flexible. The completeness of the learning materials and the completeness of task have considered to be learning well and complete (Lu & Dubbelman, 2020).

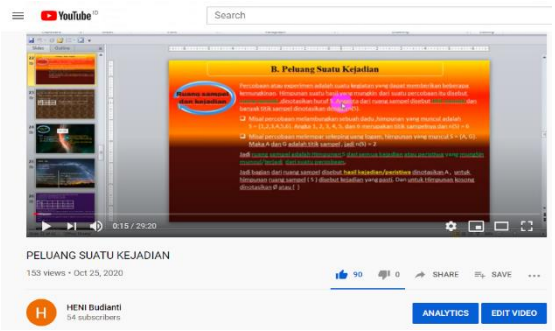


Figure 4. Screen Recording Video with Faststone App on the Probability of an Event Being Theme.

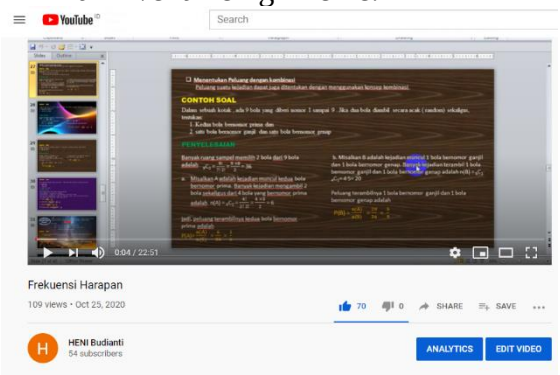


Figure 5. Screen Recording Video with Faststone App on Frequency of Expectations Theme.

In the third stage on theme of probability of event being through information on learning video link, students can study the learning video material to understand. Access to learning videos on the material discussed can be done repeatedly if the level of understanding is still not enough. To make it easier to do assignments and tests, students are expected to understand learning videos well.

Learning is perceived as complete after all students do the task (Török & Péni, 2020).

The theme of frequency of expectations is conveyed in the fourth stage of online learning through video link that students use to learn learning video material. Learning materials can be accessed repeatedly to better understand. By understanding frequency of expectations material, it will be easier to do the assignments and tests given by teacher. Completeness of assignments and daily tests are indicators that learning process is going well (Shepard et al., 2020).

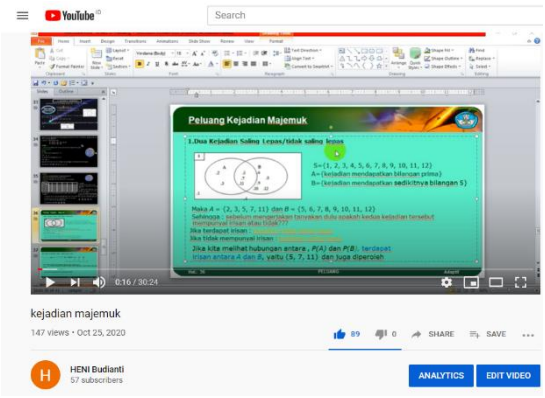


Figure 6. Screen Recording Video with Faststone App on Compound Events Theme.

In the fifth stage, online learning with the theme of compound events is given through a learning video link. By understanding through access to material, that is done repeatedly so that the level of understanding increases that it can facilitate doing tasks. Daily assignments and tests done by students are used to measure learning achievement so that they can be used to provide assessments (Puscas, 2015).

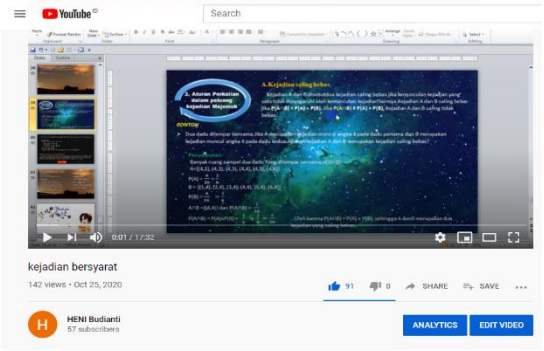


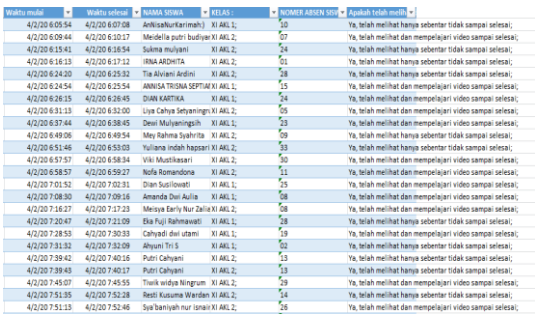
Figure 7. Screen Recording Video with Faststone App on Conditional Events Theme.

The theme of conditional events that was delivered in the sixth stage of online learning was informed through the learning video link. The level of understanding of the material provided can be strengthened by accessing material more than once. Efforts to measure learning achievement are carried out based on the completeness of assignments and daily tests carried out by students so that they can determine the assessment given by teacher (Young et al., 2017).

During treatment, teacher continues to provide observations about online learning and conduct discussions or ask questions through class whatsapp group

or conduct private networks so that interaction between teachers and students continues to run well so that students cognitive abilities and skills can increase as expected.

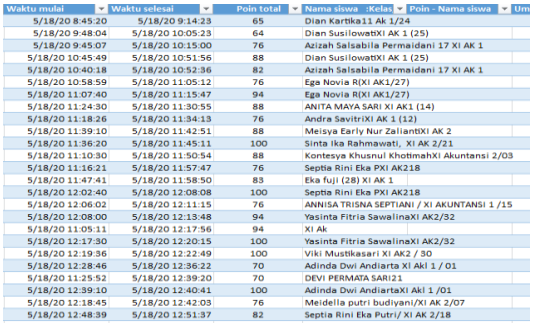
The results of teacher observations during online learning process showed that there was student activity and involvement in mathematics learning process with video recording method through faststone application. The activeness and involvement of students can be seen from attendance of students who remain active even though it is done online, and test results get value that does not decrease from previous competence when doing face-to-face learning.



Waktu mulai	Waktu selesai	NAMA SISWA	KELAS :	NOMER ABSEN SISW	Apakah telah melih
4/2/20 6:05:54	4/2/20 6:07:08	AnNisaNurKarimah)	XI AKL 1;	10	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 6:09:44	4/2/20 6:10:17	Meidella putri budiyar	XI AKL 2;	07	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 6:15:41	4/2/20 6:16:54	Sukma mulyani	XI AKL 2;	24	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 6:16:13	4/2/20 6:17:12	IRNA ARDHITA	XI AKL 2;	01	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 6:24:20	4/2/20 6:25:32	Tia Alviani Ardini	XI AKL 2;	28	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 6:24:56	4/2/20 6:25:54	ANNISA TRISNA SEPTIAN	XI AKL 1;	15	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 6:26:15	4/2/20 6:26:45	DIAN KARTIKA	XI AKL 1;	24	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 6:31:13	4/2/20 6:32:00	Liya Cahya Setyaningru	XI AKL 2;	05	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 6:37:44	4/2/20 6:38:45	Dewi Mulyaningsih	XI AKL 1;	23	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 6:49:06	4/2/20 6:49:54	Mey Rahma Syahrita	XI AKL 2;	09	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 6:51:46	4/2/20 6:53:03	Yuliana indah hapsari	XI AKL 2;	33	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 6:57:57	4/2/20 6:58:34	Viki Mustikasari	XI AKL 2;	30	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 6:58:57	4/2/20 6:59:27	Nofa Romandona	XI AKL 2;	11	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 7:01:52	4/2/20 7:02:31	Oran Sucilowati	XI AKL 1;	25	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 7:08:30	4/2/20 7:09:16	Amanda Dwi Aulia	XI AKL 1;	08	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 7:16:27	4/2/20 7:17:23	Meisya Early Nur Zalia	XI AKL 2;	08	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 7:20:47	4/2/20 7:21:09	Eka Fuji Rahmawati	XI AKL 1;	28	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 7:28:53	4/2/20 7:30:33	Cahyadi dwi utami	XI AKL 1;	19	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 7:31:32	4/2/20 7:32:09	Ahyuni Tri S	XI AKL 1;	02	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 7:39:42	4/2/20 7:40:16	Putri Cahyani	XI AKL 2;	13	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 7:39:43	4/2/20 7:40:17	Putri Cahyani	XI AKL 2;	13	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 7:45:07	4/2/20 7:45:55	Tiwik widya Ningrum	XI AKL 2;	29	Ya, telah melihat dan mempelajari video sampai selesai;
4/2/20 7:51:35	4/2/20 7:52:28	Resti Kusuma Wardan	XI AKL 2;	14	Ya, telah melihat hanya sebentar tidak sampai selesai;
4/2/20 7:51:13	4/2/20 7:52:46	Sya'baniyah nur isnain	XI AKL 2;	26	Ya, telah melihat dan mempelajari video sampai selesai;

Figure 8. Student Attendance in Online Learning Participation

The results of attendance by students can be monitored for their participation in online learning and can be used to see how far level of student participation is in understanding and studying the material that has been given through video recordings. The results of mathematics test on opportunity competence can be stated that most of the students have done well and effectively learning as shown by results of student achievement that have increased or are able to maintain achievement.



Waktu mulai	Waktu selesai	Poin total	Nama siswa :Kelas	Poin - Nama siswa	Um
5/18/20 8:45:20	5/18/20 9:14:23	65	Dian Kartika11 Ak 1/24		
5/18/20 9:48:04	5/18/20 10:05:23	64	Dian SusilowatiXI AK 1 (25)		
5/18/20 9:45:07	5/18/20 10:15:00	76	Azizah Salsabila Permaidani 17 XI AK 1		
5/18/20 10:45:49	5/18/20 10:51:56	88	Dian SusilowatiXI AK 1 (25)		
5/18/20 10:40:18	5/18/20 10:52:36	82	Azizah Salsabila Permaidani 17 XI AK 1		
5/18/20 10:58:59	5/18/20 11:05:12	76	Ega Novia R(XI AK1/27)		
5/18/20 11:07:40	5/18/20 11:15:47	94	Ega Novia R(XI AK1/27)		
5/18/20 11:24:30	5/18/20 11:30:55	88	ANITA MAYA SARI XI AK1 (14)		
5/18/20 11:18:26	5/18/20 11:34:13	76	Andra SavitriXI AK 1 (12)		
5/18/20 11:39:10	5/18/20 11:42:51	88	Meisya Early Nur ZaliantiXI AK 2		
5/18/20 11:36:20	5/18/20 11:45:11	100	Sinta Ika Rahmawati, XI AK 2/21		
5/18/20 11:10:30	5/18/20 11:50:54	88	Kontesya Khusnul KhotimahXI Akuntansi 2/03		
5/18/20 11:16:21	5/18/20 11:57:47	76	Septia Rini Eka PXI AK218		
5/18/20 11:47:41	5/18/20 11:58:50	83	Eka fuji (28) XI AK 1		
5/18/20 12:02:40	5/18/20 12:08:08	100	Septia Rini Eka PXI AK218		
5/18/20 12:06:02	5/18/20 12:11:15	76	ANNISA TRISNA SEPTIANI / XI AKUNTANSI 1 /15		
5/18/20 12:08:00	5/18/20 12:13:48	94	Yasinta Fitria SawalinaXI AK2/32		
5/18/20 11:05:11	5/18/20 12:17:56	94	XI Ak		
5/18/20 12:17:30	5/18/20 12:20:15	100	Yasinta Fitria SawalinaXI AK2/32		
5/18/20 12:19:36	5/18/20 12:22:49	100	Viki Mustikasari XI AK2 / 30		
5/18/20 12:28:46	5/18/20 12:36:22	70	Adinda Dwi Andiarta XI Akl 1 / 01		
5/18/20 11:25:52	5/18/20 12:39:20	70	DEVI PERMATA SARI21		
5/18/20 12:39:10	5/18/20 12:40:41	100	Adinda Dwi AndiartaXI Akl 1 /01		
5/18/20 12:18:45	5/18/20 12:42:03	76	Meidella putri budiyani/XI AK 2/07		
5/18/20 12:48:39	5/18/20 12:51:37	82	Septia Rini Eka Putri/ XI AK 2/18		

Figure 9. Opportunity Competency Daily Exam Results

At the end of session, teacher gives a questionnaire to students on competency opportunities or at the end of giving treatment to find out student responses regarding the application of video recording method using Faststone application in online learning.

Table 1. Student Response Questionnaire Results

Criteria	Student Number	Response Percentage
Strongly agree	5	7,24 %
Agree	53	76,81 %
Abstain	11	15.94 %
Disagree	-	-
Strongly disagree	-	-
Jumlah	69	

Results of questionnaire for class XI financial accounting students in using

video recording method through faststone application stated that students felt more interesting, motivated, interested, enthusiastic and able to replace face-to-face learning so that it was easier to understand the material presented, especially in learning mathematics. The data presented shows that the number of students agreeing as many as 53 students or 76.81%, and students who abstained as many as 11 students or 15.94% so that it was concluded that learning using video recording through Faststone application was felt to be more effective, especially in mathematics lessons in even semester of class XI financial accounting for 2020/2021 school year during pandemic with online learning.

CONCLUSION

Results of study concluded that online learning using recorded videos through faststone application was effectively applied to class XI at SMKN 1 Juwiring in 2020/2021 academic year. Effectiveness in online learning can be seen from several indicators including interest, enthusiasm in student participation in online mathematics learning through video recording with faststone application. In addition, the results of questionnaire given to students to measure response in using video recording through Faststone application there were 53 students or 76.81% agreed so that in learning mathematics using video recording through Faststone application was declared to be effectively applied.

For the smooth process of online learning, it is expected that students can always be active in learning through various learning methods and study learning materials thoroughly so that the process of transferring knowledge of each competency can be obtained and absorbed properly. In addition, students are expected to always ask questions and be creative if they get difficulties or problems that are done online. Teachers are expected to understand and be skilled in the use of learning models according to development of science and technology in order to apply the latest learning models.

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