THE EFFECTIVENESS OF E-LEARNING IN HIGHER EDUCATION INSTITUTIONS

THESIS

Submitted by

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The Effectiveness Of E-Learning In Higher Education Institutions

adalah benar-benar karya saya, kecuali semua kutipan dan referensi yang disebutkan sumbernya. Apabila terdapat kesalahan dan kekeliruan di dalamnya, maka akan sepenuhnya menjadi tanggung jawab saya. Demikianlah surat pernyataan ini saya buat dengan sesungguhnya.

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Saya yang membuat surat pernyataan,

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ABSTRACT

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Advances in technology have facilitated the learning process. Many undergraduate and graduate students are using various e-learning tools and technologies for academic and non-academic learning purposes. But how effective is e-learning for students? This survey showed the effectiveness of students when using e-learning in higher education institutions. This research uses a quantitative method and questionnaire (online questionnaire) as an instrument of research and was given to 182 students. The questionnaire was returned by 66 students, and there are using various e-learning or platforms. This study aims to find out about the effectiveness of e-learning and to determine the improvement of students when using e-learning in higher education institutions. Based on data, the result of this study is that using e-learning is effective in higher education and gives students positive feedback when using e-learning. When e-learning is effective it can improve useful learning and positively impact students of English Language Education.

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CHAPTER 1

INTRODUCTION

A. Background of Study

The development of Information and Communication Technology (ICT) is currently updated, especially in the Industrial Revolution 4.0 with students obtained from the Millennial generation and generation Z. The development of online learning systems needs special attention. According to the Minister of Research, Technology and the Higher Education Republic of Indonesia, Prof. Mohammad Nassir, who once stated in the National Dialogue "Indonesian Success" about Higher Education, both private and state that can be accessed, connect directly about the development of the industry with online learning. Cause in the future of learning, there is no space limit (without limits).

Nowadays, learning does not be in the classroom without using paper printed instructional material but employing electronic media, which is often called e-learning. Students in this generation are very expert when using technology. Current technological advancements make searching for information in education very easy, and the information provided is more widespread. The rapid development of science requires sophisticated technology to access more comprehensive information. One of the technological developments in education is learning to use electronic media or e-learning.

In early 2020, the world was shocked by the outbreak of new pneumonia in Wuhan, Hubei Province. This outbreak is named coronavirus disease 2019 (COVID-19). Coronavirus disease / COVID-19 is the name given by the World Health Organization (WHO) for patients with Covid-19. As a result of this pandemic, all economies and education have changed. All activities are carried out from home, either work or school. Currently, learning is carried out online from all education levels starting from kindergarten until higher education, which requires that all have cell phones and adequate internet access.

Online learning is new for the community, especially from kindergarten to high school levels, because they always use traditional or face-to-face learning. For the 4.0 generation, online learning is common both inside and outside the classroom, especially for the higher education level. The media used are quite diverse, ranging from web-based learning, computers, and technology, often known as E-Learning or Electronic Learning. E-learning is a type of teaching and learning that allows the delivery of root material to students using internal media or other computer network media.

E-learning provides innovative and fun learning. The sources provided the material vary from a printed books to internet journals that have integrated with e-learning. Students can look for references or new information from the problems sought; ancient learning is usually done by academics, now done using online learning or e-learning. A learning tool to facilitate students applying electronic science such as laptops, computers, and gadgets makes it easier to access the latest

data. Electronic media makes the teaching and learning process more fun and more accessible in applying science.

Lecturers in English Language Education in AR- Raniry Islamic University in Banda Aceh, increase student motivation and interest in learning using E-learning. Students can read the material, provide comments, and answer assignments given by the lecturer. Learning methods using e-learning are not only indoor but can also be outdoors. So, it can make it easier for scholars to access and read material that has been posted on learning, such as online website journals and online magazines.

This time, E-learning has become a progressively standardized approach to learning in academic establishments because of increased internet technology. As we will see, most educational establishments use e-learning to boost students' education and improve their technological skills. E-learning can provide us several positive effects, particularly students, but the technical content is double the decline and necessity. Higher education as a place of guidance for future scientists must create an enormous impact on intellectual methods, abilities, learning abilities, and creativity of students so that they will continue with vital and progressive thinking that changes them to produce solutions to current problems (Ahmed et al., 2018)

According to Sahebat (2019), the internet is making significant changes to almost every aspect of our lives, from the global economy, personal networks, information sources, news, and learning. The Internet has made online learning

possible, and many researchers and educators are using e-learning to improve student learning outcomes, particularly in higher education. The demand for online learning is on the rise at all levels of society during this pandemic.

Technology advancements have facilitated the learning process. Many undergraduate and graduate students use various e-learning tools and technologies for academic and non-academic learning purposes. How effective is e-learning for students, though? If many students fail to understand the effectiveness of learning materials, they may be misled. It is necessary to study carefully how effective e-learning is for college-level students.

B. Research Question

Based on the problems above, the main research question of this study is:

How effective is e-learning in higher education institutions?

C. Research Objective

This research aims to find out about the effectiveness of e-learning in higher education and to find out the improvement of the student effectiveness in e-learning for higher education

D. Research Hypothesis

Quantitative hypotheses square measure predictions the investigator makes regarding the expected relationships among variables, according to Creswell (2013). They are numeric estimates of population values supported by info collected from samples.

 H_1 : There is Effectiveness of using E-Learning in Higher Education Institutions H_0 : There is no Effectiveness of using E-Learning in Higher Education Institutions

E. Significance of the Study

This study would like to explore e-learning in higher education. Besides, for the researcher, this research could enrich the insight information about e-learning, especially in e-learning in higher education. For the lecturers and university, it could be shown to the students there is an effective use of e-learning in higher education and outside the pedagogy context. For the reader, be utilized as a reference for the next researchers related to this research topic.

F. Terminology

1. Effectiveness

Educational effectiveness refers to whether a particular set of resources positively impacts performance. The effectiveness that the writer means in this research is a measure that states the extent to which the quality of e-learning use is achieved. An effect of achieving effectiveness when the e-learning

objective is achieved to the maximum, the expected objectives of students can absorb the learning material and practice of e-learning.

2. E-Learning

E-learning is a learning process that is promoted and supported through information technology and the Internet (Warnajith et al., 2012). According to Popovinci (2015, as cited in Hoerunnisa et al., 2019), E-learning is an Internet application that can connect students and teachers in an online learning room to overcome the limitations of time, space, conditions, and environment.

In this article, e-learning is defined as a technology that individuals can learn by using multiple tools (personal computers, laptops, mobile devices, laptops, tablets, etc.) and type of social media use e-learning. E-Learning can contribute to effective and effective learning objectives for teachers and students. (Hakim et al., 2019a)

3. Higher Education

Higher education contributes to the award of qualifications. Higher education is the optional final step of academic study following secondary education, also known as post-secondary education. Higher education covers education, testing, and relevant work applications. Both post-secondary education, education, and study guidance for educational institutions (such as universities) approved by state and other educational institutions include higher education (Eaton, 2019a).

CHAPTER II

LITERATURE REVIEW

A. E-Learning (Electronic Learning)

Technology is beneficial to contribute to the teaching and learning process, especially in college students' lives. The application of technology allows lecturers to design/present their class of study, provide a lot of additional information, and improve student learning quality. Also, the use of technology in class saves time, so that it gives lecturers more time to dedicate lecture material (Aljawarneh, 2020a). Lecturers and students at the University could use the internet for a variety of purposes, such as accessing learning tools and communicating virtually outside class hours (Zainuddin, 2015). Technology like the internet is certainly capable of getting learners together outside the school for discussions or learning.

Education uses advanced technology such as E-Learning, which consists of the internet and electronic media as learning media and communication tools. Within the time of globalization, the advance of innovation and data is progressively creating. Symbol "e" technology, known by electronic abbreviation, is used in e-learning, e-business, and e-government (Agarwal & Pandey, 2013a). In the era of technology, the world is filled with sophisticated technology. It can make education more advanced with electronics or technology

and make Indonesian children smarter because they gain broader insights from various worlds.

At present, e-learning focuses on education and learning. Currently, learning media use electronic media such as e-learning, which uses the internet as a tool to run e-learning (Agarwal & Pandey, 2013b). Using e-learning can reduce costs, time and create learning media that is more fun and easier to use (Zare et al., 2016a). Replacing old-fashioned learning with being more modern, which does not require physical presence (face-to-face), printed books, and does not have to be done indoors and can be done outdoors (Gholamhosseini, 2008).

E-learning helps teach and learn techniques to reduce time and boundaries in the education context (Chang et al. I., 2017a). The application of e-learning makes learning more accessible when students are not present in class; they can access the teacher's e-learning site. Besides, e-learning also permits students and teachers to seek extensive information from various sources without limiting it (Elkaseh et al.,2016a). Hence, e-learning is wont to facilitate cooperative and interactive learning surroundings (Fischer & Mandl, 2005a).

Jonnavithula and Tretiakov (2012), social media is also employed by the teacher as an e-learning web site. To keep with Greenhow et al. (2009), social media is accustomed to support communication and share information between users. Practice social media to help the teaching and learning method positively impact students' learning outcomes (Jackson, 2011). Friesen and Anderson (2004)

as cited in Husna, 2018) Social media can encourage students to improve the material and understanding of students.

1. Type of Social Media for E-Learning

Numerous sorts of social media can be utilized to back instructing and learning forms and exercises such as WhatsApp (Gachago et al., 2015), Edmodo (Kandappan. et al., 2014)., Canvas (Carroll et al., 2016), and Google Classroom (Bondarenko et al., 2018).

a. WhatsApp

According Mobile instant messaging tools (such as WhatsApp) are integrated into formal and informal teaching spaces due to their accessibility and affordability, especially in development/resource-scarce environments (Gachago et al., 2015). WhatsApp is an application for sending Multimedia messages such as audio, video, photos, and simple texts. WhatsApp is like a chat program for mobile phones. Smartphones are becoming more and more popular, and WhatsApp can be used on almost all smartphones

The Internet facility is used to access information directly and conveniently and open WhatsApp and other applications requiring the internet. Communicate in groups very simply to invite, only make a WhatsApp group, and invite students or people into the WhatsApp group. The group can then share documents such as audio images and music that can only be seen by members of the WhatsApp group.

b. Edmodo

This platform is a free application and has quite tight security. It's easy to use for teachers to make online classes, and it's easy for students to join these classes that are already connected with teachers and classmates in online courses (Balasubramanian et al., 2014). The teacher records everything done by students, using it to manage the relationship between students and teachers in the online class.

c. Canvas

Canvas is a software system that has categories for creating web studies for courses also provide readings, video tutorials, discussion boards, assignments, and tests. Learning through canvas, students can repeat the learning that has been over and provide a pleasant experience during the learning process. (Farkas, 2012). Carroll et. (2016a) explain that the use of canvas is conveyed effectively to students to gain knowledge and material content that is easy to understand and remember. Lecturers, as instructors, can also monitor student engagement and performance by using Canvas. The lecturer must produce the Canvas module and directly import the content into the student's course. Each course session is made to meet students' needs (Carroll et al.,2016b).

d. Google Classroom

Google Classroom is an interactive educational tool that can create a content-rich educational environment that integrates Google Docs text editor, Google Drive cloud storage, Gmail, and other applications (Bondarenko et al., 2018a). This application is beneficial for teachers in making an effective classroom both inside the classroom and outside the classroom (groups, individuals, etc.) through giving assignments to each student and certain groups by writing content and commenting on the status of student assignments; designing individual tasks into thematic modules; announcements of lessons, questions, data digest, etc. (Bondarenko et al.,2018b).

2. Benefits of E-Learning

E-learning is new learning that has not become a large-scale learning method for teachers than traditional education teachers commonly used for teaching. E-learning has advantages such as (Agarwal & Pandey, 2013c)

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a. Low Cost

E-learning is much cheaper than old techniques of educating, much appreciated to no use of paper and pencil, and the diminished cost of educator coaching. It is regularly disseminated anyplace and at any time. It conjointly saves plenty of your time, and currently, the varied parameters won't be restricted to the dimensions of the category and range of scholars.

b. Flexible

E-learning is often distributed anyplace while not strict time foundations. It ends up in an additional versatile setting for college students.

c. Personalization

In traditional teaching practices in e-learning, the coaching material isn't chosen by the teacher or some organization and may facilitate students' demand for data.

There square measure many edges of deploying technology and learning materials within the university schoolroom (Aljawarneh et al. 2010b) Varied ways that of teaching

- More active learning
- Improved student focus and grasping
- Visual stimulation
- Less time for lecturers

E-Leaning can also be a challenge for those who are not interested in technology. However, it is something that can be used over time. Overall, it can be concluded that e-learning outweighs its disadvantages and proves to be more effective learning for future generations.

3. Weaknesses of E-Learning

These are some major drawbacks to E-Learning, and these problems often get pushed aside in online discussions. These are the disadvantages of E-learning. (Aljawarneh et al. 2010c):

- Lack of interaction between teachers and students or indeed between understudies themselves.
- The tendency to disregard the scholarly angles or social viewpoints and lousy habit versa empower the development of business aspects.
- The learning and teaching process tends towards non-educational training, emphasizing knowledge or psychomotor aspects and affective aspects.
- Students who don't have tall learning inspiration tend to fail.
- Not all internet offices are accessible (possibly this is often related to the accessibility of power, phone, or computer).
- Limited availability of software (software), which costs are still relatively expensive.

However, there are four drawbacks of utilizing technology once teaching courses (Aljawarneh et al. 2010d):

A R - A R A M I II Y

- Malfunctioning of apparatus
- Anxiety for lecturers
- Need for backup plans and directives
- Time spent on learning new technologies similarly as competencies.

Though several disadvantages exist, most of the problems associated with implementing technology and learning materials are addressed by the previous testing of the instrumentation and learning regarding each technology's use. Several learning materials area units on the market to lecturers: (i) Video and knowledge projectors, (ii) Overhead projectors, (iii) internet (iv) artifact, and (v) Course management programs (Aljawarneh et al. 2010e).

B. The Implementation of E-Learning

In the application of e-learning, several component processes must be done, 1) content that is relevant to the purpose of learning; 2) use learning methods, such as examples and practices to help learn; 3) use media inputs such as sentences and images to distribute content and learning methods; 4) learning can be done directly with the instructor (synchronous) or individual learning (asynchronous); and 5) build new insights and techniques connected with the purpose of learning (Song, 2010).

Khan (2005a) describes several components that must be known if an institution wants to implement e-learning, namely (1) learning design; (2) multimedia components; (3) internet equipment; (4) computer and storage tools; (5) connecting and service providers; (6) power/management programs, planning software sources, and standards; and (7) connection services and applications. Learning design has become a necessity for various circles. Not only students of faculty of education, but also from educators and observers of education in Indonesia. Learning design is a science that talks about the learning system,

namely subs, parts, elements, and components related to the implementation of quality and meaningful learning process and realize the objectives of national education. With online learning as an e-learning type, students can generally access online courses at any time, and anywhere they have access to the internet.

Richey (2004) explains that learning strategies themselves have many definitions in five learning technology areas consisting of areas of design, development, utilization, management, and assessment. Learning strategies are included in the design area along with learning system design, message design, and learner characteristics. The learning strategy itself is a specification for selecting and sorting learning events or learning activities in a lesson (Govindasamy, 2001a). The learning model and learning strategies needed to apply it vary depending on the learning situation and the nature of the material, and the type of learning desired. Learning strategies include the design, methods, and tools of activities planned to achieve specific teaching objectives (Govindasamy, 2001b).

The learning strategies used in e-learning are blended strategies. Blended learning is a learning process that utilizes a variety of approaches. The approach can take advantage of a wide range of media and technology. With blended learning, the learning process can combine various sources physically and virtually. Blended learning should be seen as a pedagogical approach that applies various learning between face to face compared to online. Strategy learning used in the application of e-learning according to Khan (2005b) consists of (1)

presentations; (2) exhibitions; (3) demonstrations; (4) exercise; (5) tutorials; (6) storytelling; (7) games; (8) simulation; (9) role-playing; and (10) discussions.

According to Khan (2005c), blended learning strategies that can be applied in educational institutions and non-educational institutions include (1) a combination of offline and online learning, which combines traditional learning with online learning. Online is defined as learning through internal or internal networks. Face-to-face lectures continue as usual. Students learn lecture materials and post and save assignments on the blog. Announcements and assignments are communicated to students privately or publicly via email. Group presentations and face-to-face discussions will continue as normal; (2) Combining self-learning with real-time learning and collaborative learning, this model may be suitable for training, where trainees can continue to learn without leaving work.

To use mixed learning strategy models, educators must be creative and integrate various methods and existing media to optimize the effectiveness, efficiency, and appeal of learning. There is no better way, method, or means to communicate with each other, and it is best to meet the needs of existing conditions. Concocting or combining professional knowledge from different things is key to distinguishing a good or accomplished lecturer /educator /tutor /lecturer from a bad or accomplished teacher.

C. Effectiveness

Educational effectiveness refers to whether a particular set of resources positively impacts performance, and if so, how much of that impact. Effective is not necessarily the most efficient since effectiveness cannot directly compare resource use or cost. Systematic studies have found that part of the reason is that many traditional school resources in developed countries do not improve student output (Lockheed & Hanushek, 1990a). In this context, many people have concluded that if we find any measures that seem to be effective, we should formulate policies to pursue them. However, it did not consider the cost of providing input it will not follow.

Internal effectiveness. When measured the output in terms of pure educational value (such as test scores), policy review is usually limited to alternative uses of resources within the education sector (Lockheed & Hanushek, 1990). Academic inputs include material and non-material resources. Used the latter term to cover teaching practice, the organizational structure of schools and school systems, and teacher time and ability.

Material input includes items such as textbooks, teaching materials, desks, and classrooms. Therefore, the term input in this discussion is not limited to information that can be expressed in physical quantity or currency. Looked and Hanushek (1990c) informs us that, in fact, we mostly take the complex interactions between students and teachers as input elements, and even their internal effectiveness is closely related to what economists call "technical

efficiency." It is technically effective to organize available resources to produce the maximum viable output (Lockheed & Hanushek, 1990d). Equivalent to the "maximum internal effectiveness" of a set of inputs.

Effective, which means it has been good or something that has been achieved has worked out well. Effectiveness is generally described by the scientific dictionary as the consistency of usage, effectiveness, or objectives of help. H. Opinion by Emerson quoted by Soewarno Handayaningrat S. (1994), which notes that "Effectiveness is a measurement in the sense of achieving predetermined goals." From some opinions about effectiveness, it can be concluded that effectiveness is a measure that sets out how far the targets (quantity, quality and time) have been achieved.

According to Mahmudi's opinion, effectiveness is defined: "Effectiveness is the relationship between output and objectives, the greater output towards the goal more effective when the use of e-learning in the learning process" (Mahmudi, 2005). Effectiveness focuses on outcomes (results), activities that are considered to be effective if the resulting output can meet the expected outcomes, and effectiveness can also be concluded that the effectiveness of the program is intended to achieve the desired objectives (Mayer, 2009).

The effectiveness of the use of educational media can be interpreted as the success of the learning media process and the success of students in completing each task. Effectiveness is defined as the extent to which the use of media achieves its objectives.

The essential requirement for measuring effectiveness and evaluating potential policies is to determine a set of inputs that have a homogenous relationship with student performance (Lockheed & Hanushek, 1990). Doing so may involve prying into the complex among teachers, the various process choices they propose in the classroom, the school environment, and the macro process choices. The more complex this is, the less likely it is to conduct any successful research and the less likely it is to formulate an apparent policy.

D. Higher Education

Higher education is that leads to the awarding of degrees. Higher education, also called post-secondary education, higher education, or higher education, is the optional final stage of formal studies after completing secondary education. Higher education includes teaching, research, practical applied work (such as in medical schools and dental schools), and social service activities at universities. This has an undergraduate level and postgraduate level (or postgraduate level) in the field of teaching. Higher education consists of all post-secondary education, training, and research guidance of educational institutions (such as universities) authorized by state institutions and other educational institutions (Eaton, 2019b).

Educational institutions must be able to develop skills that students should master to be able to expand their knowledge and experience to be applied in their lives (Habiburrahim, 2018). It includes all activities that a given country considers to be higher education-not only activities carried out in regular universities and

graduate schools, but also short-term education and training courses (polytechnics, colleges, and various forms of professional technical schools) courses. According to Eaton (2019c), the length is 2-3 years, and it even includes correspondence courses using information technology aimed at the majority of the students.

The government built the university, Gajah Mada University in Jogjakarta, which was built on December 19, 1949, to increase education in Indonesia (Muluk, 2016a). It is the oldest public university in Indonesia. The number of educational institutions has risen from year to year. With high economic growth, the demand for skilled workers has become increasingly important, particularly in the science and technology field (Muluk, 201b). The high number of high school graduates has resulted in a significant increase in the number of tertiary institutions in Indonesia. (Muluk, 2016c).

Higher education institutions-the most important universities-have a total of three functions. In addition to education, this research has also contributed to society. Eaton (2019d) stated research and education functions are two aspects of the coin. Research makes higher-level education possible, and education, in turn, develops human resources for research. Recently, the social demand for higher education institutions is increasing. Higher education institutions need to carry out activities to ensure that the accumulated knowledge is directly recycled into society and does not become an "ivory tower" (Eaton, 2019d).

E. Previous Study

There are several previous studies on the effectiveness of e-learning were conducted by some experts. The first study is entitled "The Impact of E-Learning on University Students' Academic Achievement and Creativity." It was written by (Zare et al., 2016) from Payamnoor University of Zanjan, Iran, in 2016. This study investigates the impact of e-learning on creativity and content knowledge of chemistry students at the Payame Noor University of Hamedan, Iran. Data analysis results using the independent t-test (aided by SPSS) demonstrated statistically significantly higher scores for the experimental group on measured variables, knowledge, and creativity. Therefore, it is concluded that e-learning is effective for knowledge and creativity acquisitions among chemistry students and should provide more significant e-learning opportunities for wider audiences.

The next study was investigated by Valentina Arkorful and Nelly Abaidoo in Ghana, January 2015. The research title is "The role of e-learning, advantages, and disadvantages of its adoption in higher education." This study investigates the effectiveness of using e-learning in teaching in tertiary institutions. In higher education institutions, utilizing modern information and communication technologies for teaching and learning is crucial. This study reviews literature and gives a scholarly background to the study by checking some contributions made by various researchers and institutions on the concept of e-learning, particularly its usage in teaching and learning in higher educational institutions.

Tuan Nguyen (2015) studied "The Effectiveness of Online Learning: Beyond No Significant Difference and Future Horizons." This study examines the evidence of the effectiveness of online learning by organizing and summarizing the findings and challenges of online learning into positive, negative, mixed, and null findings. The result of this study is there is strong evidence to suggest that online learning is at least as effective as the traditional format, but the evidence is, by no means, conclusive. Online learning is a story that is still being written, and how it progresses will likely depend on those present.

Robin Castro (2019) analyzed Blended learning in higher education. This paper aims to identify some of the most promising trends in blended learning implementations in higher education, the capabilities provided by the technology (e.g., datafication), and the contexts of use of these capabilities. The result showed the relationship between technology, pedagogy, organization, and society in general in a multi-level perspective analysis.

The last, Dr. Issa Shehabat & Dr. Saad A. Mahdi, studied "E-Learning and its Impact on the Educational System in the Arab World." This paper addresses elearning in the university environment and focuses on the Jordanian universities' experience developing e-learning courses. The main research question of this handles How does integration occur between Knowledge Management and e-Learning? The finding shows elements / important aspects in the development of e-learning use that take into account the knowledge of teachers. E-learning has great benefits in education for all parties, both teachers and students.

These findings from all previous studies above showing that using e-learning has a positive impact on their learning. The similarity of my research with previous research is that both use learning media such as e-learning in previous studies and the resulting impact in using electronic media in learning activities, implementation on higher education, and using surveys to find out the results. The difference between my study and previous studies lies in research objectives and research concepts, in my research objective is to find out about the effectiveness of e-learning in higher education.



CHAPTER III

RESEARCH METHODOLOGY.

A. Research Design

This research used a quantitative approach because observational symptoms are converted into numbers to use statistical techniques to analyze the results. This research used basic logic, i.e., if x, then y. In research, there is no direct manipulation of the independent variable (Sugiyono, 2010a). Quantitative data is data in the form of numbers or that is framed (scoring). Data collection was carried out in this study using a questionnaire method. The questionnaire method, used as a data collection tool, which previously would be tested for validity and reliability. The Effectiveness variable is given the symbol X, and the E-Learning variable is assigned the symbol Y.

The most commonly used method and thought of survey analysis are that the most applicable methodology to check the hypothesis. There are many varieties of surveys; oral survey, written survey, and web survey. This study focuses on a written survey. The written survey is classified as a form mail survey or drop-off survey. a web survey employed during this study. This study uses one independent variable, effectiveness, and one variable quantity, e-learning

B. Population and Sample

1. Population

The population is overall of the research subject. The population could be a generalization space that consists of objects or subjects with specific qualities and characteristics determined by researchers to be studied then drawn conclusions (Sugiyono, 2010b). The population of this study is 182 of all of the student students of the Department of English Language Education who are enrolled from the class of 2016.

2. Sample

According to Sugiyono (2010c), the sample is part of the number and characteristics of the population. The conclusion of the sampling of the data will be generalized to the population as needed.

According to Arikunto (2010), if the subject is large, it may be taken between 10-15% or 20-25 %or more depending on the size of the subject at least:

- The capacity of researchers can be seen from time, effort, and funding.
- The narrowness or breadth of the observation area of each subject, as it concerns at least a large number of data.
- The small amount of risk that researchers bear. For research that is at great risk, the results will, of course, be better if the sample is large.

So, in this study, the sample taken was 36.2%, with a total of 66 samples from 182 populations. The sample of this study is learners who have done use elearning in class; 66 students of PBI already use e-learning in the class. Sampling

techniques using *purposive sampling*. Purposive sampling techniques by determining certain criteria (Sugiono, 2008).

C. Research Instrument

The research tool used for this study is a questionnaire. The type of questionnaire used is an online questionnaire. Online questionnaires are more effective and easier to collect data from the respondents. The questionnaire used is a closed-ended questionnaire by using the Likert scale. The scale type used in the questionnaire is a five-point scale; 1) strongly disagree; 2) disagree; 3) neutral 4) agree; 5) strongly agree. As for the reliability of the instrument, the items related to the proposed constructs were all adopted from the relevant research with minor adjustments. This questionnaire is items of the questionnaire adapted from the scale of Effectiveness of E-Learning in Higher Education (adapted from Trakru & Monica, 2014). The question items consist of 24 questions; 13 related effectiveness and 11 questions related to e-learning. The indicator scoring on Likert scale questionnaire items are as follows:

Table 3. 1
Indicator Score of Agreement Scale

| No | Alternative Answer | Score |
|----|--------------------|-------|
| 1 | Strongly Agree | 5 |
| 2 | Agree | 4 |
| 3 | Neutral | 3 |
| 4 | Disagree | 2 |
| 5 | Strongly Disagree | 1 |

D. Data Collection Method

The online questionnaire is created on Google Forms. To collect the data from participants, the link address of the online questionnaire is distributed to the respondents via social media, WhatsApp. The respondents' responses are examined to answer the research question. The result is analyzed by using Statistical Package for Social Science (SPSS V.25).

E. Data Analysis

1. Descriptive Statistic of Respondent Characteristics

Perform descriptive statistics on interviewee characteristics to display and summarize information about interviewee characteristics (Sugiyono, 2012). This study summarizes the data percentage and data frequency. Data summary is measured using SPSS V.25

2. Descriptive Statistic of Type E-Learning

Descriptive Statistics of type e-learning use is conducted to show and summarize the information of type e-learning use in higher education. This summarizes the data and data frequency. The summary of data is measured by using SPPS V.25

3. Descriptive Statistic

Descriptive statistics are short descriptive coefficients used to summarize a given data set and represent the sample of a population. Descriptive statistics are divided into central trend measures and variability measures (Kenton, 2020). This

study provides information about the mean and standard deviation of the data.

Information about data distribution is measured using SPSS V.25

4. Instrument Validity and Reliability

- Validity test Validity test is useful to know the validity or suitability used
 by researchers in measuring and obtaining research data from respondents.

 Questionnaires are estimated validity if proven validity and reliability.

 The validity test used in this research conduct statistically using the *Pearson*product-moment coefficient of correlation test between each questionnaire
 item score with a total score of answers responding on SPSS 25 version.
- 2. Reliability tests were carried out after the questionnaire item was declared valid. The reliability test aims to see if the questionnaire has consistency if the measurement is done with a repeat questionnaire.

Therefore, the device is as reliable as a test. To measure the reliability of the questionnaire, this study uses the Cronbach Alpha test. Malhotra (2011), based on the coefficient of Cronbach alpha (α), the reliability score is considered reliable;> 0.60. If the reliability level is greater than the Cronbach alpha coefficient (α), the result indicates that the questionnaire has high accuracy and consistency

F. Hypothesis Testing

1. Simple Linear Regression

Simple linear regression analysis is used to test the effect of one free variable on bound variables. Decision making in a simple linear regression test

can refer to two things, namely: if the significance value is <0.05, it means that variable X affects variable Y, and if the signification value is >0.05, it means that variable X does not affect variable Y.

The Simple Linear Regression Equation Model is as follows:

Y = a + bX

Definition:

Y: Dependent Variable (Effectiveness)

a: Constant

X: Independent Variable (E-Learning)

b: Coefficient of Determination

To perform a simple linear regression on the research data, this study uses SPSS V. 25 to analyze the data and get the regression results. We can see results seen in the coefficient regression table from the output file in SPPS version 25

CHAPTER IV

RESEARCH FINDING AND DISCUSSION

A. Findings

The researcher created a questionnaire using the Google Form to collect data from the Department of English Language Education students at Ar-Raniry State Islamic University enrolled in academic years 2016/2017. The researcher applied all the steps that have been explained in chapter III. Then, it has been explained previously in collecting data. The questionnaire consists of a four-part question; question-related to respondent characteristics, type of e-learning use, effectiveness, and e-learning.

1. Respondents Characteristic.

Descriptive Statistic of Respondent conducted to show and summarize the information based on gender and age of the respondents.

Table 4.1

Respondents' Characteristics

| Variable | Category | Frequency | Percentage |
|----------|----------|-----------|------------|
| Gender | Female | 57 | 85,1 % |
| | Male | 9 | 14,9% |
| Age | 21 | 15 | 23,1% |
| | 22 | 44 | 67,7% |
| | 23 | 5 | 7,7% |
| | 25 | 1 | 1,4% |

Table 4.1 shows that more female students were participating as research participants compared to male students; 57 female students were participating in this study. It was equal to 85,1% of the total respondents. There were only nine male students, or it was equal to 14, 9% of the total respondents. The respondents had different age ranges, 21 to 25 years old. Dominantly, the ages of students participating in this study were the age of 22 years. It consisted of 44 students or was equal to 67,7% of the total respondents. On the other hand, there were fewer respondents at the age of 25 years old. It was equal to 1,4% of the total respondents. The total number of respondents of this study were 66 students enrolled in 2016 in English Language Education.

2. Type E-Learning Use

Descriptive Statistics of type e-learning was conducted to show and summarize the information of type e-learning used in higher education. This data summarizes with frequency and percentage. The summary of data was measured by using SPPS V.25

Table 4.2

Type E-Learning

| Frequency | Percentage |
|-----------|---------------------------|
| 39 | 27% |
| 5 | 3% |
| 40 | 28 % |
| 21 | 14% |
| 28 | 26% |
| 2 | 1% |
| | 39 5 40 21 28 |

Based on Table 4.2, the researcher found different e-learning applications in higher education. The majority of the respondents used WhatsApp in the classroom. It was 28% of the total respondents. The number of students using the Google Classroom application was almost as many as students using the WhatsApp application. On the other hand, the application used by fewer students were Edmodo and Google Meet. Only 3% of the students used Edmodo, and 1% of them used Google Meet. Based on the results of the data obtained, the elearning applications that the mostly and frequently used in the classroom, especially in English Language Education, were WhatsApp and Google Classroom applications.

3. E-Learning

Table 4.3 listed the respondents' responses to e-learning in general. Table 4.3 showed the responses of the students in the scales of SD (strongly disagree), D (disagree), A (agree), and SA (strongly agree). It also showed the average value of each question.

Table 4.3
E-Learning

| No | Question | | | | | | |
|----|---|----|----|----|----|----|------|
| | E-Learning | SD | D | N | A | SA | Mean |
| 1 | I think e-learning is interesting | 2 | 3 | 21 | 34 | 6 | 3,59 |
| 2 | I think e-learning is fun | 0 | 4 | 33 | 21 | 8 | 3,50 |
| 3 | E-learning makes it easy to access other users' knowledge | 0 | 7 | 9 | 40 | 10 | 3,80 |
| 4 | I can save money by taking online courses. | 0 | 7 | 12 | 40 | 7 | 3,71 |
| 5 | I can save time by taking an online class | 1 | 2 | 14 | 33 | 16 | 3,92 |
| 6 | Using online courses fits well with my lifestyle. | 1 | 11 | 29 | 16 | 9 | 3.32 |

| 7 | I would feel confident that I can use e-learning | 2 | 15 | 30 | 14 | 5 | 3.08 |
|----|--|---|----|----|----|----|------|
| 8 | I can skillfully use e-learning | 1 | 9 | 28 | 23 | 5 | 3.33 |
| 9 | e-Learning can help students to learn at home with no need to travel. | 0 | 1 | 5 | 41 | 19 | 4,18 |
| 10 | e-Learning provides contemporary material that is relevant to the times | 1 | 1 | 11 | 40 | 13 | 3.95 |
| 11 | e-Learning is a more interesting alternative to traditional classroom learning | 3 | 11 | 21 | 24 | 25 | 3,24 |
| | Average | | | | | | 3,70 |

Table 4.3 showed the students' responses stating that they had experienced using e-learning. The average value was 3.70. Most of the respondents' agreed to that question. These responses were related to the positive experience after learning in e-learning. It shows that most of the respondents had positive responses to e-learning activities. The highest average value in SD (totally disagree) and D (disagree) scales was in question 11, "I would feel confident that I can use e-learning." The results showed that out of 67 respondents, 17 of them felt unconfident when using e-learning. The lowest average value was 3,24. It was 28.8% of the total value.

On the other hand, the highest average of 11 question items using e-learning was "e-learning can help students' studying at home without traveling." The highest standard was 4,18. It showed that using e-learning can help students more easily access e-learning anytime and anywhere. In general, the respondents viewed that e-learning was useful in their learning processes, especially in higher education institutions.

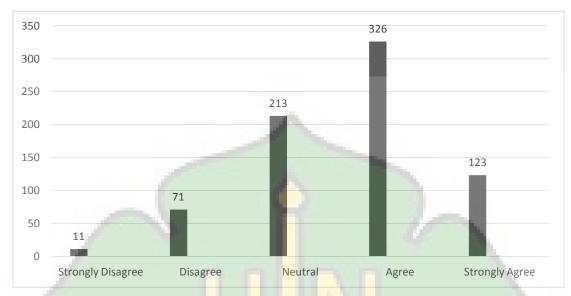


Figure 4. 1 Total Respondents' Responses of E-Learning

The bar graph provides the overall response information of the respondents to the student experience after learning online learning. the scales of "strongly disagree" (SD), "disagree" (D), "neutral" (N), "agree" (A), and "strongly agree" (SA). The overall responses to the student's experience were 794 responses. Three hundred twenty-six responses consist of information showing the students' agreement (44% of the total responses). The total responses for "strongly agree" were 123 responses. It was about a quarter of the total number of responses disagreeing with the statements in the questionnaire. The total number of responses in strongly disagree was 11. It was about a quarter of the responses on the disagree scale. Overall, the respondents' reactions to the experience of using elearning were mostly positive by agreeing to the statement. It showed that using elearning provided positive feedback in the students' learning activities.

4. Effectiveness of E-Learning

The number of instruments item of the effectiveness of e-learning is 13 questions. This form provided the response information in the scales of SD (strongly disagree), D (disagree), N (neutral), A (agree), and SA (strongly agree). Besides, it also displayed the average value of each question item

Table 4.4

Effectiveness of E-Learning

| No | Question | | H | | | | |
|----|--|----|----|----|----|----|------|
| | Effectiveness | SD | D | N | A | SA | Mean |
| 1 | I find the e-learning easy to learn | 1 | 8 | 26 | 25 | 5 | 3,41 |
| 2 | | | 1 | 9 | 45 | 10 | 3,94 |
| 3 | The design is appropriate for the type of online learning sit | 0 | 5 | 23 | 33 | 5 | 3.58 |
| 4 | E-Learning creates a positive experience for me. | 0 | 6 | 25 | 30 | 5 | 3,52 |
| 5 | The feedback given is useful. | 0 | 1 | 9 | 38 | 18 | 4,11 |
| 6 | Using E-Learning service can improve my learning performance | 4 | 5 | 36 | 15 | 6 | 3.21 |
| 7 | 7 Using E-Learning service can increase my learning effectiveness | | 8 | 30 | 23 | 3 | 3.26 |
| 8 | I find the e-learning service to be useful to me. | 0 | 2 | 20 | 34 | 8 | 3,70 |
| 9 | The objectives and span of e-Learning lessons are clearly defined | 5 | 33 | 21 | 4 | 3 | 2,50 |
| 10 | I am generally satisfied with the quality of the e-learning in education course. | 1 | 7 | 37 | 17 | 4 | 3,24 |
| 11 | I feel I am getting my money's worth from the e-learning program | 0 | 3 | 18 | 39 | 6 | 3,73 |
| 12 | Overall, I am satisfied with using e-learning. | 0 | 5 | 30 | 28 | 3 | 3,44 |
| 13 | E-Learning provides a satisfactory learning experience | 1 | 5 | 28 | 28 | 4 | 3,44 |
| | Average | | | | | | 3,50 |

Table 4.4 showed that the average student's response to the effectiveness of e-learning was 3,50. Most of the respondents' answers are in A (Agree). It showed that the majority of the respondents agreed that the use of e-learning in

higher education was effective. The students' responses in SD (strongly disagree) were 2% of the total responses. The 13 validity questions, "the feedback is given is useful," was the highest on the average (4,11), indicating that e-learning can provide useful feedback to higher learning institution students.

On the other hand, the lowest average value of the 13-question items for validity was "The objectives and span of e-Learning lessons are clearly defined." The lowest average is 2,50. It indicated that the use of e-learning materials was not explicitly provided by the teacher. Figure 4.2 briefly illustrated the overall responses to effectiveness.

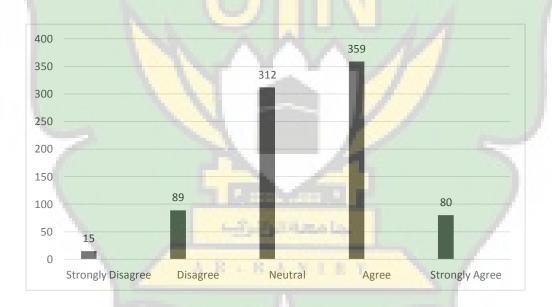


Figure 4. 2 Total Respondents' Respone of Effectiveness of E-Learning

The bar graph provides information on e-learning of the overall respondents in the form of "strongly disagree" (SD), "disagree" (D), "agree" (A), and "strongly agree" (SA). Overall, the responses of the respondents about e-

learning were 855 responses. The largest total number of responses was 359 responses (42% of the total responses). The total number of strongly agreed responses was about a quarter of the total number of the respondents, 80 responses. A neutral response was almost the same as "agree," 312 responses. Therefore, the lowest number of responses was in "strongly disagree." It was only 2% of the total response. In general, most of the students agreed that it was effective to apply e-learning in higher education institutions. It showed that e-learning in the classroom was effective and interactive, especially in higher education institutions.

p5. Instrument Validity and Reliability Test

The researchers used the SPSS 25 version of Pearson product-moment correlation test to test the validity of the questionnaire. Validity test performed by comparing the value of r-test and r-table (r-product-moment), if r-test > r-table for each questionnaire was valid and r-tet < r-table for each item of the questionnaire was invalid. In addition, the researchers also used the Cronbach Alpha test to test the reliability. According Sujerweni (2014). Questionnaire was reliable if the value of Cronbach alpha >0,60.

a) Instrument Validity Test

Table 4.5 describes the Pearson product-moment correlation test on SPSS 25 for each question. The table contains details about each question item's correlation coefficient. The essential value (5 percent) of N=67 is also seen and the result of the validity test.

Table 4.3

The Result of Validity Test

| No | Question | Variables | Coefficient of Correlation | Critical Value 5% (N=67) | |
|----|----------|-----------|-------------------------------|--------------------------|-------|
| 1 | X1 | | 0,592 | - | Valid |
| 2 | X2 | | 0,628 | | Valid |
| 3 | X3 | | 0,689 | | Valid |
| 4 | X4 | | 0,645 | | Valid |
| 5 | X5 | | 0,625 | | Valid |
| 6 | X6 | | 0,754 | | Valid |
| 7 | X7 | X | 0,774 | 0,244 | Valid |
| 8 | X8 | | 0,366 | | Valid |
| 9 | X9 | | 0,598 | | Valid |
| 10 | X10 | | 0,462 | | Valid |
| 11 | X11 | | 0,732 | | Valid |
| 12 | X12 | | 0,794 | | Valid |
| 13 | X13 | | 0,744 | | Valid |
| 1 | Y1 | 1000 | 0,689 | | Valid |
| 2 | Y2 | | 0,647 | | Valid |
| 3 | Y3 | | 0,554 | | Valid |
| 4 | Y4 | | 0,605 | | Valid |
| 5 | Y5 | Y | 0,481 | 0,244 | Valid |
| 6 | Y6 | | 0,562 | | Valid |
| 7 | Y7 | | 0,818 | | Valid |
| 8 | Y8 | | 0,565 | | Valid |
| 9 | Y9 | | 0,59 | | Valid |
| 10 | Y10 | | 0,466 | | Valid |
| 11 | Y11 | | 0,485 | | Valid |

In this research, the level of significance of the critical value is 5 % (sig α =0.05). This study's degree of freedom was (df = N - 2), where the total number of respondents was N; Df = N-2, (Df = 66-2; Df = 65). Therefore, the critical value of the r table's Pearson product time is 5% (N = 65). The r table = 0.244 in this analysis. The r-test correlation coefficient of each question item in each component exceeds the critical value (r-table) based on the table above; correlation coefficient > critical value (r-table) moment of the product (0.244). All the questionnaire items used in this study were therefore valid.

b) Instrument Reliability Test

The reliability of the study questionnaire is defined in this section. The Cronbach Alpha Test on the SPSS 25 has been performed for each question as defined by Table 4.6. The table shows the coefficient value of Cronbach Alpha. The results are also given for the reliability test

Table 4.4

The Result of Reliability Test

| No | Variab <mark>le</mark> | Total Items | Cronbach's Alpha | _ | Criteria |
|----|------------------------|----------------|---------------------|------|----------|
| | | | Coefficient | α | |
| 1 | Effectiveness | 13 | 0,891 | 0,60 | Reliable |
| 2 | E-Learning | 11 | 0,805 | 0,60 | Reliable |

The reliability test results of the questionnaire survey were shown in table 4.6. The Cronbach Alpha coefficient was 0.891 and 0.805 for each variable. The Cronbach alpha coefficient of two variables had higher

values than α (0.60); Cronbach alpha coefficient > α . All questionnaire items in the study are reliable.

6. Classical Assumption Testing

The model used in this analysis satisfies the regression model's classical assumptions. The normality test is the classical hypothesis test conducted in this analysis. Non-parametric statistical analysis of normality with Kolmogorov-Smirnov (K-S) is the purpose to determine whether or not the residual value is usually distributed.

a) Normality Test

The normality test aims to determine the distribution of research data distribution is normal or not so that the method can be further used statistic whether using parametric statistics or nonparametric. The normality test in this study used the formula Kolmogorov-Smirnov nonparametric statistical test (K-S). Ghozali (2014) stated that if the value of asymptotic is significance 2-tailed>0,05, the data is distributed normally, and significance 2-tailed<0,05 is not normally distributed.

Table 4.5

| | | Unstandardized Residual |
|---------------------------------|---------------|-------------------------|
| N | | 66 |
| Normal Parameters,b | Mean | .0000000 |
| | Std.Deviation | 4.27427675 |
| Most Extreme Differences | Absolute | .083 |
| | Positive | .048 |
| | Negative | -083 |
| Test Statistic | - | .083 |
| Asymp. Sig. (2-tailed) | | .200 |

One-Sample Kolmogorov-Smirnov

Table 4.7 show that the normality test result of significant assumptions (2-tailed) = 0.200. Significant assumption value =0.05 because the calculated significant assumption value is greater than the table's significant assumption of 0.05>0.20 then it can be stated effectiveness data of e-learning distributed normally

7. Hypothesis Testing

a) Simple Linear Regression

The purpose of using simple regression analysis is to test the hypotheses in this study of the effectiveness of using e-learning in a higher education institution. The output of SPSS showed the regression result. Table 4.8, the coefficient of regression table, showed the output of this study and its conclusion.

Table 4.6

Coefficient of Regression

| | Coeffic | ient | | |
|------------------|--------------------------------|------------------------------|-------|------|
| Model | Unstandardized Coefficients | Standardized Coefficients | t | Sig. |
| | B Std. Error | | | |
| 1 (Constant) | 11,315 2.935 | | 3.856 | .000 |
| X | .629 .064 | 0.773 | 9.757 | .000 |
| a. Dependent Var | iable: Y | 7. | | |

The significant value of the coefficients table showed that a significance value of 0.000 <0.05 was obtained. So, it can be concluded that the effectiveness (X) variable affected the E-Learning (Y) variable. The findings based on the simple linear regression of Table 4.8 can be transformed into the following model of research:

$$Y = \alpha + \beta X (I)$$

 $Y = 11,315 + 0.629X (II)$

Based on the signification value of the Coefficients table, the obtained significance value was 0.000<0.05. So, it can be concluded that the effectiveness variable (X) was affected by the e-learning variable

(Y).
$$t_{tabel} = (\alpha/2 : n-k-1)$$

= (0,05/2 : 66-1-1)
= (0,025: 64)
= 1,999

The value t: known value t_{hitung} by 9,757 > t_{tabel} 1,999 so it can be concluded that the effectiveness variable (X) was affected by the variable E-Learning (Y).

b) Result

The results of the hypothesis tested in this analysis were interpreted from the equation prediction below, as the implementation of the simple linear regression model was found.

$$Y = 11,315 + 0.629X$$
 (II)

1. Constant (α)

The Constanta was 11,315 in the model. The effectiveness was calculated to be 11.315, while the use of e-learning is zero or constant as an independent variable.

2. Effectiveness (X) on use E-Learning (Y)

The regression coefficient for the use of E-Learning as an independent variable was 0,629. The slope coefficient was positive (0,629). It showed that e-learning was predicted to increase (62,9%) when student learning effectiveness in higher education increased to one percent.

Freedman (2009), to find the regression result, the coefficient of the independent variable must be different from zero. Therefore, the independent variable has a real impact on the dependent variable. The independent variable is invalid (the coefficient is 0%), then the null hypothesis (default) is accepted, which is the reason for rejecting the theory. On the other hand, If the independent variable has an absolute

effect (coefficient> 0%), the alternative hypothesis can be accepted, which is the reason for accepting the theory.

According to the above explanation, the coefficient of e-learning as the independent variable was 0.629. It was equal to 62,9%. It showed that using e-learning as an independent variable had a real effect on higher education effectiveness as a dependent variable; 62,9%>0%. Hence, the null hypothesis (H0) was rejected, and an alternative hypothesis (H1) was accepted.

B. Discussion

The result showed that the regression coefficient of the use of e-learning and its effectiveness in higher education institutions was 62,9% (62,9%>0%). This finding was consistent with many previous studies. Ali et al. (2018) and Song (2010) found that e-learning was effective for students regardless of their background. The use of digital media or e-learning led to the effective use of e-learning. An empirical study was conducted to determine the effectiveness of using e-learning in higher education. The findings show that e-learning has a positive impact on students, such as studying anytime and anywhere. Ali et al. (2018) also found that students supporting e-learning because it was not long-time consuming, easy to use, cost-effective, and time-friendly. One of the results showed that the use of e-learning was effective in higher education.

In conclusion, using e-learning was effective for the student at the English Language Education, Ar-Raniry State Islamic University, Banda Aceh. It was in line with previous research results. The findings of this study indicated that the English Education Department students had positive responses to their studies using e-learning. Finally, the effectiveness of using e-learning had positive impacts on the Department of English Language Education students.

Based on data obtained, 359 responses (42% of total respondents) agreed that e-learning was effective because e-learning provided useful feedback and an exciting learning environment. The research indicated that 326 responses (44% of total respondents) claimed that the e-learning platform provided positive experiences for students. Besides that, e-learning also can help students learn at home, not to travel, and save time by taking an online class with e-learning. E-learning allowed teachers and students to speed up their learning, and it was flexible in organizing students' schedules.

CHAPTER V

CONCLUSIONS AND SUGGESTIONS

A. Conclusions

Based on the results of research and discussion about the effectiveness of e-learning in the English Language Education Department of UIN Ar-Raniry, it can be concluded:

The use of E-Learning in higher education specializing in English language education is effective. Students use the two most dominants e-learning applications as a learning tool. They were WhatsApp and Google Classroom. Based on the results of the SPSS version 25 data analysis, it was found that the effectiveness regression coefficient is 0,629. The course of the reversal is positive (0.629). It shows that independent variables (effectiveness) differ by the regression coefficient of 0 percent cent.

Based on the results of the effectiveness variable with an average of 3.50, it can be concluded that the highest outcome of the effectiveness questionnaire is "useful feedback" with an average of 4.11 out of 66 respondents and "e-learning has an attractive appearance" with an average of 3.94. As a result, the effectiveness of e-learning has a positive impact on the learning process.

Descriptive statistics of e-learning variables, pointing out how far students know about e-learning. Based on the data obtained, 326 responses agreed that e-learning provides useful experiences in learning activities. E-learning can help students learn at home without the need to attend the class physically with an average of 4,18 and can save their time to set our schedule with an average of 3,92, wherever possible between work and study. Learning with e-learning give provides contemporary material that is relevant to the times with an average of 3,95.

Therefore, these results illustrated that the use of e-learning was effective in higher education. Finally, the null hypothesis was rejected (there was no effect of using e-learning in higher education institutions). Simultaneously, the alternative hypothesis was accepted (there was the effectiveness of e-learning in higher education institutions). Research results showed that using e-learning was effective and had a positive impact on the teaching and learning process. E-learning played a significant role in enhancing the teaching and learning activities at the Department of English Education of UIN Ar-Raniry.

B. Suggestions

The findings of this study illustrated that the use of e-learning was effective and it gave a positive impression to the students. The teaching and learning process more effective and interesting using e-learning. Therefore, the researcher recommended the lecturers use an application for e-learning. It was because students were more comfortable using an application for e-learning for all

ARLRANTES

lessons. Besides that, the university authority should also provide free WIFI for students to access e-learning. Students will be easier to access e-learning without any network problems so that the learning process will be conducted effectively. So, all students can access learning materials with their smartphone, computer, or other electronic media.

The study also recommended that future researchers involve the lecturers as their research participants to seek their opinions regarding e-learning implementation and its effectiveness at higher education institutions. It was suggested to do further research to increase the number of respondents. Finally, it is highly recommended to add independent variables to show better results.



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-Salida Amela



Appointment Letter Supervisor

FENGANGAATAN FEMDIMDING SKRIPSI MAHASISWA FAKULTAS TARBIYAH DAN KEGUKUAN UIN AK-RANIRY

DEKAN FAKULTAS TARBIYAH DAN KEGURUAN UIN AR-RANIRY

Menimbang

- a bahwa untuk kelancaran bimbingan skripsi dan ujian munaqasyah mahasiswa pada Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry Banda Aceh, maka dipandang perlu meninjau kembali dan menyempurnakan keputusan Dekan Nomor: B-655/Un.08/FTK/KP.07.6/01/2020 tentang pengangkatan pembimbing skripsi mahasiswa Fakultas Tarbiyah dan Keguruan Ar-Raniry Banda Aceh.
- b. bahwa saudara yang tersebut namanya dalam surat keputusan ini dipandang cakap dan memenuhi syarat untuk diangkat sebagai pembimbing skripsi.

Mengingat

- Undang Undang Nomor 20 tahun 2003, Tentang Sistem Pendidikan Nasional; Undang Undang Nomor 14 Tahun 2005, Tentang Guru dan Dosen; Undang Undang Nomor 12 Tahun 2012, Tentang Pendidikan Tinggi;

- Peraturan Presiden RI Nomor 64 Tahun 2013, tentang Perubahan Institut Agama Islam Negeri Ar-Ranity Banda Aceh menjadi Universitas Islam Negeri Ar-Raniry Banda Aceh;
- 5. Peruturan Menteri Keuangan RL Nomor. 190/PMK.05/2012, tentang Tata Cara Pembayaran dalam rangka Pelaksanaan APBN;
- 6. Peraturan Menteri Agama RI Nomor 12 Tahun 2014, tentang Organisasi & Tata Kerja UTN Ar-Raniry Banda Aceh:
- Keputusan Menteri Agama Nomor 492 Tahun 2003, tentang Pendelegasian Wewenang Pengangkatan, Pemindahan, dan Pemberh<mark>entian</mark> PNS di Lingkungan Depag RI
- Peraturan Menteri Agama RI Nomer 21 Tahun 2015, tentang Statuta UIN Ar-Raniry Banda Aceh;
 Keputusan Rektor UIN Ar-Raniry Nomer 02 tahun 2016, tentang Pendelegasian Wewenang kepada Dekan dan Direktur Pascasarjana di Lingkungan UTN Ar-Raniry Banda Aceh;
- Keputusan Rektor UIN Ar-Raniry Nomor 28 tahun 2019, tentang Satuan Biaya Khusus Tahun Anggaran 2020 di Lingkungan UIN Ar-Raniry Banda Aceh;
- Peraturan Kementerian Keuangan (PMK) Republik Indonesia Nomor: 72/PMK.02/2020, tentang Perubahan atas Peraturan Menteri Keuangan Nomor: 78/PMK.02/2020 tentang Standar Biaya Masukan Tahun Anggaran 2020.

Memperhatikan

Keputusan Seminar Proposal Skripsi Program Studi Pendidikan Bahasa Inggris Fakultas Tarbiyah dan Keguruan UTN Ar-Raniry Tanggal 31 Desember 2019

Menetapkan

MEMUTUSKAN

PERTAMA

Mencabut Surat Keputusan Dekan Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry Nomor: Nomor: B-655/Un.08/FTK/KP.07.6/01/2020 tanggal 24 Januari 2020

KEDUA

Menunjuk Saudara:

1. Habiburrahim, S.Ag, M.Com, MS, Ph.D Sebagai Pembimbing Pertama 2. Fitriah, M. Pd Sebagai Pembimbing Kedua

Untuk membimbing Skripsi: Nama Zifa Annisa 160203159 NIM

Program Studi Pendidikan Bahasa Inggris

The Effectiveness of E-Learning in Higher Education Instituations Judul Skripsi

KETIGA

Pembinyaan honorarium pembimbing pertama dan kedua tersebut diatas dibebankan pada DIPA UIN Ar-Raniry Banda Aceh tahun 2019 dengan Nomor. 025.04.2.423925/2020 tanggal 12 November 2019;

KEEMPAT KELIMA

Surat keputusan ini berlaku sampai akhir semester Genap Tahun Akademik 2020/2021 Surat Keputusan ini berlaku sejak tanggal ditetapkan dengan ketentuan segala sesuatu akan diubah dan diperbalki kembali sebagaimana mestinya apabila kemudian hari ternyata terdapat kekeliruan dalam penetapan ini.

> Ditetapkan di: Banda Aceh Pada Tanggal: 05 Januari 2021 An. Rektor

Muslim Razali

Tembusan

- Rextor UIN Ar-Rantry (sebagai laporan);
- 2 Ketua Prodi PBI Fak. Tarbiyah dan Kegunu
- Pembimbing yang bersangkatan untuk dimaklami dan dilaksanakan,
- Mahasirsa yang bersanghuan:
- Arzo

Confirmation Letter of Conducting Research from Faculty of Education and Teacher Training, Ar-Raniry State Islamic University

12/7/2020

Document



KEMENTERIAN AGAMA UNIVERSITAS ISLAM NEGERI AR-RANIRY FAKULTAS TARBIYAH DAN KEGURUAN

Jl. Syeikh Abdur Rauf Kopelma Darussalam Banda Aceh Telepon: 0651-7557321, Email: uin@ar-raniy.ac.id

: B-13572/Un.08/FTK.1/TL.00/12/2020 Nomor

Lamp

Hal : Penelitian Ilmiah Mahasiswa

Kepada Yth,

Ketua Prodi Pendidikan Bahasa inggris

Assalamu'alaikum Wr.Wb.

Pimpinan Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry dengan ini menerangkan bahwa:

: ZIFA ANNISA / 160203159 Semester/Jurusan : IX / Pendidikan Bahasa Inggris

Alamat sekarang : Gampoeng Lampeneurut Kab. Aceh Besar

Saudara yang tersebut namanya diatas benar mahasiswa Fakultas Tarbiyah dan Keguruan bermaksud melakukan penelitian ilmiah di lembaga yang Bapak pimpin dalam rangka penulisan Skripsi dengan judul The Effectiveness of E-Learning in Higher Education Institution

Demikian surat ini kami sampaikan atas perhatian dan kerjasama yang baik, kami mengucapkan terimakasih.

Banda Aceh, 03 Desember 2020

an. Dekan

Wakil Dekan Bidang Akademik dan Kelembagaan,



Berlaku sampai: 03 Desember

Dr. M. Chalis, M.Ag.

Confirmation Letter of Conducting Research from Department of English Language Education UIN Ar-Raniry Banda Aceh



KEMENTERIAN AGAMA REPUBLIK INDONESIA UNIVERSITAS ISLAM NEGERI AR-RANIRY FAKULTAS TARBIYAH DAN KEGURUAN PRODI PENDIDIKAN BAHASA INGGRIS

Thi Sycikh Abdur Rauf Kopehifa Darussalam Banda Aceh Email phi flk a ac-tanny ne id Website http://ai-tanny ac id

SURAT KETERANGAN Nomor: B-17/Un.08/PBI/TL.00/01/2021

Sehubungan dengan surat An. Dekan, Wakil Dekan Bidang Akademik dan Kelembagaan Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry, Nomor: B-13572/Un.08/FTK.1/T1.00/12/2020 tanggal 03 Desember 2020, Ketua Prodi Pendidikan Bahasa Inggris Fakultas Tarbiyah dan Keguruan UIN Ar-Raniry Darussalam Banda Aceh menerangkan bahwa yang namanya tersebut di bawah ini:

Nama : Zifa Annisa NIM : 160203159

Fak/Prodi : FTK/Pendidikan Bahasa Inggris

Benar telah melakukan penelitian dan mengumpulkan data pada mahasiswa Prodi Pendidikan Bahasa Inggris dalam rangka penyusunan Skripsi yang berjudul:

The Effectiveness of E-Learning in Higher Education Institution.).

Demikianlah surat ini kami buat agar dapat dipergunakan seperlunya.

Banda Aceh, 08 Januari 2021 Ketua Prodi Pendidikan Bahasa Inggris,

T. Zulikar

QUESTIONNAIRE

THE EFFECTIVENESS OF E-LEARNING IN HIGHER EDUCATION INSTITUTION

| 27.12.50 | | |
|------------|---|--|
| NAME | • | |
| 1 47 71A1T | | |
| | | |

NIM :

GENDER :

AGE :

TYPE OF E-LEARNING :

Note:

Rate as 1 for strongly disagree, 2 for disagree, 3 for neutral, 4 for agree and 5 for strongly agree.

| | Questions | | | | | |
|----|--|----|---|----|---|---|
| | | 1 | 2 | 3 | 4 | 5 |
| | Bagian in <mark>i menil</mark> ai keyakinan Anda terhadap e-le <mark>arning, se</mark> cara umum. | 12 | | | | |
| 1 | Menurut saya e-learning itu menarik | | | | | |
| 2 | Menurut saya e-learning itu menyenangkan | | | | | |
| 3 | E-learning memudahkan saya untuk mengakses pengetahuan pengguna lain | 4 | | | 1 | |
| 4 | Saya dapat menghemat waktu dengan mengambil kelas online | | | | | |
| 5 | Saya dapat menghemat biaya dengan mengambil kelas online | | | | / | |
| 6 | Menggunakan kursus online cocok dengan gaya hidup saya. | 7 | N | 1 | | |
| 7 | Saya akan merasa percaya diri bahwa ketika mengunakan e-learning | | | ų. | | |
| 8 | Saya dapat dengan terampil menggunakan e- learning | | | | | |
| 9 | E-learning dapat membantu siswa untuk belajar di rumah tanpa perlu bepergian. | | | | | |
| 10 | E-Learning menyediakan materi kontemporer yang relevan dengan zaman | | | | | |
| 11 | e-Learning adalah alternatif yang lebih menarik daripada pembelajaran kelas tradisional | | | | | |
| | Bagian ini menilai persepsi Anda tentang keefektifan setelah menggunakan e- | | | | | |

| | learning | | | | |
|----|---|---|----|---|---|
| 12 | Saya menemukan e-learning mudah dipelajari | | | | |
| 13 | E-Learning memiliki penampilan yang menarik | | | | |
| 14 | Desainnya sesuai untuk jenis duduk belajar online | | | | |
| 15 | E-larning memberikan pengalaman positif bagi saya. | | | | |
| 16 | Umpan balik yang diberikan berguna | | | | |
| 17 | Menggunakan layanan E-Learning dapat meningkatkan kinerja pembelajaran saya | | | | |
| 18 | Menggunakan layanan E-Learning dapat meningkatkan efektivitas belajar saya | | ٧. | | |
| 19 | Saya menemukan layanan e-learning berguna untuk saya | | | N | |
| 20 | Tujuan dan pelajaran e-learning didefinisikan dengan jelas | | | | |
| 21 | Saya umumnya puas dengan kualitas e- learning dalam kursus pendidikan | | | | A |
| 22 | Pelajar harus memiliki akses ke Internet di institutnya | | | | |
| 23 | .E-Learning memberikan pembelajaran yang memuaskan pengalaman | | | | |
| 24 | Secara keseluruhan, saya puas menggunakan e-learning | 6 | | | |

-Diploments

ARHRANIET

The Responses of the Questionnaire

Effectiveness (X)

| NO | Gender | Age | Type of E-Learning | X1. | X2 | X3. | X4 | X5 | X6 | X7 | X8 | X9 | X10 | X11 | X12 | X13 |
|-----|--------|-----|--|-----|----|-----|----|----|----|----|----|----|-----|-----|-----|-----|
| 1. | P | 22 | WhatsApp, Canvas | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2. | P | 22 | Canvas | 2 | 4 | 4 | 2 | 3 | 2 | 2 | 2 | 1 | 3 | 3 | 3 | 3 |
| 3. | P | 22 | Google Classroom, Canvas | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 3 |
| 4. | P | 22 | Google Classroom | 4 | 5 | 5 | 4 | 4 | 4 | 3 | 5 | 4 | 3 | 4 | 4 | 5 |
| 5. | P | 22 | Google Classroom, WhatsApp, Edmodo, Canvas | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 4 | 2 | 4 | 4 | 4 | 4 |
| 6. | P | 22 | Edmodo, Canvas, Googlemeet | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 4 |
| 7. | P | 22 | Canvas | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 4 | 3 | 3 |
| 8. | P | 22 | Google Classroom, WhatsApp, Canvas | 3 | 4 | 4 | 3 | 3 | 3 | 2 | 4 | 3 | 2 | 4 | 2 | 2 |
| 9. | P | 22 | Zoom, WhatsApp | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 4 | 4 |
| 10. | P | 22 | Google Classroom, Zoom, WhatsApp, Canvas | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 5 |
| 11. | P | 23 | Zoom, WhatsApp, Edmodo | 5 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 2 | 3 | 4 | 3 | 4 |
| 12. | P | 22 | Canvas | 4 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | 3 |
| 13. | P | 25 | Zoom, WhatsApp, Edmodo, Canvas | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 |
| 14. | L | 22 | Google Classroom, WhatsApp, Canvas | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 1 | 4 | 4 | 4 | 4 |
| 15. | P | 22 | Google Classroom, Canvas | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 1 | 1 | 4 | 3 | 3 |
| 16. | P | 22 | Google Classroom, Zoom, Canvas | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 5 | 2 | 3 | 4 | 4 | 5 |
| 17. | P | 21 | WhatsApp | 2 | 4 | 2 | 2 | 3 | 2 | 2 | 3 | 2 | 3 | 3 | 3 | 3 |
| 18. | P | 22 | WhatsApp | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 4 | 3 | 3 |
| 19. | P | 22 | Google Classroom, Zoom, WhatsApp, Canvas | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 4 | 4 | 3 |
| | | | | | | | | | | | | | | | | |

| 20. | P | 21 | Google Classroom | 2 | 4 | 4 | 3 | 4 | 5 | 4 | 5 | 5 | 3 | 4 | 4 | 4 |
|-----|---|----|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 21. | P | 22 | Zoom, WhatsApp, google | 4 | 3 | 3 | 4 | 4 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 4 |
| 22. | P | 22 | WhatsApp, Canvas | 3 | 4 | 4 | 3 | 5 | 3 | 3 | 4 | 2 | 3 | 3 | 4 | 4 |
| 23. | L | 22 | Google Classroom, WhatsApp, Canvas | 5 | 4 | 3 | 4 | 5 | 2 | 4 | 4 | 5 | 4 | 4 | 4 | 4 |
| 24. | P | 22 | Google Classroom | 3 | 5 | 5 | 4 | 4 | 5 | 4 | 4 | 2 | 4 | 5 | 4 | 4 |
| 25. | P | 21 | Google Classroom, WhatsApp, Canvas | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | 3 |
| 26. | P | 21 | Google Classroom, WhatsApp, Canvas | 3 | 4 | 4 | 4 | 5 | 4 | 3 | 4 | 3 | 3 | 4 | 4 | 4 |
| 27. | L | 21 | WhatsApp | 1 | 1 | 2 | 2 | 3 | 1 | 1 | 2 | 2 | 2 | 2 | 2 | 2 |
| 28. | P | 22 | Edmodo | 5 | 4 | 4 | 4 | 5 | 3 | 4 | 4 | 2 | 4 | 4 | 4 | 4 |
| 29. | L | 23 | Google Classroom, Zoom, Canvas | 4 | 4 | 4 | 4 | 5 | 4 | 4 | 5 | 1 | 4 | 4 | 4 | 4 |
| 30. | L | 21 | Google Classroom, Canvas | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 |
| 31. | L | 23 | WhatsApp | 2 | 3 | 3 | 3 | 4 | 3 | 2 | 3 | 2 | 3 | 3 | 3 | 4 |
| 32. | P | 22 | Google Classroom, Zoom, WhatsApp, Canvas | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | 3 |
| 33. | P | 22 | Zoom, Canvas | 4 | 4 | 2 | 4 | 4 | 4 | 3 | 4 | 2 | 2 | 4 | 3 | 3 |
| 34. | P | 22 | Zoom | 3 | 3 | 4 | 2 | 4 | 4 | 3 | 3 | 2 | 3 | 3 | 3 | 3 |
| 35. | P | 21 | WhatsApp, Canvas | 5 | 5 | 5 | 4 | 5 | 5 | 5 | 5 | 3 | 5 | 5 | 5 | 5 |
| 36. | P | 21 | Google Classroom, Canvas | 4 | 4 | 3 | 4 | 5 | 3 | 3 | 4 | 2 | 3 | 3 | 3 | 3 |
| 37. | P | 22 | Google Classroom, WhatsApp, Canvas | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 2 | 3 | 4 | 4 | 4 |
| 38. | P | 22 | WhatsApp, Canvas | 2 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 2 | 2 | 4 | 4 | 3 |
| 39. | P | 22 | Google Classroom, Zoom, WhatsApp, Canvas | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 3 | 4 | 4 | 4 |
| 40. | P | 22 | Google Classroom | 2 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 2 | 3 | 4 | 3 | 3 |
| 41. | P | 21 | Google Classroom, Canvas | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 2 | 3 | 3 | 3 | 3 |
| 42. | P | 22 | Google Classroom | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 3 | 3 | 4 | 4 |
| 43. | P | 22 | Google Classroom, Zoom, WhatsApp, Edmodo, Canvas | 3 | 5 | 3 | 3 | 4 | 3 | 4 | 4 | 2 | 3 | 4 | 4 | 3 |

| | | | | - | | | | | | | | | | | | |
|-----|---|----|--|---|---|---|---|---|---|---|---|---|---|---|---|----------|
| 44. | P | 23 | Zoom, WhatsApp | 2 | 2 | 3 | 4 | 5 | 3 | 3 | 4 | 2 | 3 | 3 | 3 | |
| 45. | P | 22 | Google Classroom, WhatsApp, Canvas | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 3 | 2 | 3 | 3 | 3 | |
| 46. | P | 22 | Google Classroom | 4 | 4 | 4 | 3 | 4 | 2 | 4 | 4 | 3 | 4 | 4 | 4 | |
| 47. | P | 22 | WhatsApp | 3 | 4 | 3 | 4 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 4 | |
| 48. | P | 22 | Zoom, WhatsApp, Canvas | 3 | 4 | 2 | 4 | 2 | 3 | 2 | 4 | 2 | 3 | 3 | 2 | |
| 49. | P | 21 | Google Classroom, Zoom, WhatsApp, Canvas | 4 | 5 | 4 | 5 | 5 | 5 | 5 | 4 | 2 | 4 | 5 | 5 | |
| 50. | P | 21 | Google Classroom, Zoom, WhatsApp, Canvas | 3 | 4 | 4 | 5 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 3 | |
| 51. | P | 21 | Google Classroom, Zoom, WhatsApp, Canvas | 4 | 4 | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 3 | 4 | 3 | |
| 52. | P | 22 | WhatsApp, Canvas | 3 | 4 | 4 | 3 | 5 | 4 | 4 | 4 | 3 | 4 | 4 | 3 | |
| 53. | P | 22 | Google Classroom | 2 | 3 | 3 | 2 | 3 | 3 | 3 | 4 | 5 | 3 | 2 | 3 | |
| 54. | P | 21 | Zoom | 3 | 4 | 4 | 4 | 5 | 3 | 2 | 4 | 2 | 3 | 4 | 3 | |
| 55. | P | 22 | Edmodo | 4 | 4 | 4 | 3 | 4 | 1 | 3 | 3 | 3 | 4 | 4 | 4 | |
| 56. | P | 22 | Canvas | 3 | 4 | 3 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 | 2 | |
| 57. | P | 22 | Google Classroom | 4 | 3 | 4 | 3 | 5 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | |
| 58. | P | 21 | Google Classroom, Zoom, WhatsApp, Canvas | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 2 | 3 | 3 | 3 | |
| 59. | L | 22 | Google Classroom, Canvas | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 4 | 3 | |
| 60. | P | 23 | Google Classroom, Zoom, WhatsApp | 4 | 5 | 5 | 5 | 4 | 1 | 2 | 4 | 4 | 2 | 5 | 3 | |
| 61. | L | 22 | Google Classroom | 5 | 3 | 3 | 3 | 5 | 1 | 1 | 3 | 1 | 5 | 3 | 3 | |
| 62. | L | 22 | Google Classroom, Canvas | 3 | 4 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 4 | 4 | 3 | |
| 63. | P | 21 | Google Classroom | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 2 | 4 | 4 | 4 | |
| 64. | P | 22 | WhatsApp, Canvas | 3 | 5 | 4 | 5 | 5 | 5 | 4 | 5 | 2 | 5 | 5 | 4 | |
| 65. | P | 22 | Google Classroom, Zoom, WhatsApp, Canvas | 4 | 4 | 2 | 2 | 4 | 2 | 4 | 2 | 2 | 2 | 4 | 2 | |
| 66. | P | 21 | Google Classroom, WhatsApp, Canvas | 4 | 5 | 4 | 4 | 5 | 3 | 4 | 4 | 3 | 4 | 4 | 4 | |
| | I | 1 | | | Л | | | | | | | | | | | <u> </u> |

The Responses of the Questionnaires

E-Learning (Y)

| NO | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 | Y8 | Y9 | Y10 | Y11 |
|-----|----|----|----|----|----|----|----|----|----|-----|-----|
| 1. | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 4 | 3 | 2 |
| 2. | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 4 | 4 | 3 |
| 3. | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 3 |
| 4. | 4 | 3 | 4 | 4 | 5 | 5 | 4 | 3 | 5 | 5 | 3 |
| 5. | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 |
| 6. | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 3 |
| 7. | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 4 | 4 | 4 |
| 8. | 2 | 3 | 2 | 2 | 4 | 2 | 2 | 3 | 4 | 4 | 2 |
| 9. | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 3 |
| 10. | 5 | 5 | 2 | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 11. | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| 12. | 4 | 4 | 3 | 3 | 4 | 2 | 2 | 3 | 4 | 4 | 4 |
| 13. | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 3 | 5 | 4 | 4 |
| 14. | 4 | 3 | 4 | 4 | 5 | 3 | 3 | 4 | 4 | 4 | 0 |
| 15. | 3 | 3 | 4 | 4 | 2 | 3 | 3 | 3 | 4 | 4 | 3 |
| 16. | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 3 | 5 | 4 | 4 |
| 17. | 3 | 2 | 4 | 3 | 3 | 2 | 2 | 2 | 4 | 4 | 2 |
| 18. | 3 | 3 | 4 | 3 | 4 | 5 | 3 | 3 | 4 | 4 | 3 |
| 19. | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 |
| 20. | 3 | 3 | 2 | 3 | 4 | 5 | 4 | 5 | 5 | 4 | 1 |
| 21. | 5 | 4 | 4 | 4 | 5 | 5 | 5 | 4 | 3 | 3 | 4 |

| 3 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 22. |
|---|---|---|---|---|---|---|---|---|---|---|-----|
| 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 2 | 3 | 23. |
| 4 | 4 | 5 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 24. |
| 3 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 25. |
| 5 | 4 | 4 | 3 | 4 | 5 | 4 | 5 | 5 | 4 | 4 | 26. |
| 1 | 4 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 27. |
| 3 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 28. |
| 5 | 4 | 5 | 4 | 4 | 5 | 3 | 4 | 4 | 3 | 4 | 29. |
| 4 | 3 | 4 | 3 | 2 | 2 | 3 | 4 | 4 | 2 | 2 | 30. |
| 2 | 3 | 4 | 2 | 3 | 3 | 4 | 2 | 4 | 3 | 3 | 31. |
| 3 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 32. |
| 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 33. |
| 4 | 3 | 4 | 1 | 1 | 3 | 4 | 4 | 3 | 3 | 1 | 34. |
| 4 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 35. |
| 2 | 5 | 4 | 3 | 3 | 3 | 4 | 5 | 5 | 4 | 4 | 36. |
| 3 | 4 | 4 | 4 | 2 | 3 | 4 | 2 | 2 | 3 | 3 | 37. |
| 2 | 5 | 4 | 3 | 3 | 2 | 4 | 4 | 5 | 3 | 4 | 38. |
| 3 | 4 | 4 | 4 | 3 | 3 | 5 | 4 | 4 | 4 | 4 | 39. |
| 4 | 4 | 4 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 40. |
| 4 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 41. |
| 3 | 4 | 5 | 3 | 2 | 4 | 5 | 4 | 4 | 3 | 3 | 42. |
| 3 | 5 | 5 | 3 | 3 | 4 | 5 | 4 | 4 | 3 | 3 | 43. |
| 3 | 4 | 4 | 4 | 3 | 3 | 4 | 2 | 2 | 3 | 3 | 44. |
| 4 | 4 | 4 | 3 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 45. |
| 2 | 4 | 4 | 3 | 3 | 4 | 4 | 2 | 2 | 4 | 3 | 46. |

| 47. | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 |
|-----|---|---|---|----|---|------|---|---|---|---|---|
| 48. | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 2 | 4 | 4 | 2 |
| 49. | 4 | 4 | 5 | 5 | 5 | 3 | 4 | 4 | 5 | 5 | 4 |
| 50. | 5 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 5 |
| 51. | 4 | 3 | 4 | 4 | 3 | 3 | 2 | 4 | 3 | 3 | 4 |
| 52. | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 5 | 5 | 4 |
| 53. | 3 | 3 | 4 | 4 | 5 | 4 | 2 | 2 | 4 | 2 | 3 |
| 54. | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 5 | 4 | 2 |
| 55. | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 1 | 2 |
| 56. | 4 | 3 | 3 | 4 | 4 | 2 | 2 | 3 | 4 | 4 | 4 |
| 57. | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 3 |
| 58. | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 5 | 4 | 3 |
| 59. | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| 60. | 1 | 5 | 5 | 3 | 5 | 3 | 2 | 4 | 4 | 4 | 3 |
| 61. | 5 | 5 | 5 | 5 | 5 | 1 | 5 | 5 | 5 | 5 | 1 |
| 62. | 4 | 3 | 4 | 4 | 5 | 2 | 2 | 3 | 4 | 4 | 3 |
| 63. | 3 | 3 | 4 | 4 | 4 | 2 | 3 | 3 | 4 | 4 | 4 |
| 64. | 5 | 5 | 5 | 5 | 3 | 4 | 4 | 3 | 5 | 5 | 4 |
| 65. | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 4 | 4 | 4 | 2 |
| 66. | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 |
| | , | | | 1/ | | RANI | | | | | |

The Responses of the Questionnaire

E-Learning (Y)

| NO | Y1 | Y2 | Y3 | Y4 | Y5 | Y6 | Y7 | Y8 | Y9 | Y10 | Y11 |
|-----|----|----|----|----|----|----|----|----|----|-----|-----|
| 1. | 3 | 3 | 3 | 3 | 3 | 3 | 2 | 3 | 4 | 3 | 2 |
| 2. | 3 | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 4 | 4 | 3 |
| 3. | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 3 | 3 | 4 | 3 |
| 4. | 4 | 3 | 4 | 4 | 5 | 5 | 4 | 3 | 5 | 5 | 3 |
| 5. | 4 | 4 | 4 | 4 | 3 | 4 | 3 | 4 | 4 | 4 | 4 |
| 6. | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 4 | 5 | 4 | 3 |
| 7. | 4 | 3 | 4 | 4 | 4 | 3 | 3 | 2 | 4 | 4 | 4 |
| 8. | 2 | 3 | 2 | 2 | 4 | 2 | 2 | 3 | 4 | 4 | 2 |
| 9. | 4 | 3 | 4 | 3 | 4 | 4 | 3 | 3 | 4 | 4 | 3 |
| 10. | 5 | 5 | 2 | 2 | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| 11. | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 4 | 5 |
| 12. | 4 | 4 | 3 | 3 | 4 | 2 | 2 | 3 | 4 | 4 | 4 |
| 13. | 4 | 4 | 4 | 4 | 5 | 3 | 3 | 3 | 5 | 4 | 4 |
| 14. | 4 | 3 | 4 | 4 | 5 | 3 | 3 | 4 | 4 | 4 | 0 |
| 15. | 3 | 3 | 4 | 4 | 2 | 3 | 3 | 3 | 4 | 4 | 3 |
| 16. | 4 | 4 | 5 | 4 | 5 | 4 | 4 | 3 | 5 | 4 | 4 |
| 17. | 3 | 2 | 4 | 3 | 3 | 2 | 2 | 2 | 4 | 4 | 2 |
| 18. | 3 | 3 | 4 | 3 | 4 | 5 | 3 | 3 | 4 | 4 | 3 |
| 19. | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 |
| 20. | 3 | 3 | 2 | 3 | 4 | 5 | 4 | 5 | 5 | 4 | 1 |

| 4 | 3 | 3 | 4 | 5 | 5 | 5 | 4 | 4 | 4 | 5 | 21. |
|---|---|---|---|---|---|---|---|---|---|---|-----|
| 3 | 3 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 3 | 4 | 22. |
| 5 | 5 | 5 | 5 | 4 | 4 | 4 | 4 | 4 | 2 | 3 | 23. |
| 4 | 4 | 5 | 3 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 24. |
| 3 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 25. |
| 5 | 4 | 4 | 3 | 4 | 5 | 4 | 5 | 5 | 4 | 4 | 26. |
| 1 | 4 | 2 | 2 | 1 | 2 | 1 | 2 | 2 | 2 | 2 | 27. |
| 3 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 | 4 | 4 | 28. |
| 5 | 4 | 5 | 4 | 4 | 5 | 3 | 4 | 4 | 3 | 4 | 29. |
| 4 | 3 | 4 | 3 | 2 | 2 | 3 | 4 | 4 | 2 | 2 | 30. |
| 2 | 3 | 4 | 2 | 3 | 3 | 4 | 2 | 4 | 3 | 3 | 31. |
| 3 | 3 | 3 | 2 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 32. |
| 4 | 3 | 4 | 4 | 3 | 4 | 3 | 3 | 3 | 4 | 3 | 33. |
| 4 | 3 | 4 | 1 | 1 | 3 | 4 | 4 | 3 | 3 | 1 | 34. |
| 4 | 5 | 5 | 4 | 5 | 5 | 5 | 4 | 4 | 5 | 4 | 35. |
| 2 | 5 | 4 | 3 | 3 | 3 | 4 | 5 | 5 | 4 | 4 | 36. |
| 3 | 4 | 4 | 4 | 2 | 3 | 4 | 2 | 2 | 3 | 3 | 37. |
| 2 | 5 | 4 | 3 | 3 | 2 | 4 | 4 | 5 | 3 | 4 | 38. |
| 3 | 4 | 4 | 4 | 3 | 3 | 5 | 4 | 4 | 4 | 4 | 39. |
| 4 | 4 | 4 | 2 | 3 | 3 | 4 | 3 | 3 | 3 | 4 | 40. |
| 4 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 4 | 4 | 4 | 41. |
| 3 | 4 | 5 | 3 | 2 | 4 | 5 | 4 | 4 | 3 | 3 | 42. |
| 3 | 5 | 5 | 3 | 3 | 4 | 5 | 4 | 4 | 3 | 3 | 43. |
| 3 | 4 | 4 | 4 | 3 | 3 | 4 | 2 | 2 | 3 | 3 | 44. |
| 4 | 4 | 4 | 3 | 2 | 2 | 3 | 4 | 4 | 3 | 3 | 45. |

| 46. | 3 | 4 | 2 | 2 | 4 | 4 | 3 | 3 | 4 | 4 | 2 |
|-----|---|---|---|---|-------|------|-----|---|---|---|---|
| 47. | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 3 | 4 | 4 | 4 |
| 48. | 4 | 4 | 3 | 4 | 4 | 3 | 4 | 2 | 4 | 4 | 2 |
| 49. | 4 | 4 | 5 | 5 | 5 | 3 | 4 | 4 | 5 | 5 | 4 |
| 50. | 5 | 5 | 4 | 4 | 3 | 4 | 4 | 4 | 4 | 3 | 5 |
| 51. | 4 | 3 | 4 | 4 | 3 | 3 | 2 | 4 | 3 | 3 | 4 |
| 52. | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 5 | 5 | 4 |
| 53. | 3 | 3 | 4 | 4 | 5 | 4 | 2 | 2 | 4 | 2 | 3 |
| 54. | 4 | 4 | 4 | 4 | 4 | 3 | 3 | 3 | 5 | 4 | 2 |
| 55. | 4 | 4 | 3 | 3 | 4 | 3 | 4 | 4 | 4 | 1 | 2 |
| 56. | 4 | 3 | 3 | 4 | 4 | 2 | 2 | 3 | 4 | 4 | 4 |
| 57. | 4 | 3 | 4 | 4 | 4 | 3 | 4 | 4 | 4 | 5 | 3 |
| 58. | 3 | 3 | 3 | 3 | 4 | 3 | 3 | 4 | 5 | 4 | 3 |
| 59. | 3 | 3 | 4 | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 4 |
| 60. | 1 | 5 | 5 | 3 | 5 | 3 | 2 | 4 | 4 | 4 | 3 |
| 61. | 5 | 5 | 5 | 5 | 5 | 1 | 5 | 5 | 5 | 5 | 1 |
| 62. | 4 | 3 | 4 | 4 | 5 | 2 | 2 | 3 | 4 | 4 | 3 |
| 63. | 3 | 3 | 4 | 4 | 4 | 2 | 3 | 3 | 4 | 4 | 4 |
| 64. | 5 | 5 | 5 | 5 | 3 | 4 | 4 | 3 | 5 | 5 | 4 |
| 65. | 3 | 4 | 4 | 4 | 3 | 2 | 2 | 4 | 4 | 4 | 2 |
| 66. | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 5 | 4 |
| | | | 4 | K | A.R.+ | RANI | 11. | Y | | · | |

Documentation of the Resarch

