

# E-learning Usage Analysis in English Language in Universitas Muhammadiyah Purworejo

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**Abstract.** This research belongs to qualitative research. The objectives of this research are to explain E-learning usage and to determine of the students' responses E-learning Usage in English Language Education of Universitas Muhammadiyah Purworejo. The unit of analysis of this research is E-learning usage at the students of English Language Education. The subject of this research were the English education students of batch 2016, 2017, 2018, 2019 of Universitas Muhammadiyah Purworejo. There are 43 students which are volunteering in answering the questionnaire. The result of the analysis shows that E-learning is easy to use (51,1%), E-learning perceives usefulness (37,2%), E-learning makes their communication and interaction easier and comfortable (48%), and students feel satisfy with E-learning (37,4%). That mean the result of the questionnaire most of them feeling easy and comfortable using E-learning method and the result of this research shows that E-learning is useful and helpful for the students and they felt satisfied with E-learning.

**Keywords:** E-learning; Linguistic; Media of ELT

## 1. Introduction

Humans now live in a rapidly evolving digital era in which technology affects almost everything and everyone. Booking flights, communicating with others, shopping, and banking are just a few examples of how technology has impacted our lives over the last decade. Especially in light of the Covid-19 pandemic, which has impacted many fields, including education, and has had a significant impact on learning methods. [1]. Education must create the student or teacher creativity to adapt the condition based on atmosphere [1], [2], [3], [4]. Education has embraced this technological tsunami and through the development of E-learning and distance learning, opportunities have become available to an ever increasing, geographically remote and diverse population [5], [6], [7]. E-learning is rapidly progressing as a learning medium in academia and an increasing number of students are voluntarily choosing this route due to geographical or social conditions [8]. Due to this expanding online market, it is imperative that researchers keep abreast of these technologies to inform educators and developers of the factors that influence its acceptance and use. While institutions aim to reach more students with different ages and needs and from more diverse cultures, the difficulties to students in this relatively new arena should not be underestimated. The researcher may be teaching 'digital natives' but daily technical experience can differ greatly from the technical experience required to learn [9].

Modern students claim to be technologically savvy, but the question is whether their technical background is sufficient to aid them in E-learning success. Students will only be successful in their learning if they have the technical skills to engage effectively in the distance learning environment and are sufficiently motivated to use it and keep using it. To establish the effectiveness of online learning, the perceptions and experiences of students that have participated in it can provide the necessary insight to determine how it can be improved and hence further successful outcomes. The perceptions and experiences of students who have participated in online learning can provide the necessary insight to determine how it can be improved, and thus lead to more successful outcomes. As universities compete for students around the world with dwindling resources, E-learning has the potential to help them meet the growing demand for high-quality education. Students are unlikely to engage with E-learning systems if they are cumbersome and difficult to use, so any investment in them is wasted. The main aim of this study, therefore, is to explore students' experiences of E-learning, specifically distance learning, through

examining their use and acceptance of it in terms of its usefulness, ease of use and intention to use in future.

## **2. Literature Review**

The origins of the term E-learning is not certain, although it is suggested that the term most likely originated during the 1980's, within the similar time frame of another delivery mode online learning [10]. E-learning make user can access course material everywhere via internet. By using E-learning, it can encourage and improve learner's interaction in the class. E-learning focuses on the use of technology in learning and education [11]. Through E-learning, material provided to students can be accessed anytime and from anyplace [12]. says that E-learning can be defined as natural evolution of distance learning which utilizes newest tool in technological context for arrangement in education [13]. The use of technology can be accessed anywhere and anytime that supported by teacher as a natural evolution of distance learning.

From those definitions, the researcher can conclude that E-learning is the use of technology that it can be accessed anywhere and anytime that supported by teacher and it is a natural evolution of distance learning.

### **E-learning in higher education**

The perceptions and experiences of students who have participated in online learning can provide the necessary insight to determine how it can be improved, and thus lead to more successful outcomes. As universities compete for students around the world with dwindling resources, E-learning has the potential to help them meet the growing demand for high-quality education. Students are unlikely to engage with E-learning systems if they are cumbersome and difficult to use, so any investment in them is wasted. computer-managed instruction and computer-assisted-learning [14].

E-learning in higher education is about taking an education to the next level and learn the new things and getting to where you want to be [15]. Furthermore, the higher education can be achieved by conducting a large-scale comprehensive meta-analysis covering various technologies, subject areas, and grade levels [16]. The use of technology for learning and teaching in higher education, has the potential effectively to support learning and teaching in a number of situations in which the technology was used and aligned with the goals and aspirations of the learner was an important consideration [17].

### **Pedagogy of E-learning**

Choosing a pedagogical approach is obviously linked to the goals of the researcher. However, it's critical to distinguish between designing face-to-face and E-learning courses. Whether E-learning and traditional face-to-face learning should be measured using the same definitions and approaches to effectiveness was one of the many questions raised during the discussion. The authors suggest that future researchers and designers critically consider the identified definitions, measures, and factors when designing for effective E-learning in order to find appropriate answers to this question. [18].

Considers that "pedagogically rich strategies" such as instructor participation, interaction with students, and facilitation of student collaboration, as well as continuous monitoring and moderating discussions, have the greatest impact on students' performance. [19]. A promising approach to developing self-regulatory skills using externally facilitated scaffolds is presented in study [20]. Their findings show that meaningful student-student interaction can be facilitated without the instructor's participation in discussions. Instead of only setting quantitative expectations, instructional design that provides students with qualitative guidelines on how to discuss has a significant impact. (e.g., number of messages posted).

The provision of formative and individualized feedback has also been identified as an important challenge in E-learning [18]. The researcher can find E-learning models that provide specific support for designing effective learning experiences for students taking online courses, in addition to support from learning theories. Participants and target groups are generally adult learners from higher education, according to a content analysis of online learning journals from 2009 to 2013. [21]. In their study, they found that the Community of Inquiry model has been particularly relevant to the successful implementation of E-learning.

### **Benefits of E-learning**

For students, E-learning represents one of the most flexible approaches to learning with opportunities for unique engagement and tailored learning that would be difficult to replicate outside the digital environment [22]. Modern technologies provide flexible learning opportunities where students can define their own pathway through controlled personalized learning [23]. E-learning commonly utilized to facilitate ubiquitous learning, overcome global and time restrictions of traditional methods and offer a more personalized learning environment to the student [24]. There are technologies that have the potential to support a wide range of E-learning platforms and devices, giving students a lot of flexibility in terms of when, where, and how they learn. These flexible options are especially beneficial for distance and part-time students because they allow them to advance their credit accumulation through scalable lifelong learning while maintaining study schedules that fit their needs. [23]. In addition, E-learning offers access to educational opportunities previously unattainable. For example, MOOCs offer students the opportunity to learn for free [25].

MOOCs, for example, are new learning models that use technology to create an engaging learning experience (Massive open online courses). Thousands of students can learn for free in an online environment thanks to MOOCs. Khan Academy, which has over 4,000 videos with over 244 million views, and Coursera, which was founded by Stanford teaching staff and now offers courses from over 60 universities and enrolls about 1 million students per month, are both MOOCs. [25].

### **Challenge of E-learning**

The challenges to technology integration in developing countries included little or no electrical power, conflict or post-conflict situations, harsh physical and environmental conditions that damage or destroy equipment lack of secure storage facilities for equipment, little or no internet capability, and insufficient financial resources to obtain and maintain hardware and software [26]. E-learning has some challenges as follows [27]:

a. Technological Challenges

The E-learning raises significant challenges in the technological research area. For development of E-learning resources that meet the user requirement needs to be addressed. The technological challenges of E-learning can be considered as two keys of technological research areas.

b. Development of New Forms of Learning community and Interactive Learning

In E-learning environments interaction, cooperation and community play an important role to support learning. The developments in the area of E-learning environments provide new forms of interaction for learning experience. It generates new relationships between learner and computer and also form a new learning community.

Key issues include as follows [27]:

- New forms of multi-modal interface to support learning.
- New techniques to understand and support learning communities.
- The development of systems to support mobile communities of learners.
- Personalization techniques that meet user personal needs and current activity.
- Techniques to promote and support interaction.
- Discovery of new learning communities.
- Support for time to time assessment services.
- Developing New Knowledge Facilities for E-learning

E-learning environment needs to support the rapid increase in the size and variety of data by appropriate semantic services. The semantic services generate a surrounding semantic context for learning support. Research that needs to work on as follows [27]:

- Development of learning and reasoning theories for uncertain and incomplete knowledge.
- Support for the development of large-scale learning facilities.
- Support for a dynamic learning process.
- Support for information sharing across different learning facilities.
- Developments of lightweight knowledge capture technique for promotion of lifelong learning.
- Development of learning support services as per the requirement of different domains and users.

c. Research Issues for E-learning

Current E-learning research brings together pedagogical, technical and organizational concerns within a wider set of socio-cultural factors. These factors influence the research agenda in E-learning system. Understanding these broader social and cultural issues is of significant importance to the research communities involved in E-learning and will have a significant role in informing future practices [27].

### **TAM (Technology Acceptance Model)**

The ever-increasing development of technology and its integration into users' private and professional life, a decision regarding its acceptance or rejection still remains an open question. A respectable amount of work dealing with the technology acceptance model (TAM), from its first appearance more than a quarter of a century ago, clearly indicates a popularity of the model in the field of technology acceptance. Originated in the psychological theory of reasoned action and theory of planned behavior, TAM has evolved to become a key model in understanding predictors of human behavior toward potential acceptance or rejection of the technology. The main aim of the paper is to provide an up-to-date, well researched resource of past and current references to TAM related literature and to identify possible directions for future TAM research. The paper presents a comprehensive concept-centric literature review of the TAM, from 1986 onward [24].

### **TAM in Education**

The technology acceptance can be defined as a user's willingness to employ technology for the tasks it is designed to support. Over the years, acceptance researchers have become more interested in understanding the factors influencing the adoption of technologies in various settings. From the literature, much research has been done to understand technology acceptance in this context [28].

The educational context doesn't make the study of technology acceptance distinct from other such studies. Technology acceptance theory has continued to develop over the last few decades, for education, healthcare, business, and other settings. All too often these studies are aligned in technological determinism [29]. It aims to unravel the current situation, and by doing so, make visible other trajectories into other futures [30].

### **TAM & E-learning**

TAM (Technology Acceptance Model) and the TAM constructs relationships, perceived usefulness (PU) and perceived ease of use (PEOU), and behavioral intention (BI) are considered appropriate to examine E-learning acceptance in both the blended learning and fully online environment [31]. Advocates the TAM as a valid measurement for the acceptance of E-learning in higher education [31]. The validity of using TAM to evaluate the acceptance of the E-learning system Moodle [32].

TAM has been used as a basis to develop a model specifically for E-learning. They performed a meta-analysis of 107 papers from the previous decade to identify the most frequently used external factors to extend the TAM in empirical research and examined investigated acceptance or usage of E-learning systems or technologies [33].

### **Whatsapp**

WhatsApp provides its users with various forms of communications, namely user-to-user communications, broadcast messages, and group chats [34]. When communicating, users may exchange plain text messages, as well as multimedia files (containing images, audio, and video), contact cards, and geolocation information. WhatsApp instant messaging handled ten billion messages per day in August 2012 [35]. During June 2013, WhatsApp, Inc. announced that they handled 27 billion messages every 24 hours [36]. WhatsApp had over 450 million monthly active users including 700 million photos are and 10 billion messages shared daily [37].

### **Google Classroom**

Google Classroom is a tool which facilitates students and teacher collaboration; also teacher can create and distribute assignments for students in an online classroom for free. It makes teachers simply

build groups to share assignments and announcements. Google Classroom can be a tool that makes learners become active participants [38].

Teachers can create active lessons which are student-centered, collaborative, and unforgettable just through Google Classroom, because it provides easy-to-use learning features with students of all categories able to cooperate [38].

### **3. Research Methods**

#### ***Research Design***

The method of this research is descriptive survey research. Descriptive survey method is a research method that takes sample from a population and use a questionnaire as a collection tool data. In this study data and information were collected from respondents by using a questionnaire [39].

#### ***Data Source***

Data source is a subject where data can be obtained [40]. If the researcher uses questionnaire for collecting data, so the source of the data is called respondent. Respondent is a person who gives responds or answer the questions from the researcher. Most qualitative researchers studying human phenomena collect data through interviews with individuals or groups; their selection of the type of interview depends on the purpose of the study and the resources available [41].

#### ***Unit of Analysis***

The unit of analysis of this research is E-learning usage at the students of English Language Education in Universitas Muhammadiyah Purworejo in the academic year of 2019/2020.

#### ***Research Instrument***

The main instrument in analyzing the data in this study is the researcher. The researcher uses questionnaire as his supporting instrument to conduct the research. The questionnaire consisted of 23 statements. Each of them categorized into four category including ease of access, perceived usefulness, communicate and interact and the last students' satisfy [42].

#### ***Technique of Collecting and Analyzing Data***

Data collection steps in qualitative research include setting the boundaries for the study, collecting information through unstructured or semi structured observations and interviews, documents, and visual materials, as well as establishing the protocol for recording information [43], [7]. In this research, the researcher used questionnaire to collect the data.

### **4. Findings and Discussion**

#### **Findings**

From the result, the researcher can conclude the analysis of E-learning usage at the students of English Language Education in Universitas Muhammadiyah Purworejo. First, it is from Ease of Access in E-learning, there are 51,1 % agreed that they don't have any problem when access or navigate through online media like zoom meeting. The second it is communication and interaction 48 %, that majority agreed or disagree when doing communicate or interact with the lecturer or student during online classroom. Third, students disagreed 37,4 percent of the time that active learning is the best method and motivation booster in an online classroom like Google Classroom. Fourth, 37,2 percent of respondents agreed or disagreed in social interactions, whether between lecturer and students or between students.

#### **1. Students' ease of access**

Ease of Access consist of 6 questions; with mean 51,1 %. Most of them choose agreed with the highest score is number 4 (submitting assignment) with average 62,8% which means respondents agreed

that E-learning makes it easier for them to submit assignments. That means they don't have any difficulty in access online meeting such as google class or zoom meeting. The lowest mean is 4,6 % that is strongly disagreed in ease of access online learning media.

No	Statements	SD	D	N	A	SA
1.	I can feel the quality is very excellent when in online	25,6%	51,2%	20,9%	-	2,3%
2.	I feel the online classroom is a very good media for social interaction (lecturer with students and students with student)	23,3%	60,5%	9,3%	4,7%	2,3%
3.	I felt online classroom help me to give the assignment in time	4,7%	30,2%	32,6%	27,9%	4,7%
4.	I feel online classroom help me to examine issues, to evaluate new ideas, and to apply what I have learned	2,3%	9,3%	62,8%	25,6%	-
5.	I can understand the feedback provided by the lecturer is useful	2,3%	20,9%	46,5%	27,9%	2,3%
6.	I can understand the grading system in online classroom help in monitoring my performance and understanding the current topic discussed	4,7%	30,2%	39,5%	25,6%	-
7.	I can understand the subject objective, assessment and content were consistent with the aid of online classroom	4,7%	27,9%	48,8%	18,6%	-

## 2. Students' perceived usefulness

Perceived Usefulness is made up of seven questions, the average of which is 37.2%. The majority chose netral or whether they agreed or disagreed. With the highest score in number ten *I believe that online classrooms assist me in examining issues, evaluating new ideas, and applying what I've learned.* That is, the students believe that the online classroom is an excellent medium for social interaction and for evaluating new ideas via E-learning. The lowest mean is 2,9%, with the students strongly agreeing with their perceived usefulness.

No	Statements	SD	D	N	A	SA
6.	I haven't difficulty in access online media such as Youtube and zoom	4,7%	20,9%	27,9%	34,9%	11,6%
7.	I have access course material or do the assessment given by the lecturer	2,3%	7%	16,3%	60,5%	14%
8.	I could receive assignment in online through media that given by the lecturer	-	2,3%	14%	60,5%	23,3%
9.	I can receive the assignment in online through media that	-	2,3%	11,6%	62,8%	23,3%

10.	given by the lecturer I can navigate or setting the system in the app or website that given by the lecturer	-	14%	30,2%	48,8%	7%
11.	I can easily and understood the app or website that given by the lecturer	7%	9,3%	32,6%	39,5%	11,6%

### 3. Students' communication and interaction

There are six questions in the communication and interaction section, with the highest mean of 30,6 percent. When it came to communication and interaction with the lecturer or student, the majority of them chose to disagree. That is to say, they do not enjoy conversing in an online classroom setting such as Google Classroom or Zoom Meeting. In strongly agreed, the lowest mean is 2,3 percent.

No	Statements	SD	D	N	A	SA
12.	I felt comfortable conversing through this medium for this activity	4,7%	23,3%	51,2%	18,6%	2,3%
13.	Lecturer helped to keep course participants engaged and participating in productive discussion	4,7%	30,2%	44,2%	20,9%	-
14.	I felt comfortable interacting with other participants in this activity	2,3%	30,2%	46,5%	18,6%	2,3%
15.	My point of view was acknowledged by other participants during this activity	4,7%	14%	65,1%	16,3%	-
16.	Lecturers are enthusiastic in teaching and explaining through online classroom	11,6%	44,2%	39,5%	4,7%	-
17.	Lecturer are friendly, approachable and could be easily contacted	7%	41,9%	41,9%	9,3%	-

### 4. Students' satisfaction

Students' satisfaction consist of 4 questions with the highest mean is 37,4%. Most of them choosing disagreed in students' satisfaction. That means the students don't really satisfy with the online classroom. The lowest mean is 2,3% in strongly agreed.

No.	Statements	SD	D	N	A	SA
20.	The subject met my personal goal through the medium introduced	2,3%	25,6%	51,2%	18,6%	2,3%
21.	I would recommend this method of learning to be applied to other appropriate subjects	14%	20,9%	46,5%	18,6%	-
22.	Online classroom is my first choice in active learning compare to other method	16,3%	55,8%	16,3%	9,3%	2,3%
23.	I like the online classroom as a learning initiative and motivation booster	9,5%	47,6%	31%	11,9%	-

## 5. Conclusion

This study's conclusion is based on the research findings and a discussion of students' responses to the E-learning analysis. This study found that students in the English Language Education Department at Universitas Muhammadiyah Purworejo in the classes of 2016, 2017, 2018, and 2019 find it easy to access E-learning.

From the result of the questionnaires, it is found that E-learning is easy to use (51,1%), E-learning perceives usefulness (37,2%), E-learning makes their communication and interaction easier and comfortable (48%), and students feel satisfy with E-learning (37,4%). That mean the result of the questionnaire most of them feeling easy and comfortable using E-learning method and the result of this research shows that E-learning is useful and helpful for the students and they felt satisfied with E-learning.

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