E-Learning Implementation Effectiveness on E-Filing Material in Vocational High School in East Java

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ABSTRACT: Filing is one of the main subjects in Office Administration Expertence Competence at Vocational High School. When viewed from the meaning of the word archive by Undang-Undang No 43 tahun 2009, archives are records of events or events in various forms and media in accordance with the development of information and communication technology created and accepted by state institutions, regional government, educational institutions, corporations, political organizations, community organizations, and individuals in the implementation of community life, nation, and state. This archive material examines how archives/documents are stored using a particular system so that when it is needed it is easy to rediscover.

The purpose of this study is (1) to implement the development of a fun, educative and innovative learning media based on E-learning multimedia to improve students' competence in archival teaching in vocational high school all east java. (2) Knowing the effectiveness of E-Learning enforcement on E-Filing material at vocational high school all east java. The method used is the method of research and development or in English is called Research and Development. The model used in this study is the research and development model of Borg and Gall. "Research and Development is a research method used to produce a particular product, and test the effectiveness of the productt" (Sugiyono, 2013:407).

Teaching methods undertaken by teachers have led to student creativity. Developed media are learning media that enhance student achievement and motivation. Learning media developed leads to learning that refers to mobile learning, which means learning can be done anywhere and anytime can do learning. In this study there are 3 important components namely, competence, material and evaluation. All of these components are learning throughout the learning process. So that the three components can be aligned for the end of learning that can improve student achievement and motivation in learning. The results of this development are in the form of applications that contain material in a media, the test results obtained are 96.43% for media experts, 89.28% for material experts. From this study it can be concluded that the media developed are valid so that they are suitable for use. While the learning method used has included innovative learning that is fun. Learning media and learning methods certainly have advantages and disadvantages. This should require continuous development. This weakness is a change in the need for continuous learning media that adapts existing learning and learning methods must continue to evolve according to the needs of students. E-Learning model applied in E-Filing lesson works well.

Keywords: Learning, E-Learning, E-filing

I. BACKGROUND

Filing is one of the main subjects in Office Administration Expertise Competence at Vocational High School. When viewed from the meaning of the word archive by Undang-Undang No. 43 Tahun 2009, the archive is a recording of events or events in various forms and media in accordance with the development of information and communication technology created and accepted by state institutions, local government, educational institutions, companies, political organizations, community organizations and individuals in the implementation of community life, nation, and state. This archive material examines how archives/documents are stored using a particular system so that when it is needed it is easy to rediscover.

The development of technology and information, then the existence of filing system also began to grow. Utilization of technology is used to support the creation of archive system more up to date and effective.

Archiving systems that utilize information technology called electronic filing system or commonly called e-filing.

The development of information technology if we look at its history starts from mainframes - personal computers - Local Area Networks (LAN) - internet. Mainframe means still utilizing manual technology in doing archive storage. Personal computer means the archive can only be accessed in 1 computer used for storage. Local Area Network means the archive can be accessed from a specific local area using a computer. While the internet means the archives can be accessed with unlimited distances during access permissions.

Information technology today also has a big role in the learning process. Unlimited information access has led to a shift in the use of learning media through information technology. Distance and time are not an obstacle anymore to communicate between students and teachers. Strength in the success of the learning process lies in the use of technology. Learning related to e-filing should use technology progress in the learning process. Aside from being a material reinforcement for learning, the use of technology as a means of student practice for "literacy" technology. There is a general gap that technology-related learning is not done using existing technology. The sophistication of smart phones that almost all students have has not been utilized optimally to support the achievement of learning goals. While time constraints become a problem that is often expressed by the teachers as the cause of learning incompetence.

The sophistication of the transfer of information is captured by some educational institutions to not only transfer passive information, but fully utilized to transfer active information that is in the form of online learning. The need for knowledge by people who are constrained by time constraints makes online learning an important alternative choice. As an institution that has responsibility in the management of learning, it is appropriate to meet the needs of learners to the fullest. Limitations of time in the organization of learning is not a "fixed price" which causes the incomplete learning process. But with the touch of creativity that is supported by the opportunity and sense of the high need for science to make distance learning or e-learning as an alternative that needs to be prioritize

II. LITERATURE REVIEW
A. Learn and Learning
1. Understanding of learn

Learn is a process of student interaction to the situation around them by seeing, observing and understanding something so that there is a change from the beginning can't be able to. Rusman, dkk (2013:7) states "Learn is one of the factors that influence and play an important role in personal formation and individual behavior. Learn is an activity that can be done psychologically and physiologically". According to Arsyad (2013:1) "Learn is a complex process that happens to everyone throughout their lives. Learn occurs because of the interaction between a person and his environment, and can occur anytime and anywhere".

2. Understanding of learning

Learning is essentially a process of communication interaction between teacher learning resources, and students. Learning is also a basic process of education. Rusman, dkk (2013:15) states "Learning is a process of creating conditions conducive to interaction of teaching and learning communication between teachers, learners, and other learning components to achieve learning objectives". According to Dimyati and Mudjiono (2006:157) "Learning is a process organized by the teacher to teach students to learn how to learn to acquire and process knowledge, skills and attitudes".

B. E-Learning

E-learning stands for Electronic Learning. E-learning is a new way in teaching and learning process that uses electronic media, especially internet as a learning system. E-learning is a logical consequence of the development of information and communication technology.

C. Electronic Archive (E-Filing)
1. Understanding of electronic archive

An archive is a document created, received, and stored as evidence and information by an agency, organization, or person, to fulfill legal obligations or in business transactions. Whereas electronic archives are archives contained in electronic preservation media, produced, communicated, encrypted and/or accessed using electronic equipment.

2. Terms of Completeness of Electronic Archives

To ensure that the contents contained in the electronic archive are well preserved, the archiving organization must ensure that each electronic archive has intellectual property elements. The elements are: chronological dates of both sending and receiving, the place where the archive was created and/or where it was

sent, the sender's address, the name or/and the authors' or author's autograph, the address of the recipient, the recipient, the subject/subject, the disposition. (Laksmi dkk, 2008:181).

3.   Electronic Archive Management
        Electronic archives are recognized as legal legal evidence, since the enactment Undang-Undang No. 11 Tahun 2008 regarding information and electronic transaction. In pasal 5 ayat (1) mentioned "Electronic Information and/or Electronic Documents and/or prints are valid legal evidence ", furthermore pasal 5 ayat (2) "Electronic Information and/or Electronic Documents and/or their prints as referred to in pasal 5 ayat (1) is an extension and valid evidence in accordance with the applicable procedural law in Indonesia". With the enactment of the law concerning Information and Electronic Transactions, electronic files must be properly considered and managed in administrative activities of each agency, both government and private, so that administrative products in the form of electronic files can be accounted for and can facilitate the administration of an agency.

III. RESEARCH METHODS

The method used is research and development methods or in English, called Research and Development. The model used in this study is the research and development model of Borg and Gall. "Research and Development is a research method used to produce a particular product, and test the effectiveness of the product" (Sugiyono, 2013:407).
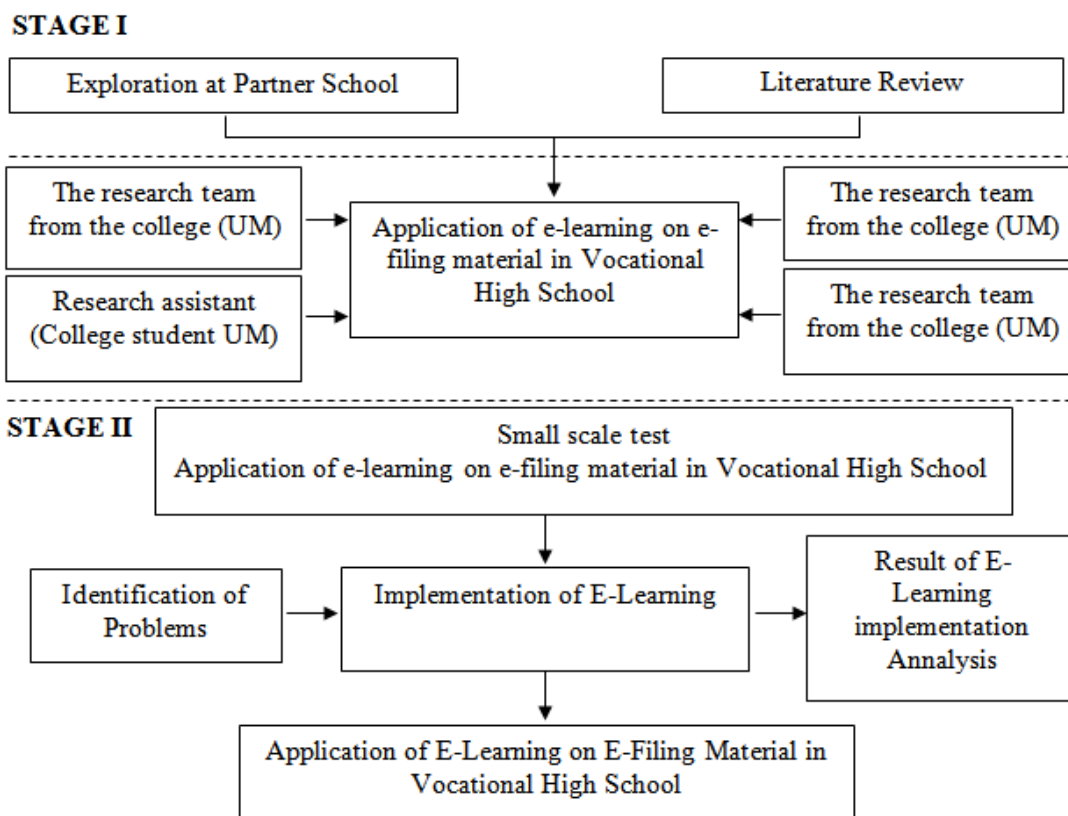
IV. RESEARCH RESULT

1.   The results of identification of the characteristics of respondents, analysis of the situation/environment of the research object, identification of the real needs of respondents.
        Based on the data above the knowledge of E-Filing learning is essentially the smallest unit as the core of a subject in the Office Administration Program in Vocational High School. As the smallest unit, E-Filing learning is a miniature and embryo of various elements of an E-Learning based education system. A conducive learning atmosphere will produce good archival learning because in E-Filing learning can lead to motivation and enthusiasm to learn using IT programs.
        The development of civilization and culture, especially since science and technology developed rapidly, both positive and negative. E-Filing learning has undergone many changes and is far from the values of the development of real science. In the present conditions, which are characterized by modernization and

globalization, many parties are of the opinion that the current conditions of E-Learning based learning are rooted in the conditions of the development of E-Filing learning. E-Filing Learning is a part of science whose role is very important to form a healthy knowledge of neatness and archival order. It is from E-Filing learning that education for students begins and from conventional or classical learning will create a good educational order, so that to build an E-Learning-based education it should begin with knowledge of Archival Science. Broadly speaking, this research can be described in Statistics, which can be seen in the table below:

Table 1. Knowledge E-Filing

Criteria		Frequency	Percent	Valid Percent	Cumulative Percent
1.	Very Low (14 – 24.50)	52	25.4	25.4	25.4
2.	Low (> 24.50 - 35)	90	46.3	46.3	71.7
3.	High (> 35 – 45.50)	39	19.0	19.0	90.7
4.	Very High (>45.50 - 56)	19	9.3	9.3	100.0
TOTAL		200	100.0	100.0	287,8

2.   E-Learning Application for the application of electronic-based archival subjects (E-Filing).
In general, in this study can be described in statistics is can be seen in the table below:

Tabel 2. Statistics

		Knowledge Science Archives	Activity Practice of E-Filing Learning	Implementation of E-Filing Based E-Learning	E-Filing Readiness Based E-Learning
N	Valid	200	200	200	200
	Missing	0	0	0	0
Mean		32.20	25.96	32.09	50.01
Median		31.00	25.00	31.00	48.00
Mode		23	26	36	36
Std. Deviation		8.739	7.554	9.697	13.937
Variance		76.364	57.057	94.026	194.250
Minimum		20	14	17	31
Maximum		51	39	55	83
Sum		6600	5322	6579	10253

(Source: Data processed Researchers year 2018)

E-learning stands for Electronic Learning. E-learning is a new way in teaching and learning process that uses electronic media, especially internet as a learning system. E-learning is a logical consequence of the development of information and communication technology. Here are some notions of E-learning from various sources.

To ensure that the contents contained in the electronic archive are well preserved, the archiving organization must ensure that each electronic archive has intellectual property elements. The elements are: chronological dates of both sending and receiving, the place where the archive was created and/or where it was sent, the sender's address, the name or/and the authors' or author's autograph, the address of the recipient, the recipient, the subject/subject, the disposition .

Applications that occur in 3 Vocational High Schools which are the object of research can be concluded that E-Filing learning is part of E-Learning or Electronic learning in archival materials. The readiness of the teacher is highly demanded in terms of material quality and the curiosity of the quality of archival facilities and infrastructure that have the support or support power for the successful implementation of learning.

The existing schools have facilitated archival skills, as evidenced by the scheduling of E-Learning based archival learning and the application of E-Filing for 3 face-to-face meetings in class. It can familiarize students with existing IT in school. In the process of E-Filing in practice, E-Filing is taught by the teacher in stages and continuously, this is to provide opportunities for students to follow the learning thoroughly and understand each chapter. In addition, the teacher also explains the guidelines that have been made to make it easy teachers in teaching. Teachers have been given guidance on the implementation of E-Filing in the hope that this learning can be practiced by students anywhere and anytime by opening the guide, while the teacher only

acts as a facilitator who can observe and oversee the results of E-Learning based learning application easily. In addition students can learn for themselves as an increase in self-reliance in learning E-Filing.

The independence of these students can improve students' skills in learning, can be seen from the work of the tasks assigned in learning. Students will develop themselves in terms of developing their logic or cognitive skills, for the development of psychomotor skills is no less important and the development of affective skills also increases. All that can be seen when students work on assignments using E-Learning on E-Filing material.

For the successful implementation of this lesson, the teacher and the research team also conduct a multilevel evaluation, the first is an evaluation of the readiness of the process including material evaluation, tool evaluation and evaluation of the delivery of materials in accordance with the teacher's guidance, the second evaluation is the evaluation of the implementation or process when the student the practice of operating an existing application archival application. In the third stage is the evaluation at the end, at this stage of the assessment carried out on the results of tasks that have been given by the teacher. The teacher acts more as a facilitator.

The teacher here as a facilitator, the teacher only provides supervision and observes the course of E-learning based E-Filing learning. The teacher only gives task orders, provides work instructions and provides discussion in solving problems faced by students. But with clear instructions and instructions in the application of E-Filing, students do not experience many obstacles. So that it can be said that E-Learning based E-Filing learning can be done well. Moreover, learning is done by using adequate computer equipment or supporting the E-Filing learning process. With this kind of learning, students are facilitated in carrying out archival tasks.

The tasks assigned to students are given by the teacher to make learning about filing more enjoyable when combined with E-Filing technology. As expressed by the students who said that this kind of learning is very fun and give a positive aura to the students to keep trying and always the practice of learning E-Filing fun.

3. Implementation of a fun, educative and innovative learning media development based on E-learning multimedia to improve teachers' competence in teaching archives in vocational high schools in East Java.

Learning media is a component in learning because it contains material or information that the teacher will deliver to his students. Learning media can be created by utilizing the facilities provided by the school. One example of learning media that can be made by utilizing the school facilities that is using software. The software is a video processing software that can combine text, images, sound/audio, and video into one component and is easy to operate.

This research was conducted with the aim to practice E-Filing, multimedia-based media learning products on Archives subjects. This instructional media product is a packaged archive application that comes with a user manual to make it easier for users in operation. Partners of the school is a place of teaching and learning activities of students who take advantage of the development of information and communication technology is increasing rapidly, one of them through the use of computers/laptops to find information about the material submitted by teachers. Therefore, teachers should maximally be able to utilize it by using a variety of learning media during learning activities, one of them by using media learning related to the internet. If teaching and learning activities only use the same learning media, it is feared there will be a decrease in student learning outcomes.

An educator is required to be able to condition the class and master the class so that the learning activities that we design can succeed. A teacher is also required to be able to combine or make learning interesting and fun so students are motivated to take lessons. Interesting learning can be made using varied learning media. Arsyad (2014:3) said "media is a tool that conveys learning messages". Learning media can be created by utilizing the facilities and infrastructure available in schools. The facilities provided by the school now have a lot of progress. The development of the times makes the development of technology and knowledge develop rapidly. This is evident from the number of schools that provide technology-based facilities and infrastructure such as computers, laptops, LCD projectors, and so on. Efforts to make learning media by utilizing technology are also increasingly developing and experiencing many changes.

Learning media is a component in learning because it contains material or information that the teacher will deliver to his students. Learning media can be created by utilizing the facilities provided by the school. One example of learning media that can be made by utilizing school facilities is using fun, educative and innovative learning media based on multimedia E-learning to improve teacher competency in entrepreneurship teaching is a video processing software that can combine text, images, sound/audio, and video into one component and easy in operation.

The learning objectives and characteristics of the media should be adjusted at the time of media selection. Seels & Glasgow in Sutirman (2013: 16) divides the media based on technological developments, namely media with traditional technology and media with cutting-edge technology. One example of the latest

learning media is multimedia-based learning media. Multimedia is a mix of various media (file format) in the form of text, images, graphics, sound, animation, video, and others that have been packaged into digital files (computerized) used to deliver the message to the public (Munir, 2013: 2).

The world of education is in desperate need of multimedia technology. If the learning media uses multimedia technology, then the media will be an interactive learning media. "Interactive means users can control the operation of the program in accordance with the desired ...." (Sutirman, 2013: 19). This is because multimedia learning media is supported by various aspects such as voice / audio, video, animation, text, and graphics.

Can be concluded here, E-Learning learning with E-Filling material can be said to be very successful and pleases students in the learning process in the classroom, this is because it is supported by a very adequate media use process and supports students in learning.

4.   Knowing the effectiveness of E-Learning learning on E-Filing material in SMK in East Java
The test results on E-Filing material showed that the average value obtained by class XI APK 2 was 58, 15. The cognitive learning outcomes of the further learners will be presented in Table 3. The following:

Table 3. Learning Outcomes of Pre-Action Cognitive Cognitive Area

Score Range	Category	Frequency	Percentage %	Predicate
85-100	Very Good	1	3,12	Complete
70-84	Good	3	9,37	Complete
55-69	Enough	20	62,5	Not Complete
40-54	Less	8	25,00	Not Complete
<40	Very Less	-	-	Not Complete
Total		**32**	**100**	
Average	**58,15**			
Percentage of Success			**58,15**	

(Source: Data processed Researchers, 2018)

It is known that 1 student (3.12%) scores between 85-100, 3 students scores between 70-84 and 4 students completes in the lesson. While 20 students (62,5%) get score between 55-69, 8 students get value between 40-54 and 28 student is not complete. For the learning result of the cognitive domain of the KKM value standard of E-Filing subject is 75. It shows that in the pre cycle percentage of success yield 58.15% with "Enough" criteria.

The results of observations of the implementation of learning carried out by the teacher can be seen that the total score obtained from 2 observers is equal to 20 with a maximum score of 24 thus the percentage of teacher success in applying E-Learning based learning models with the following calculations:

Percentage of Success $= \frac{20}{24} \times 100\%$

The results of observation of the implementation of the second E-Filing learning can be seen in Table 5 below:

Table 5. Observation Results of Teachers' Learning Implementation First meeting

No				Aspects observed	Observer 1 (Lifa)		Observer 2 (Andy)	
					Yes	No	Yes	No
I		Observation of KBM						
	A.		Introduction					
	1.		Motivate student		√		√	
	2.		Convey the purpose of learning		√		√	
	B.		Core activities					
	1.		Discuss the steps of activities with students		√			√
	2.		Guiding students to conduct discussions activities using cooperative learning model debate			√		√
	3.		Guiding students end discuss the results of the activities in the group			√		√

	4. Provide opportunities for students to present the results of teaching and learning activities		√		√
	5. Guiding students is a conclusion or finding a concept	√		√	
	C. Conclusion				
	1. Guiding students to make a summary	√		√	
	2. Provide evaluation.	√		√	
I	Time Management	√		√	
III	Class Enthusiasm				
	1. Enthusiastic Students	√		√	
	2. Enthusiastic Teacher	√		√	
Amount		**9**	**3**	**8**	**4**
Total Amount		**17**			
Percentage of Success		**70,83%**			
Criteria		**Done**			

(Source: Data processed Researchers, 2018)

The results of the implementation of teacher learning at meeting I reached the percentage of 70.83% with the "Executed" criterion, and at the second meeting as can be seen in Table 5. The results of the implementation of teacher learning increased with the percentage of 83.33%, the criteria obtained that is "Implemented", this is because this second meeting of teachers (researchers) can practice directly the application of E-Filing learning model based on E-Learning in accordance with the schedule that has been made. And when the learning outcomes at meetings I and II are averaged, then a percentage of 77.08% is obtained, with this result in cycle I the criteria obtained are "Applied".

Percentage of learning model model by teacher and student in average then determined the criteria of its implementation based on the following table:

Table 6. Percentage and Criteria for the Implementation of Learning

Percentage of Compliance	Criteria
85-100	Really done
70-84	Done
55-69	Enough Done
40-54	Less Done
<40	Very Less Done

(Source: Data processed Researchers, 2018)

Learning activities are quite conducive, many students are interested in the material described by teachers, many students are actively asking questions about real examples around them. Besides, students' activeness at the time of application of E-Filing learning model based on E-Learning is also very, very high compared to without E-Filling E-Learning learning model, but there are still many passive and timid students to express their opinions and tend to discuss with your friends beside him without going to say in general, in this case the teacher should be able to lure students who still look passive to be more active again.

Table 7. Student Learning Outcome Psychomotoric Domain

Student Absece Number	The Number of Idicators Assessed	Score	Squared Score	Value	Predicate
1	10	72	5.184	B	Good
2	10	66	4.356	C	Enough
3	10	64	4.096	C	Enough
4	10	78	6.086	B	Good
5	10	66	4.356	C	Enough
6	10	72	5.184	B	Good
7	10	74	5.476	B	Good
8	10	68	4.624	C	Enough
9	10	74	5.476	B	Good
10	10	68	4.624	C	Enough

11	10	64	4.096	C	Enough
12	10	74	5.476	B	Good
13	10	72	5.184	B	Good
14	10	68	4.624	C	Enough
15	10	76	5.776	B	Good
16	10	76	5.776	B	Good
17	10	66	4.356	C	Enough
18	10	68	4.624	C	Enough
19	10	78	6.086	B	Good
20	10	70	4.900	B	Good
21	10	72	5.184	B	Good
22	10	66	4.356	C	Enough
23	10	68	4.624	C	Enough
24	10	74	5.476	B	Good
25	10	76	5.776	B	Good
26	10	66	4.356	C	Enough
27	10	68	4.624	C	Enough
28	10	72	5.184	B	Good
29	10	80	6.400	B	Good
30	10	68	4.624	C	Enough
31	10	72	5.184	B	Good
32	10	74	5.476	B	Good
Total		**2.226**	**161.624**		
Avarage			**69,56**		
Standard Deviation			**14,55**		
Percentage of Success			**69,56%**		

(Source: Data processed Researchers, 2018)

Information:
Value 5 = Score 85-100 = A / (category is very good)
Value 4 = Score 70-84 = B / (category is good)
Value 3 = Score 55-69 = C / (category is enough)
Value 2 = Score 40-54 = D / (category is less)
Value 1 = Score <40 = E / (category is very less)

Table 9. Student Learning Outcomes

Domain of Assessment	Percetage (%)
Psychomotor	69,56
Cognitive	66,31
Average	**67,93**

(Source: Data processed Researchers, 2018)

Based on Table 9. Student learning outcomes obtain an average percentage of 67.93% with the criteria of "Enough", so that it needs improvement in the delivery of E-Filing based E-Filing learning.

V. CONCLUSION
From the results of research that has been done, can be drawn conclusion as follows:

Teaching methods undertaken by teachers have led to student creativity. Media dikembamgkan learning media that improve on student achievement and motivation. Learning media developed leads to learning that refers to mobile learning, which means learning can be done anywhere and anytime can do learning. In this study there are 3 important components namely, competence, material and assessment. All of these components are learning throughout the learning process. So the three components can be aligned to the end of learning that can improve student achievement and motivation in learning. The results of this development in the form of applications that contain material in a media, the test results obtained are 96.43% for media experts, 89.28% for material experts. Even concluded here the media developed valid so feasible to use. While the learning method used already includes a fun learning innovative. Learning media and learning methods certainly have advantages and disadvantages. This should require continuous development. This weakness is a change in the need for continuous learning media that adapts existing learning and learning methods must continue to evolve according to the needs of students.

E-Learning models applied in the E-Filing subject run well. The following stages are the activities of E-Learning models in E-Filing subjects:

a. At the first meeting the teacher explains the material of identifying archival activities.
b. At the first meeting teachers divided the participants group E-Filing because of the limitations of computer facilities and infrastructure in the school. The teacher delivers the task of reading the material or problems that will be done in E-filing lesson.
c. The teacher distributes the letter sheet and classification of the letters that will be done with the E-Filing application, then responded by the students, and so on until most students can express getting E-Filing task orders.
d. While students organize and open the E-Filing application, the teacher writes the core of each conversation and occasionally briefs or mediates when students have come out of material unknown to students.
e. Then the teacher invites students to make or complete tasks or commands that refer to the topic to be achieved.

Student E-Filing application operation skills have improved during the learning process that has applied E-Filing learning model, as evidenced by the achievement of percentage of success from the skill observation sheet. When the percentage of success with the "Good" criteria is then improved, this is proven by the percentage of success on the "Excellent" criteria.

Student learning outcomes using the E-Learning learning model also experience improvement. This can be evidenced by the acquisition of scores for the psychomotor domain gets the criteria of "Good" and increases with the criteria of "Very Good", then for the cognitive domain reaches the criteria of "Enough" then increases with the results of the criteria of "Good".

VI. RECOMENDATION

Here are some suggestions from researchers to follow up on the results of this study.

1. For Students
a. Students are expected to be able to follow every stage in E-Learning learning model based on E-Learning learning well, because it is very useful to improve matapelajaran skills Student archives and student learning outcomes.
b. Students should not be tied to conventional learning and highly capable students can work together with low-ability students in E-Learning based E-Learning learning.

2.   For Teacher
It is suggested that teachers are able to make varied learning strategies to overcome students 'saturation while studying, so as to trigger students' courage in speaking, asking and answering when lessons are in progress. Teachers should pay more attention to time management at the time of execution of learning so that each stage planned can be done properly and appropriately. The teacher should be more assertive towards students who like to be self-indulgent outside of the topic given. Teachers' attention should be further divided so that it can be evenly distributed.

3.   For Schools
It would be better if the computer was installed in each class permanently so that the learning time was not cut off to borrow to a special laboratory first and not even to mention the preparation of the installation of computer equipment which is quite time consuming. Moreover, there are schools that every turn of class must fix their computer facilities and infrastructure in advance.

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