

Evaluation Of The Implementation Of Take Home Examination (THE)

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Abstract:

Background: The final examination at Universitas Terbuka, a key element of distance education in higher learning, is typically held at the end of each semester, conducted simultaneously, and consists of objective tests (multiple-choice) or standardized essay assessments. These exams are then evaluated at the Testing Management Center. In the 2020 academic year, following the Joint Decree of the Ministers on Guidelines for Organizing Learning during the Covid-19 pandemic and the Odd Semester 2020/2021 Learning Guidelines, Universitas Terbuka implemented a Take Home Examination (THE) format for the odd semester of 2020 (2020/21.1-2020.2). The aim of this research is to measure the quality of implementation of final examination of take-home examination (THE) at Kupang region. Evaluation of THE final exam needs to be carried out to find out to what extent the implementation of THE final exam achieves the maximum objectives of the Universitas Terbuka standardized learning outcomes evaluation process.

Materials and Methods: The method used is a quantitative descriptive approach. The population in this study was students of teacher training and education faculty of Kupang region spread across 12 regencies throughout East Nusa Tenggara with a sample of 152 students taken using the cluster random sampling technique. The instruments used in this research were (1) a questionnaire regarding Kupang regency students' responses to the implementation of THE, (2) biodata of research samples (students and proofreaders), and (3) interview guidelines.

Results: The research results show that in the aspect of participant reactions, the categorization of students' reactions to the implementation of THE is at good level (19.74%), and very good (80.26%), in the learning aspect, the categorization of participants towards the implementation of THE is at good (23%) and very good (77%) level, in the aspect of organizational support and change, the categorization of organizational support and change in the implementation of THE is at the good level (31%), and very good (69%) and in the implementation aspect participants (new knowledge and skills), the categorization of participants' implementation (new knowledge and skills) of THE implementation was at good level (27.64%), and very good (72.36%).

Conclusion: THE final exam provides a good evaluation for students regarding measuring aspects of knowledge and skills after studying the material during the current semester. The change from the conventional UAS system to a technology-based UAS does not affect student performance in terms of self-preparation.

Key Word: Distance education; Learning assessment; Students' achievement; Take home examination.

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I. Introduction

Universitas Terbuka as one of the distance educations in Indonesia has unique characteristics, which differentiate it from conventional universities. These differences concern various aspects, one of which is learning evaluation. If conventional universities develop various kinds and types of evaluation based on lecturer subjectivity, Universitas Terbuka uses standard learning outcome evaluation materials. This standard evaluation material goes through a series of processes and stages to make it suitable as evaluation material and is intended for all Universitas Terbuka students. With a learning system that requires students to be able to study independently, Universitas Terbuka implements a summative evaluation; final examination.

By¹ emphasized that the dignity of distance education is mainly determined by three aspects, including (1) teaching materials including exam and practicum materials with high standards², (2) development and use of multimedia to deliver teaching materials³, and (3) the importance of an established position for management and organization in the context of providing supporting services. As an important component in distance education

in higher education, final examination at Universitas Terbuka is usually carried out at the end of the semester simultaneously, using the form of objective test questions (multiple choice) or standardized essay tests, and then examined at the Testing Management Center. In some study programs, final examinations are also given in the form of oral exams (for example, speaking courses) and listening (for example, Listening courses). Written and oral final exams are held simultaneously at the exam location determined by Universitas Terbuka.

In the middle 2020 academic year, in accordance with the Joint Decree of the Ministers regarding Guidelines for Organizing Learning in the 2020/2021 Academic Year during the Covid-19 pandemic as well as Guidelines for Organizing Learning for the Odd Semester 2020-2021, in the odd semester of 2020 (2020/21.1-2020.2), Universitas Terbuka holds final exam with the Take-Home Examination (THE) scheme. The THE final exam questions are in the form of assignment description tests, projects, or other forms that test students' ability to apply the concepts or essential competencies of a course in a context. Different from the previous final exam, THE is done by students at the student's place of residence and they are allowed to open the book while still complying with and upholding the prevailing academic integrity. Students can download scripts and answers to course questions and then upload them online to the page <http://the.ut.ac.id>.

Universitas Terbuka, through related institutions and units of Universitas Terbuka, has made every effort possible to disseminate information and assistance services that support the implementation of THE final exam. On November 19th, 2020, Universitas Terbuka distributed a circular regarding the implementation of the THE final exam and final program assessment semester 2020/21.1 (2020.2) along with the THE application guide. Apart from carrying out coordination between the Universitas Terbuka and unit of Universitas Terbuka, the unit of Universitas Terbuka also implemented various strategies for disseminating information related to THE final exam 2020.2. Kupang region as the Universitas Terbuka technical implementation unit in the province of East Nusa Tenggara, has held exam clinics for diploma, undergraduate and postgraduate students, disseminated information via SMS blast, Kupang region Instagram and Facebook social media (live FB), and opened consultations discussion between students and each regional PIC who is also the person in charge of the examination site.

Changing or switching the UAS mode from face-to-face final exam to THE final exam mode is certainly not an easy thing, but if we refer to the Covid-19 pandemic situation, THE final exam is the most appropriate alternative because face-to-face UAS is impossible to hold. Based on the recapitulation of THE progress on December 9th, 2020, it was recorded that from 5,466 Students' registration number of THE final exam participants, there were 4790 students' registration number (87.63%) who downloaded the questions and 4,506 Students' registration number (82.44%) who uploaded answers to the page <http://the.ut.ac.id>. Overall, 85.45% of students succeeded in taking the THE final exam, meaning there were 23,139 students' registration numbers (14.55%) who did not take part or did not finish taking the THE final exam. In Kupang region itself, 17.56% of students' registration number who did not take or did not complete the THE final exam. Based on the results of interviews with several students, information was obtained that students had trouble in answering questions which were no longer in the form of multiple choices but in the form of assignment, project or other description tests even though students had the convenience of being able to do open book test. Apart from the THE final exam questions, students also have difficulty using the THE application. On the first day of the THE final exam implementation, students experienced problems accessing the THE application and in the final minutes of the upload deadline, students also had trouble uploading the exam answer book they had completed. Final exam answer book which must be uploaded in Portable Document Format (pdf) format with a capacity limit of 2 Mb for diploma and undergraduate students, and 5 Mb for postgraduate students also makes it difficult for students because they need to shrink the exam answer book file first without reducing the readability quality of the exam answer book.

Based on the results of the exploration of the background to the implementation of THE final exam, the efforts of Universitas Terbuka and unit of Universitas Terbuka in helping students and making the implementation of THE final exam a success, and the findings from the implementation of THE final exam, researchers are interested in conducting a program evaluation to measure the quality of implementation of THE final exam, especially at Kupang region. THE final exam evaluation needs to be carried out to measure the extent to which the implementation of THE final exam achieves the maximum objectives of the Universitas Terbuka standardized learning outcomes evaluation process. The main purpose of evaluation is to improve the implementation of THE final exam, not to assess the success/failure of the program alone^{4,5}. There are various evaluation models that have been developed by experts with different characteristics and focus. By considering the stages of activities and the objectives of implementing THE final exam, the appropriate evaluation model to use is the program evaluation model by ⁶. ⁷explains that the Guskey evaluation model has been used in many evaluation studies of various teacher training programs in various countries, including the United States and Australia. In Indonesia, the Guskey program evaluation model has been applied to the Science Teacher Working Group professional development program in three districts on the island of Java, which is implemented by the Directorate General of Improving the Quality of Educators and Education Personnel of the Indonesian Ministry

of National Education in collaboration with the Japan International Cooperation Agency (JICA) and three Relevant District Government.

II. Material And Methods

This research is quantitative research with a survey method. This research is directed at answering the question of how to implement the THE final exam for Teacher Training and Education Faculty Kupang region students and is designed to reveal the results of implementing the THE final exam as initial information for the purpose of improving, developing and improving the process of implementing the THE final exam. There are several reasons underlying the use of a quantitative approach with a survey method, 1) this research seeks to reveal the evaluation of the implementation of THE final exam of Teacher Training and Education Faculty in Kupang region during the Covid-19 pandemic, 2) a quantitative approach using a survey method can provide more comprehensive answers because it involves a large number of respondents spread across 12 study groups in East Nusa Tenggara. The population in this study was Teacher Training and Education Faculty in Kupang region students spread across 12 working groups in East Nusa Tenggara. The sampling technique used is cluster random sampling with a minimum of 25% for each cluster. The instruments used in this research were (1) Kupang region student response questionnaire regarding the implementation of THE, (2) biodata of research samples (students and proofreaders), and (3) interview guide. This questionnaire was developed by researchers according to the information needs of students on the implementation of THE The questionnaire grid can be presented in Table no 1.

Table no 1: Questionnaire Grid for Responses from Kupang region Teacher Training and Education Faculty Students Regarding the Implementation of THE.

No	Components	Question Items
1	Student Reaction	1-20
2	Student learning	21-38
3	Organizational support	39-50
4	Implementation of new knowledge	51-55

Data analysis in this research uses descriptive statistics by categorizing responses using Likert's Summated Rating rules which include:

1. Determine the maximum score, namely the largest answer score times the number of items;
2. Determine the minimum score, namely the smallest answer score times the number of items;
3. Determine the median value, namely the sum of the maximum score and the minimum score divided by two;
4. Determine the 1st quartile value, which is the result of adding the minimum score and the median divided by two;
5. Determine the 3rd quartile value, namely the result of adding the maximum score with the median divided by two

The categorization of minimum, maximum and quartile values obtained above is as follows:

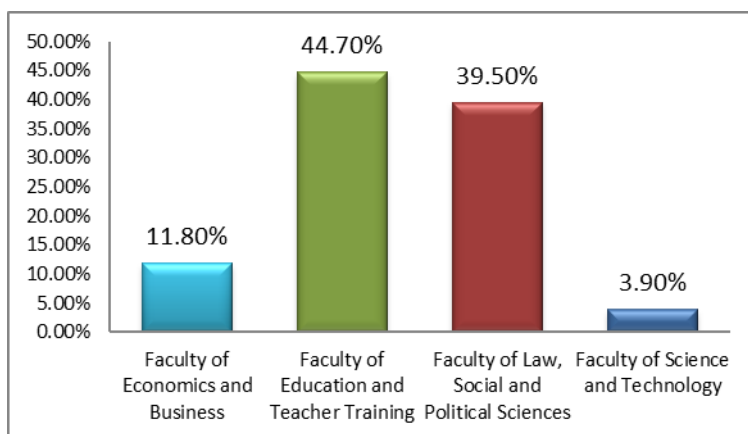
1. The very poor category, namely the area limited by the minimum score and quartile 1. (Minimum score $\leq x <$ quartile 1);
2. The poor category is the area bounded by quartile 1 and the median (Quartile 1 $\leq x <$ Median);
3. Good category, namely the area bounded by quartile 3 and maximum score (Quartile 3 $\leq x \leq$ maximum score);
4. The very good category, namely the area bounded by the median and quartile 3 (Median $\leq x <$ Quartile 3).

III. Result And Discussion

The first stage in carrying out this research was the development of research instruments. This development is related to testing the validity and reliability of the instrument theoretically and empirically with a sample of Kupang region students. The questionnaire uses a rating scale from 1 to 4. Test the validity of the Product Moment correlation with the r_{table} value at a significance level of 5% and $N=50$ is 0.279. The item validity value is the Scale Corrected Item-Total Correlation value $> r_{table}$ 0.279 so that all statement items are declared valid. The df value in this trial is the sample size of $(50-2) = 48$, so based on the r_{table} value of Df (48) and the probability of 0.05 is 0.284. Because the Cronbach's Alpha value is $0.670 > r_{table}$ 0.468, so the statement items are reliable. Or in other words, the Cronbach's Alpha value is > 0.6 so it can be concluded that Kupang region students' response to the implementation of THE.

Research activities were carried out from July to October 2022. The initial stage was distributing questionnaires to 12 study groups in the East Nusa Tenggara region. Distributing the questionnaire used an online questionnaire developed through the Google Form application. The sample is not limited to each working

group, the researcher accepts the number as is according to the questionnaire data received. The descriptive data displayed in this section is the distribution of samples based on faculties, working groups, as well as information on the implementation of THE. Data on the distribution of student samples/respondents by faculty is presented in Figure 1.



From 152 respondents, the distribution that can be seen is based on faculty, namely from the Economics and Business Faculty, Faculty of Law, Social Sciences and Political Science, Teacher Training and Education Faculty, and the Faculty of Science and Technology.

Participant Reactions

The first data analysis was participant reactions to the implementation of the THE final exam. Participants' reactions were measured by indicators of student satisfaction regarding the objectives of the THE final exam, student satisfaction with Universitas Terbuka services in the THE final exam, as well as the usefulness of the THE final exam for students. The number of statements in the participant reaction aspect was 20 statements. Categorization of participant reactions using Likert's Summated Rating rules. The maximum score is $4 \times 20 = 80$, the minimum score is $1 \times 20 = 20$, the median value is $(80 + 20) : 2 = 50$. The scale describes the minimum, median, 1st quartile, 3rd quartile and maximum scores, namely, the m value minimum 20, quartile 1: 35; median: 50; 3rd quartile: 65 and maximum 80. Based on these scores, the range of scores from the four categories is presented in Table no 2.

Table no 2: Categorization of Kupang region Teacher Training and Education Faculty Student Reactions to the Implementation of THE.

Student Reaction Category	Quartile Range	Value Range
Very Good Category	Quartile 3 $\leq x \leq$ Maximum Score	$65 \leq x \leq 80$
Good Category	Median $\leq x <$ Quartile 3	$50 \leq x < 65$
Less Category	Quartile 1 $\leq x <$ Median	$35 \leq x < 50$
Very Poor Category	Minimum Score $\leq x <$ Quartile 1	$20 \leq x < 35$

From the sample data, categorization results were obtained using SPSS as in Table no 3.

Table no 3: Frequency of Categorization of Reactions of Teacher Training and Education Faculty Kupang region Students to the Implementation of THE.

		Frequency	Percent	Cumulative Percent
Valid	SB Category	122	80.26	80.26
	Category B	30	19.74	100
Total		152	100	

Based on Table no 3, the categorization of Teacher Training and Education Faculty students in Kupang region reactions to the implementation of THE is at the good level (19.74%), and very good (80.26%).

Participant Learning

The second aspect focuses on the suitability between the material provided and the participants' needs during the activity. Measurement of this aspect refers to the knowledge, skills and attitudes obtained by participants. Participant learning is measured by indicators of student satisfaction related to the suitability of teaching materials and THE, the level of difficulty of the questions, and the needs of THE final exam for

students. The aspect of suitability of teaching materials with the THE final exam questions consists of 7 statements which aim to provide an evaluation of the quality of the teaching materials used so far to support the completion of the THE final exam questions. The difficulty level aspect of the THE final exam questions consists of 7 statement items which aim to provide an evaluation of the quality of the THE final exam questions. Meanwhile, the THE final exam requirements aspect for students consists of 4 statement items. Categorization of participant learning uses the Likert's Summated Rating rule with the maximum score being $4 \times 18 = 72$, the minimum score is $1 \times 18 = 18$, and the median value is $(72 + 18) : 2 = 45$. The scale describes the minimum score, median, quartile 1, and quartile 3 and maximum i.e., m value minimum 18, 1st quartile: 31.5; median: 45; 3rd quartile: 58.5 and maximum 72. Based on these scores, the range of scores from the four categories is presented in Table no 4.

Table no 4: Categorization of Participant Learning on the Implementation of THE

Student Reaction Category	Quartile Range	Value Range
Very Good Category	Quartile 3 $\leq x \leq$ Maximum Score	$58.5 \leq x \leq 72$
Good Category	Median $\leq x <$ Quartile 3	$45 \leq x < 58.5$
Less Category	Quartile 1 $\leq x <$ Median	$31.5 \leq x < 45$
Very Poor Category	Minimum Score $\leq x <$ Quartile 1	$18 \leq x < 31.5$

From the sample data, categorization results were obtained using SPSS as in Table no 5.

Table no 5: Frequency of Participant Learning Categorization of THE Implementation

		Frequency	Percent	Cumulative Percent
Valid	SB Category	117	77	77
	Category B	35	23	100
Total		152	100	

Based on Table no 5, the categorization of participants' learning regarding the implementation of THE is at the good level (23%), and very good (77%).

Organizational Support and Change

The third aspect focuses on the organization; organizational variables can be the key to the success of any professional development effort. The aspects measured at this level are Kupang region's support for the implementation of THE and the ease of THE application. The aspect of UT's support for the implementation of THE consists of 7 questions which aim to provide an evaluation of Kupang region's support for students so that they can carry out the THE final exam well. The ease aspect of the THE final exam application consists of 7 statement items which aim to provide an evaluation regarding the application used in implementing the THE final exam. Categorization of participant learning uses the Likert's Summated Rating rule with the maximum score being $4 \times 12 = 48$, the minimum score is $1 \times 12 = 12$, the median value is $(12 + 48) : 2 = 30$. The scale describes the minimum score, median, quartile 1, quartile 3 and maximum i.e., m value minimum 12, quartile 1: 21; median: 30 ; quartile 3: 39 and maximum 48. Based on these scores, the range of scores from the four categories is presented in Table no 6.

Table no 6: Categorization of Kupang region Teacher Training and Education Faculty Student Learning on the Implementation of THE

Student Reaction Category	Quartile Range	Value Range
Very Good Category	Quartile 3 $\leq x \leq$ Maximum Score	$39 \leq x \leq 48$
Good Category	Median $\leq x <$ Quartile 3	$30 \leq x < 39$
Less Category	Quartile 1 $\leq x <$ Median	$21 \leq x < 30$
Very Poor Category	Minimum Score $\leq x <$ Quartile 1	$12 \leq x < 21$

From the sample data, categorization results were obtained using SPSS as in Table no 7.

Table no 7: Frequency of Categorization of Support and Organizational Changes in the Implementation of THE

		Frequency	Percent	Cumulative Percent
Valid	SB Category	105	69	69
	Category B	47	31	100
Total		152	100	

Based on Table no 7, the categorization of support and organizational changes for the implementation of THE is at good (31%) and very good (69%) level.

Participant Implementation (new knowledge and skills)

The third aspect focuses on participants implementing the new knowledge and skills they receive from a program in their work. In the context of this program, it is not a training activity but rather a technology-based exam program, so this aspect focuses on implementing student experience in facing the next THE final exam. The implementation aspect of students' experiences in facing the THE final exam consists of 7 statement points which aim to explore information on student follow-up regarding the next THE final exam based on previous THE experience. Categorization of participant learning uses the Likert's Summated Rating rule with the maximum score being $4 \times 5 = 20$, the minimum score being $1 \times 5 = 5$, the median score being $(5 + 20) : 2 = 12.5$. The scale describes the minimum, median, quartile 1, quartile 3 and maximum scores, namely, the minimum 5, quartile 1: 8.75; median: 12.5 ; 3rd quartile: 16.25 and maximum 20. Based on these scores, the range of scores from the four categories is presented in Table no 8.

Table no 8: Categorization of Participant Implementation (new knowledge and skills) Regarding THE Implementation

Student Reaction Category	Quartile Range	Value Range
Very Good Category	Quartile 3 $\leq x \leq$ Maximum Score	$16.25 \leq x \leq 20$
Good Category	Median $\leq x <$ Quartile 3	$12.5 \leq x < 16.25$
Less Category	Quartile 1 $\leq x <$ Median	$8.75 \leq x < 12.5$
Very Poor Category	Minimum Score $\leq x <$ Quartile 1	$5 \leq x < 8.75$

From the sample data, categorization results were obtained using SPSS as in Table no 9.

Table no 9: Frequency of Categorization of Participant Implementation (new knowledge and skills) of THE Implementation

		Frequency	Percent	Cumulative Percent
Valid	SB Category	110	72.36	72.36
	Category B	42	27.64	100
Total		152	100	

Based on Table no 9, the categorization of participants' implementation (new knowledge and skills) of THE implementation is at good level (27.64%), and very good (72.36%) level.

Evaluation of THE Implementation of Kupang Open University Teacher Training and Education Faculty Students

Measurements of the four evaluation aspects of THE implementation provide the conclusion that THE implementation received a good response from Kupang region students in 2022. A tabulation of measurements of these four aspects is presented in Figure no 2.

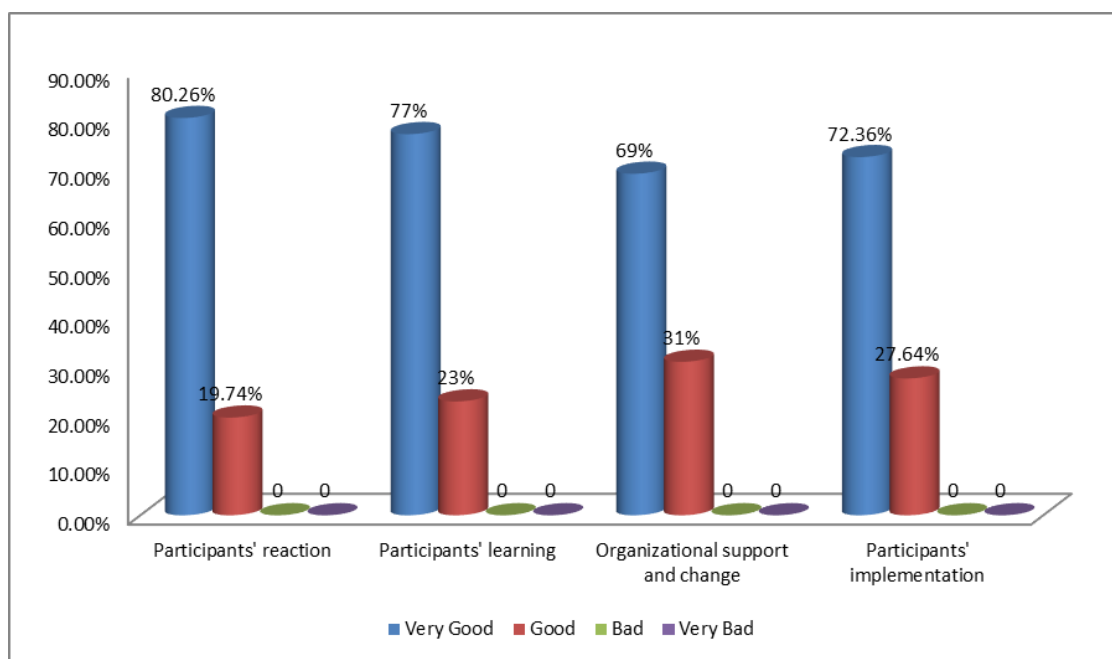


Figure no 3: Student responses to the implementation of THE

91.08% of students who assessed that the implementation of THE went well with a programmed work mechanism, good service support, and provided good benefits for students. THE final exam provides a good evaluation for students regarding measuring aspects of knowledge and skills after studying the main material books, participating in tutorial activities, and mentoring by Kupang region during the semester.

There were 73.39% of students who gave a very good assessment regarding the participant learning aspect, namely assessing the suitability of the teaching materials with the THE final exam questions, the difficulty level of the questions at a medium level and providing positive benefits for students. This positive response was due to the development stage of THE questions being very well designed. The development of THE questions consists of developing a question grid, question items and answer guidelines. Competency achievements and mandatory indicators refer to the modules and learning activities in the main material book for each course. THE question set was then reviewed by experts and improved based on input from experts, meaning that THE question set met the content validity requirements⁸.

The lowest aspect of assessing the suitability of teaching materials with the THE final exam questions is the quality of the teaching materials in supporting students to develop further ideas and critical reasoning skills to answer the THE final exam. Interesting, effective, and efficient learning requires innovative teaching materials. Teaching materials as all materials (tools and texts) are arranged systematically, which displays material from competencies that are controlled by students and used in the learning process with the aim of planning and studying learning implementation⁹. This becomes an evaluation material for improving the quality of teaching materials, especially those that facilitate the improvement of high-level thinking skills. Students assess the quality or level of difficulty of the THE final exam questions at a medium level.

The THE final exam questions have sentences that are easy to understand and can be completed in sufficient time. The lowest aspect of assessing the difficulty of THE final exam questions is that the questions do not require complex solutions. This is relevant to the other two statement items, namely that the THE final exam questions can be solved easily and do not make students have a high cognitive load which has almost the same presentation. This condition shows that the THE final exam questions have a fairly good level of difficulty or have a moderate level of difficulty. Quantitative measurements can be made based on the proportion of students who answered the THE final exam results correctly and the total number of students. Finally, in terms of the THE final exam needs for students, students gave very good assessments regarding the need to evaluate their learning processes and outcomes, as well as develop students' knowledge and skills.

There were 92.27% of students who assessed that Kupang region's support in implementing the THE final exam was very good and the THE application was easy to access, had clear instructions and menus and did not make it difficult for students to download questions and upload final exam answer book. This shows Universitas Terbuka readiness in implementing THE, namely by building systems and human resources in providing services to students.

85.26% of students were able to apply their experience well in implementing the THE final exam. The change from the conventional final exam system to a technology-based final exam does not affect student performance in terms of self-preparation. THE final exam as an online form assessment is currently a major concern for all educational institutions across the world due to the closure of all campuses and the lack of face-to-face teaching, students are now taking their exams and evaluations primarily online¹⁰. There are several advantages of THE final exam including the capacity to offer students immediate, the capacity to access it from various geographical locations at times depending on the student's convenience, and the capacity to take assessment tests multiple times to evaluate and refine their knowledge¹¹. According to¹², students can complete take-home exams from home by using programs like Blackboard Learn and Lockdown Browser. Because these solutions include safeguards against students using third-party software to cheat during assessments, they enable more fair and valid exams.

IV. Conclusion

Based on the research results, it can be concluded that, at the participant reaction stage, 91.08% of students gave an assessment that the implementation of THE final exam went well with programmed work mechanisms, good service support and provided good benefits for students. THE final exam provides a good evaluation for students regarding measuring aspects of knowledge and skills after studying the material during the current semester. At the participant learning stage, 73.39% of students gave a very good assessment regarding the participant learning aspect, namely assessing the suitability of the teaching materials with the UAS questions. THE, the level of difficulty is moderate and provides positive benefits for students, at the support and organizational change stage, there are 92.27% of students who assess that Kupang region's support in implementing the THE final exam is very good and the THE application is easy to access, has clear instructions and menus and does not make it difficult for students to download questions and upload BJT and at the implementation stage of new knowledge and skills, there are 85.26% of students who are able to apply their

experience well in implementing the THE final exam. The change from the conventional final exam system to a technology-based final exam does not affect student performance in terms of self-preparation.

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