Evaluating the impact of computer accounting media applications on human development



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ABSTRACT

Purpose: Technology in education especially in accounting and computer learning is currently needed to support teacher performance and as a facility for students to participate in the learning process in the 21st century. This study aimed to determine whether there are differences in the performance of teachers before and after training on information technology-based learning evaluation models that use accounting applications.

Design/Methodology/Approach: The process of mastering Wondershare software is carried out for economics and accounting teachers in order to enhance the quality of learning. The research design uses a true pre-and post-tests experimental design with respondents being teachers in the field of accounting learning.

Findings: The results showed that there were differences before and after the training was carried out. After the training, the ability of teachers to perform the learning evaluation process improved.

Conclusion: Similarly, the responses of the teachers during the training and their perceptions of using the learning evaluation application were very enthusiastic.

Research Limitations and Implications: The limitation in this study is that there are many choices in using the questions in this application so not all the model questions in the application are taught.

Practical Implications: The findings of this study may be used to train instructors and raise their levels of proficiency, resulting in higher-quality human development.

Contribution to the Literature: The theoretical ramifications of this research include developing appropriate modelling in training and learning through the use of direct instructional applications.

Keywords: Accounting, Evaluation, Learning, Online questions, Teacher, Teaching, Wondershare.

1. INTRODUCTION

Science and technology are developing quite quickly in the contemporary era of globalization particularly in the field of computers (Abbitt & Klett, 2007). The ability to use a computer is necessary in every field. The use of information and communication technology (ICT) is an effective and efficient way of conveying information. The technology that enables this strategy is always improving. Users are occasionally not prepared to use ICT due to its fast development. Access to technology is non-negotiable in the current global era because technology is one of the factors that shapes globalization itself (Marold, 2002). Advances in technology, information and transportation are the three main factors of globalization. Globalization has resulted in the fading of national boundaries in the interests of business, government and society.

Education is required to act quickly, considering developments in technology and information and creating instant situations characterized by changes in behavior. ICT is still not widely used in Indonesia particularly in the field of education. Meanwhile, ICT use is essential in the context of globalization to improve performance effectiveness and efficiency, particularly in teaching and learning (Marold, 2002). In addition, we can easily monitor the latest developments throughout the world using ICT due to the web which is a type of ICT. In other words, whether we like it or not, we must become familiar with, adept at and even create ICT including its application to ensure that we are left behind in the evolution of globalized world.



Figure 1. Use of ICT in teaching and learning accounting.

Based on Figure 1, this computer has been known since elementary school or even in early childhood. Among educators themselves, especially teachers of economics or accounting subjects, the need for the ability to use computers is very important. The ability needed is the creation of calculation programs. This requires a fairly long settlement procedure and cannot be solved quickly using a calculator. In addition, there is still very little knowledge of using computer applications that is known by teachers of economics or accounting subjects in senior high schools.

Teachers are required to be more creative in using economics or accounting learning media in accordance with Information Technology (IT). Moreover, this exam has been implemented with an online system. An online method was used to administer the exam (Schinske, 2011). Teachers must be experts in learning evaluation with software in order to keep up with the present state of evaluation media development (Jones & Jones, 2008). The initial identification results were based on information from economics or accounting teachers that the application of the online exam would be tried out in Indonesia. Meanwhile, teachers who are members of economics or accounting do not have knowledge about designing online questions. The Wondershare software programme may be used as a medium for assessing economics learning. Even if students are adapted to online questions in everyday learning, the degree of mastery of online questions will also be easier. Therefore, it is very appropriate to hold computer training that can be useful for teachers, especially in teaching and learning activities in class (Marold, 2002).

The results of the initial identification indicate that there has been no Wondershare software training that has been attended by teachers especially those who are members of economics or accounting subjects. This adds to the belief that there is a need for mastery of skills related to applications that can be used to improve the quality of learning (Khafid, 2007). Most teachers can operate standard computer software such as Windows, Excel and PowerPoint. Basic mastery of this software standard can be used as a prerequisite for learning Wondershare software. Training in IT for economics teachers teaching activities have included teaching Mind Mapping and Mind Your Own Business (MYOB) accounting to service organizations in 2019 and to trade companies in 2021, respectively.

It is necessary to have additional insight and skills in the Wondershare software application as an evaluation medium for economics or accounting learning for economics teachers by looking at the mastery of applications for learning in the last 3 years. How is the process of learning Wondershare software as an evaluation media for economics or accounting learning for economics or accounting teachers? The question posed in this research is whether there are differences in the competence of teachers before and after attending Wondershare training?

The purpose of mastering Wondershare is to improve skills in operating the software as an evaluation medium for economics or accounting learning for economics or accounting teachers.

2. LITERATURE REVIEW

2.1. Computer-Based Learning

The development of media for use in the teaching and learning process has reached a new phase in the educational sector due to the availability of information technology in the form of computers. Competence in computer mastery is needed in teaching in the 21st century (Marold, 2002). The ability of information technology to combine various text media, sound, numerical images, animations and videos in digital software has interactive capabilities to become an alternative tool for teaching and learning processes. The teaching and learning process is an activity of carrying out the curriculum of an educational institution in order to assist students in achieving predetermined educational goals and lead to changes in behavior both intellectual, moral and social. Along with these changes, aspects of teaching methodology also changed. These aspects are teaching methods and teaching media (Lawrence, 2022).

However, computerized-based learning does not always run without problems. In the world of higher education, students taking computer accounting courses are often anxious, especially those who are not good at using computers and do not master basic accounting and intermediate financial accounting. Students sometimes believe that what they study is just theory since they can not immediately understand how it applies to their lives. The results of research on Gajah Mada University accounting students in Indonesia conducted by Ali (2008) found that judging from the level of computerized anxiety as measured by the CARS Computer Anxiety Rating Scale (CARS) instrument, respondents had different levels of anxiety. The frequency distribution of computerized anxiety shows that 52.8% of respondents do not have technophobia, 40% show low technophobia and 7.2% of respondents show high technophobia. This research shows that the phenomenon of computer anxiety occurs among accounting students is consistent with the statement of Rosen and Weil (1990). Anxiety about using a computer will not increase utilization of computer use because computer knowledge has a positive relationship with computer use (Olatoye, 2009). Self-efficacy has a strong and significant relationship with computer anxiety in students (Adebowale, Adediwura, & Bada, 2009; Khorrami, 2001; Saadé & Kira, 2009). The concept of self-efficacy is seen as an important variable for the study of individual behavior in the field of information technology. Self-efficacy is defined by Bandura (1989) as a judgment of a person's capability and computer skills to perform tasks related to information technology. Anxiety about using computers in learning is a psychological pressure due to a lack of understanding of technology, its applications and its operating methods. One approach to overcoming anxiety when using computers is to involve students themselves in dealing with beliefs, fears and assumptions that help them develop strategies to overcome their anxiety (Horton & Gerrig, 2002). It is necessary to consider the application of computer programs to be used, especially for the use of accounting computer application programs in order for computer-based learning to be more meaningful and not cause anxiety to students.

The proper utilization of information technology helps to overcome the emergence of obstacles and distractions for students or teachers in the teaching and learning process (Bandura 1989). The use of information technology must be based on the right selection so that it can expand its meaning and function in supporting the success of the teaching and learning process. Numerous disciplines must be based on computer technology in order to obtain insight and inspiration and keep up with the present pace of progress. Computers have the ability to increase the quality of teaching and learning in almost all disciplines from a practical perspective. They cannot just make activities simpler to perform (Nindya & Dafit, 2022). The presence of information technology in the form of computers opens a new era in the development of learning media that will be used for the teaching and learning process as well as the transfer of knowledge. The development of computer multimedia technology that is able to combine various text media, sound, numerical images, animation and video in digital software has interactive capabilities to become an alternative tool or media in the teaching and learning process (Silberman, 2001). The teaching and learning process is an activity of carrying out the curriculum of an educational institution in order to assist students in achieving predetermined educational goals namely to lead students to changes in behavior both intellectual, moral and social. Teaching is generally a teacher's effort to create conditions or regulate the environment in such a way that there is interaction between students and the environment including teachers, learning tools and so on.

2.2. Wondershare Application

The Wondershare application which is also called Quiz Creator is an accurate quiz-making application program to create quiz applications with surveys with multimedia and flash cored objects. The application can quickly help compile content that can be used as an assessment and publish it synchronized or online. Moreover, the application can be used to track quiz output as well as get in-depth notifications with Wondershare Quiz Management System (QMS) which is able to operate seamlessly with Quiz Creator. Online questions are defined as an evaluation of students presented in online media on the internet or intranet. It is far more flexible to evaluate some subjects taught to students using the internet than it is to do so using written questions as usual, yet written questions are still required in some circumstances when using paper media.

Wondershare Quiz Creator is a useful application for compiling quizzes, tests or questions offline and synchronous (online based). It is very easy to operate and does not need to use complicated programming algorithm. Using Wondershare Quiz Creator to compile these questions is very easy and user friendly. Test results, questions and quizzes compiled using the software are already stored in flash format which can stand alone on the website. Users can very easily create and organize various forms and levels of questions, namely multiple choice, matching, true/false matching and filling in the blanks, quiz with image area and others with Wondershare Quiz Creator. Even with Wondershare Quiz Creator, various images and flash files (flash movies) can also be inserted to support students' understanding of working on questions. Making online questions is obviously not too difficult for individuals with an IT educational background, but for those without one, there are some substantial challenges. It is quite difficult to make online questions with various question models. Forms of questions contained in the Wondershare question models and various other question models. Forms of questions contained in the Wondershare question maker application software are:

- 1. True/False Questions (T-B).
- 2. Multiple Choices: Multiple choices, only one is correct.
- 3. Multiple Responses: With multiple choices with many correct.
- 4. Fill in the Blank: Filling questions.
- 5. Matching
- 6. Sequence: A question that is interrelated.
- 7. Word Bank: Fill in the blanks or complete the sentences.
- 8. Click map: Select an image.
- 9. Short Essay: Short entry.

This is extremely helpful for both students and teachers with online questions. Teachers can get direct reports sent automatically to e-mail while students can immediately find out the results of their grades and can also immediately find out answers that function as corrections for errors in answering online questions with the help of this software. The process of teaching and learning is essentially a process of communication between teachers and students where the teacher is the transmitter of information (messages) in the form of subject matter that will be received by students. In this case, the authors consider that there is no problem regarding the teaching method used by a teacher but how appropriate the use of the teaching method will be less optimal results if the method used to evaluate the results of a teaching and learning activity is only the conventional method. For this reason, the author tries to use Wondershare Quiz Creator to optimize results and attract students' attention.

3. RESEARCH METHODS

3.1. Research Design

A descriptive research method was used to answer the formulation of the problem in this study. Descriptive research is a research method used to find the widest possible knowledge of the object of research at a certain time. The research design uses the true experiment approach with the pre- and post-tests model. This research method also aims to explain or describe a situation, event, object or person or anything related to variables that can be explained. This study describes the process of mastering the Wondershare software by twenty four economics or accounting teachers. This research uses a purposive sampling technique that is based on teachers who are members of economics or accounting courses and are currently receiving Wondershare software application training.

Table 1. Pre-post tests experiment.							
Group	Pretest	Treatment	Posttest				
Experiments	01	X ₁	02				

3.2. Data Analysis Technique

In this study, we compared the abilities of teachers after and before training Wondershare software in learning. The research instrument and data collection instrument use pre-post-tests questions which are validated using reliability and validity tests using KMO (Kaiser-Meyer-Olkin) and Bartlett's test.

4. FINDINGS

The process of mastering Wondershare software is carried out for teachers of economics or accounting subjects to improve the quality of learning. Wondershare is an interactive application program that can be used as a medium for delivering information and as an evaluation medium in the learning process. Based on Table 2, the process of mastering the Wondershare application is designed in the form of training with the following pattern:

Table 2. Activity patterns and training methods.						
Activities/Materials	Training method					
Introduction Wondershare application in learning evaluation	PPT assisted lectures and Wondershare application examples					
Installation of Wondershare supporting software and	Direct instructional					
Wondershare software online						
Wondershare application operation	Direct instructional					
Wondershare advance application operation	Direct instructional					

At the introduction stage of the Wondershare application in the learning evaluation, the power point assisted lecture method and examples of the Wondershare application are used. At this stage, the implementation of the training took place at the economics or accounting subject secretariat.

Table 3. KMO and Bartlett's tests.					
Kaiser-Meyer-Olkin measure of s	ampling adequacy.	0.587			
Bartlett's test of sphericity	Approx. Chi-square	15.490			
	Df	6			
	Sig.	0.017			

Based on Table 3, the KMO value shows 0.587 where the KMO position is greater than 0.500 which indicates that the data from the pre- and post-test results are valid.

Table 4. Reliability statistics.	
Cronbach's alphaª	N of items
0.808	4
Note: a. value of reliability	

Based on Table 4, the results of the reliability test of pre-and post-tests data were reliable at alpha values above 0.60, namely 0.808. According to information from policy holders, teachers still feel worried when faced with software training. Training is a planned effort to increase the knowledge, skills and abilities of teachers. With the implementation of proper training, it is hoped that it can improve the effectiveness of the teacher's work in achieving the work results that have been set (Abraham, 2006). The purpose of the introduction stage of the Wondershare application in this learning evaluation is to provide initial knowledge about the nature of computerassisted learning and the Wondershare application. The following will show you how to operate the Wondershare application. The first time you run the Quiz Creator program, a selection window will appear as follows:



Figure 2. Display quiz creator/Wondershare.

Figure 2 illustrates the quiz creator or Wondershare display done through the following steps:

- 1. Select create a new quiz.
- 2. Highlight and click.



Figure 3. Setting quiz information.

Figure 3 illustrates setting quiz information through the following steps:

1. Select quiz properties.

2. Type a name for the problem you created (e.g. exercise).

3. Type an introduction for the starting page of the question.

If to work on the questions later the user has to enter a keyword, put a tick in the password column.

Quiz Information Quiz Settings Question Settings Question Settings Quiz Result Quiz Result	
Quiz Information Quiz Settings Question Settings Quiz Result	
Quiz Settings Quiz Settings Quiz Settings Quiz Result Points: 1 Points: 1 Points: 10 2 Points: 10 Attempts: 5 Points: 10 Stufficulty: Points: 10 Points: Points: Points: <th></th>	
Question Settings Quiz Result 1 Shuffle questions 3 Shuffle answers 4 Feedback If the answer is correct, display the following: B U S Correct 5	
Quiz Result If the answer is correct, display the following: B × U Image: Correct 5	
If the answer is incorrect, display the following:	
B Z U 20 4 12 -	
6	

Figure 4. Setting question settings.

Figure 4 illustrates setting question settings done through the following steps :

- 1. Select question setting.
- 2. Enter the value for each correct answer.
- 3. Put a tick on the Shuffle question if the questions appear randomly.
- 4. Put a check mark on Shuffle answer if the answer choices appear randomly.
- 5. Type a response for the correct answer.
- 6. Type a response for the wrong answer.



Figure 5 illustrates template selection through the following steps:

- 1. Select the player template icon.
- 2. Select the template to be used.
- 3. Select the text and label icons.

Preview the results after answering the questions in order to see them.



Figure 6. Selecting an icon.

Figure 6 illustrates how to select icons through the following steps:

- 1. Select the preview icon.
- 2. A preview window will appear.

Select this button (button name according to the change on the label) to run on the question.

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Training increases the knowledge, skills and abilities of teachers. It is envisaged that the implementation of appropriate training would increase the efficacy of the teacher's job in accomplishing the goals that have been established for their work.

Table 5. Paired samples statistics.							
Value		Mean	Ν	Std. deviation	Std. error mean		
Pair 1	Before	77.167	24	7.435	1.518		
	After	86.167	24	3.185	0.650		

From the results of Table 5, the average teacher performance before training was 77.16 with a standard deviation of 7.43 and the average after training was 86.16 with a standard deviation of 3.18. This means that there is an increase in average performance before and after training for teachers. The hypothesis test is guided by the significance value of alpha (2-tailed) 0.05, if it is greater, it indicates that there is no significant difference between the initial and final variables. On the other hand, if it is less than 0.05, it indicates that there are differences before and after training for teachers. This shows a significant effect on the difference in the treatment given to each variable.

Table 6. Paired samples test.									
Paired differences									
	Std.		Std. error	95% confidence interval of the difference					
	Mean	deviation	mean	Lower	Upper	т	df	Sig. (2-tailed)	
Before - after	-9.000	7.483	1.528	12.159	-5.840	-5.892	23	0.000	
	Before - after	Mean Before -9.000 - after	Mean Std. Before -9.000 7.483 - after -9.000 7.483	Table 6. Pa Paired different Paired different Std. Std. Mean deviation mean Before -9.000 7.483 1.528	Table 6. Paired samples ter Paired differences Paired differences Paired differences Std. 95% cor Std. error difference Mean deviation mean Lower Before -9.000 7.483 1.528 12.159	Table 6. Paired samples test. Paired differences Paired differences Paired differences Std. 95% confidence Std. interval of the Open Open Oppen Before -9.000 7.483 1.528 12.159 -5.840	Table 6. Paired samples test. Paired differences Paired differences Paired differences 95% confidence Std. error difference Mean deviation mean Lower Upper T Before -9.000 7.483 1.528 12.159 -5.840 -5.892	Table 6. Paired samples test. Paired differences Paired differences Paired difference 95% confidence Std. error difference Mean deviation mean Lower Upper T df Before -9.000 7.483 1.528 12.159 -5.840 -5.892 23	

According to Table 6 of the T test described above, the hypothesis that there are differences between teacher training before and after training is accepted since the sig (2-tailed) value = 0.000 which is less than the significant value = 0.05 is accurate. Implementation of training held for teachers can improve teacher performance.

Based on the hypothesis testing conducted, it can be seen that there are strong and significant differences before and after training in teacher performance.

The results of this study indicate that the implementation of training for teachers is in the good category. The performance of employees will increase after attending training. Implementation of training methods is in a very good category. Teachers really apply training methods in accordance with the concept so that teachers who have taken part in the training can understand the material provided, so that teachers' skills and knowledge increase, such as being able to interact with other people, work together in teams and mastery of technical skills from learning outcomes (Carroll, 2011). Teachers are worried that they will not be able to operate the Wondershare application. The results of research on students majoring in accounting at Gadjah Mada University in Indonesia found that judging by the level of computer anxiety, respondents had different levels of anxiety. The frequency distribution of computerized anxiety shows that 52.8% of respondents do not have technophobia, 40% show low technophobia and 7.2% of respondents show high technophobia. This study shows that the phenomenon of computer anxiety occurs among college students (Ali, 2008). The training participants will be more motivated and have confidence in being able to operate the Wondershare application with the introduction of the Wondershare application in the learning evaluation (Aydin & Mehmet, 2019). The results of the training of participants at these stages indicate optimism about being able to participate in the next training stage. Participants are advised to bring a laptop to install Wondershare supporting software. At the installation stage, Wondershare supports software and the online use of a direct instructional model. The training took place in the computer laboratory of the Unesa Faculty of Economics. By using Wi-Fi in the computer laboratory, the participants were guided by an instructor to browse and install Wondershare supporting software. Wondershare application supporting software is Flash Player 19 win ax. At this stage, the obstacle that arises is the slow speed of the internet so the loading time is very long and even almost fails. The next obstacle that arises is the domain from Wondershare asking for paid passwords whereas previously the domain for Wondershare was free to download. However, these obstacles can be overcome by registering later. The participants' persistence allowed the installation of the Wondershare programme and accompanying applications. The instructions for installing Wondershare supporting software and its online use led to the participants' computers' successful installation of Flash Player and Wondershare. The ability to operate ICT requires courage to learn how to use it (Nowfeek & Mahrool, 2021).

At the operating stage of the Wondershare application using the direct instructional model, the participants follow the instructions and explanations from the instructor. Each stage was followed closely by the participants. Several participants who experienced difficulties were assisted intensely by the instructor so they could follow the next stages. A simple module has also been prepared for participants to make it easier for participants to understand when carrying out each stage (Alharbi, 2022). The training material includes applications of true-false and multiple -choice questions as well as quiz settings. At this stage, the participants were directed to be able to design true false questions in the Wondershare application first. After completing the true-false question design, the participants were directed to preview the results of the question design. Furthermore, participants were directed to design Wondershare-based multiple choice questions and preview them. Participants were given the opportunity to rehearse designing Wondershare-based questions. After successfully designing Wondershare-based questions, the design of the questions is set through the quiz setting so that they can be published in the form of Mozilla Firefox which can be accessed both online and offline. The participants were directed to be able to operate the quiz setting sequentially and systematically in order to be able to publish the results of their designs. The main obstacle at this stage is inadequate internet speed so loading takes too long. For the Wondershare training this time, publish only in the form of Mozilla Firefox, although there are several options for publishing. At the operational stage of Wondershare and quiz setting, the participants succeeded in compiling a Wondershare-based true- false and multiple- choice question model and published it in the form of Mozilla Firefox both online and offline.

At the operating stage of the Wondershare Advance application, participants are directed to have the ability to display question designs in the form of curves, tables, images and graphics that are published in the form of Mozilla Firefox. At this advanced stage, many participants were still unable to make curves, graphs of economic or accounting functions in MS Word or Excel so they had to be based again. At this stage, the participants enthusiastically tried to draft questions in the form of curves, tables and graphs with the help of Wondershare and published them in the form of Mozilla Firefox. The results of this study are in line with research (De la ossa & Alberto, 2022) showing that the use of ICT in learning enables the enthusiasm of both teachers and students in teaching and learning activities. In the final hour of the training activity, the training time was extended by a few hours. This was done by considering the participants' requests for additional training time because they wanted to really master Wondershare software operations. After the closing of the training activities, some participants requested that further training be held because of the 9 forms of questions only 2 forms of training were given. This shows that the Wondershare software training activities are in great demand and it can be said that the activities in an effort to improve the quality of learning evaluation through the process of mastering the Wondershare application have been successful. The training activities carried out need to be evaluated to determine the effectiveness of the implementation of the training. Evaluation is carried out through the distribution of questionnaires. The results of the evaluation are used for improvement in subsequent activities. The description of the results of the training implementation as shown in Figure 7 can be explained further as follows: Opinions of the economics or accounting teachers about the material presented by the team of presenters which includes the install stage of the Wondershare program, its operation and its display can be presented in diagrammatic form as follows :



Figure 7. Wondershare training material response diagram (Using a Likert scale).

The Wondershare training participants gave their opinions on the information above in the following order: 8% said less, 17% said good and 77% said very well. The training participants, namely teachers who are members of the accounting or economics class feel that this Wondershare material is very interesting to master. The Wondershare application will help support the tasks of carrying out learning especially in interesting learning evaluations for students. This research is in line with the research of Ratheeswari, (2018) who found that the existence of ICT in learning makes it easier for students to understand a material. Wondershare is able to produce questions that can be done on a PC or laptop computer both online and offline. Opinions of the economics teachers regarding the presentation of the material presented by the team of presenters included mastery of the material, how to deliver the material, the use of language in conveying material, the use of media in delivering

material and the interaction between the presenter and the participants. The presentation of the material can be described in the diagram as follows:



Figure 8. Wondershare presentation response diagram (Using a Likert scale).

According to Figure 8 from the presentation of the aforementioned content, the Wondershare training participants gave positive responses declaring well 20% and very well 80% of the time. All participants felt that the presentation of the material had been well delivered. In the process of delivering training materials to teachers, instructors do not use programming languages or computer application languages which tend to use English but use Indonesian which is easy for participants to understand. The information is delivered coherently, methodically and repeatedly to make it simpler for participants to follow each stage in the Wondershare application's functioning. Participants are given the freedom to interact with fellow participants or with the instructor. If there is material that is not clearly understood by participants, participants are given the opportunity to ask questions at any time. Opinions of the economics teachers regarding all the material presented during the training which included understanding of the material presented, the benefits obtained by the participants and new things obtained by the trainees and timeliness in implementing the Wondershare training. Understanding of the material by participants can be described as follows:



Figure 9. Wondershare material understanding response diagram (Using a Likert scale).

According to the results based on Figure 9 and the entire content discussed above, 33% of the participants in the Wondershare training gave adequate responses and 67% of them gave good responses. The trainees must be able

to use the Wondershare programme to develop the two types of questions: true/false and multiple choices in order to assess the effectiveness of the Wondershare training. The Wondershare software was very popular with the training participants. The need for monitoring this training is only reasonable given the significance of this programme in current economics and accounting classes. The intended follow-up mean a similar training held on another occasion (as an in-depth study) or improvement of the material provided in this training. The participants' desire for the continuation of this training was very large. This was also expressed very clearly through the request for an extension at the end of the training session.

5. CONCLUSION

According to research and discussions on the analysis of teachers' performance during this training, there is a strong and significant difference between teacher performance before and after training where teachers actually implement training methods in accordance with the concept that has been agreed upon so that the teachers who attended the training can fully comprehend the provided material so that the skills can be improved. Teachers who are members of the economics subject also have the desire to be able to improve their quality and develop their scientific insights through Wondershare software training. The teachers' perception of Wondershare software training is good in carrying out their duties especially in introducing online evaluations in dealing with national exam. The suggestions summarized by the participants basically showed high enthusiasm for this training. This suggestion relates to the continuity of the training as explained above the participants only get 2 online question model trainings out of the 9 models contained in the application.

6. FUTURE IMPLICATIONS

The use of the Wondershare application when combined with the selection of appropriate learning methods can affect the achievement of good quality learning when applied to students especially methods that prioritize student centered learning. Student motivation will increase when implementing and evaluating learning using ICT-based applications because they are more interactive. For further research development, it is recommended to be able to apply the Wondershare application in a blended learning manner.

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INSTITUTIONAL REVIEW BOARD STATEMENT

The Ethical Committee of the Universitas Negeri Surabaya, Indonesia has granted approval for this study (Ref. No. 1151/UN38/HK/PP/2023).

TRANSPARENCY

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

COMPETING INTERESTS

The authors declare that they have no competing interests.

AUTHORS' CONTRIBUTIONS

Developed the theoretical formalism, performed the analytic calculations and performed the numerical simulations and contributed to the final version of the manuscript and supervised the project, A.L. and R. Both authors have read and agreed to the published version of the manuscript.

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