

LECTURER VOICES TOWARD FUTURE ENGLISH LANGUAGE TEACHING: AUGMENTED REALITY (AR) AND ARTIFICIAL INTELLIGENCE (AI)

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ABSTRACT

This research was carried out because of the rapid development of the application of English language learning along with the development of technology. The teachers are presented with so many choices of learning applications that are very easy to obtain. In the near future, language learning technology will continue to develop to utilize cutting-edge technology such as Augmented Reality (AR) and Artificial Intelligence (AI).

The purpose of this study is to see how the perceptions and understanding of several lecturers in Indonesia related to the development of AR and AI-based learning technology. Then also to see the extent of their support and readiness in concept and application. In the implementation, researchers used a qualitative approach by observing, determining samples, interviewing, studying documents and drawing conclusions.

The expected output in this study is to obtain the standard understanding of the lecturers related to the development of learning technology. Thus, there must be a change in the language learning paradigm by developing application-based learning methods. Overall, the results of this study are targeted to be published in a national journal with ISSN. To achieve these targets, this research has been made with a background, conception and objectives that are quite clearly supported with adequate references. Likewise, with the methodology and data analysis process that have been used.

Keywords: *Lecturer voices, Future ELT, Augmented Reality, Artificial Intelligence*

INTRODUCTION

Disruption has become a global study that has been widely discussed in recent months. This is a sign that the journey of the times has entered the gates of the industrial revolution 4.0. The impact is predicted to affect most aspects of life. Thus, it will have an impact on changing the lifestyle of modern humans in a more practical direction. In a more specific aspect, of course we will speak in the national context, namely Indonesia.

Digital interference is very clearly starting to be present and embedded in filling every aspect of people activity. The ability of Indonesian people to connect between digital applications and the needs of society is the result of a remarkable leap of thinking. The presence of Bukalapak, Tokopedia, Shoopee became the new motor of the nation's economic driving force. In the field of services, Go-Jek, Go-

Car and Grab open up considerable employment opportunities for the people in this country. This does not only occur in the economic sector, but also in several other sectors.

In the education sector, especially foreign language teaching (English) is inseparable from the development of digital technology. In language teaching, there are so many sophisticated technologies with its development teacher can choose in advancing students ability of English (Kessler:2017). The emergence of several learning applications is a sign and real symptoms that we can see. Starting from the use of computers as a support for language learning or more we know (CALL). The next few years with the rapid development of mobile phone technology, there were several innovations in the use of mobile phone applications in learning (MALL). Even further, several studies related to the development of digital technology in learning have emerged. Like the emergence of the concept of artificial intelligence in learning English.

In language teaching, it becomes both support and inhibitor. The era of information and communication, it should be an opportunity for teachers and lecturers to utilize these various technologies in the learning process. Nevertheless, the development of learning technology as mentioned above certainly does not necessarily just happen. This is because in principle every technology or application is only a tool that if not operated, will not produce anything. Need a skilled hand and sufficient knowledge to operate it. If all of these components are owned, then we will get convenience from the development of a learning technology. This research is focused on seeing the lecturer's readiness from their understanding, perception and point of view in the use of the latest technology, especially Augmented Reality and Artificial Intelligence in teaching English.

METHOD

Problem Statements

1. How is the future English language-learning model?
2. To what extent do lecturers' Understanding related to Augmented Reality (AR) and Artificial Intelligence (AI)?
3. To what extent are they prepared to use AR and AI in learning English?

Research Objectives

1. To find out the views of lecturers related to the English language-learning model in the future.
2. To find out how far they understand about AR and AI.
3. To find out how ready they are in applying AR and AI in learning English.

Research Site

This research was conducted in Universitas Islam Makassar (UIM) particularly; this research applied to the English Education students Faculty of Teachers and Training Education (FKIP).

Research Informants

The subject of this research were some lecturer who are bounded in range 28-30 years old. The Researcher choose the lecturer based on some consideration such as their age, teaching experience and their understanding about technology in teaching English.

Data Collection

As we know that in qualitative research, the researcher becomes the only instrument. As the main instrument, the researcher used three techniques in collecting the data:

1. Non-participant observation where the researcher entering the classroom and observing whole lecturer activities when they are teaching in the classroom.
2. Interview was the main way in collecting the data. The researcher started make some list of questions in the form of semi-structured interview. The questions next were asked by researcher to the lecturers of course in different setting of each lecturer. The researcher then adds or reduce the questions based on the informant respond and until the data saturate.
3. Documentation, the researchers collected some documents from the subject to support the data. Kinds of photos and videos also taken to view on data analysis phase.

Data Analysis

The data analysis of qualitative research is varied and there is no particular technique to be claimed as well. In this research, the data analysis technique adopted the Miles and Huberman data analysis as follows:

1. Data Reduction

All of the data that have been collected through some techniques will be reduced. It reduced based on the importance of the data. All the data were elaborated one by one and then it simplified in a number of category.

2. Data Display

In the data display, the data that have been reduced then be categorized further in a similar group. The presentation of data was done using tables, graphs, pictograms, and so on. Through the presentation of data, then the data was organized and arranged in the relationship, so it was more easily understood. Unlike the case in qualitative research, the presentation of data used the form of a short description, chart, among categories, relationships. According to Miles and Huberman, most often used to present the data in a qualitative study is a narrative text.

3. Drawing Conclusion and Verification

After those steps are already done, the last step of this data analysis is drawing conclusion and verification. In this step, the researchers viewed the diagram or chart in the data display and reach some conclusion based on the relationship on the data and the problem statements in the first chapter. Verification is also needed to make sure that the conclusion drawn is match with the research objectives.

FINDINGS

Table 1. Lecturers' Teaching Experience Duration at their University

Lecturer	University	Teaching Experience Duration (Year)	Age (Year)
NA	UMPAR	6	30
KH	UMPAR	9	29
AA	UNCP	5	32
AR	CASEA	8	33
BT	YAPIKA	8	32
AHF	UNIBOS	8	30
JN	UIM	7	32
SN	UIM	5	31

This research involved eight lecturers from six different universities as informants. One of the main considerations in the selection of informants in this study is the age factor. Our lecturers are in the 29-33 years old range which are still included in the category of young lecturers. In their capacity as young lecturers, of course they have projections related to the future of teaching English. While in the aspect of teaching experience, the data we collect is in the range of 5-9 years. This experience meets the minimum limit of 5 years and they have more time ahead to carry out teaching using the latest technology.

Table 2. Lessons Taught

	NA	KH	AA	AR	BT	AHF	JN	SN
Reading	✓							
Speaking			✓			✓		
Listening						✓	✓	
Cross Culture Understanding		✓						
English for Economics (ESP)	✓							
English Learning Model			✓					
Aviation English (ESP)				✓				
English for health (ESP)					✓			
Curriculum and Material Development								✓

In this study we also collected data about the subjects that were delivered by each lecturer. The informants involved in this study did not only come from universities but also academies. The subjects taught are not only in the context of

English Language Education, but also English for Specific Purposes (ESP). From the table shown above, some lecturers still work on language skills-based courses. Some others teach macro linguistic courses such as Cross Cultural Understanding (CCU). While the rest teach ESP courses such as English for economics, English for Aviation and English for Health. The course also supports the sustainability of this research because it provides information on what subjects AI and AR can be applied and what they look like.

Table 3. Frequently Used Method

	NA	KH	AA	AR	BT	AHF	JN	SN
Blended Learning	✓			✓				
Communicative language teaching					✓		✓	✓
Cooperative learning								✓
Discovery Learning								✓
Experiential Learning		✓						
Jigsaw			✓					
Lecture Method			✓					
Role Play						✓		
Students Active Learning								

Table 3 Next presents data related to the methods used by lecturers in teaching the courses they have been taking so far. Various methods were applied by the informants. The data is the result of an interview about the method that they think is most appropriate and effective in teaching based on the subjects presented in the table ... before. The results are certainly diverse, because this question contains subjectivity based on their teaching experience. The table above shows that only one lecturer has applied a digital-based method namely blended learning. The rest also uses the latest methods but, in its application, has not implemented digital media-based learning.

Table 4. Lecturers' Understanding on AR & AI

<i>"Teaching technology that combines 3D and 2D is projected on the real world"</i>
<i>"3G Technology based learning"</i>
<i>"Digital Technology that is brought to the real world"</i>
<i>"The use of high tech for games"</i>

“The use of technology in learning activities that can facilitate the activities because it is assisted by technology”

“Augmented Reality Technology is the Application of Technology by combining the Use of Virtual Objects with real objects for example when we teach, we use an LCD projector in the teaching process”

“What I understand about Augmented Reality technology is incorporating virtual objects into the real world. For some people this term sounds Unfamiliar, but basically the implications or application of this technology can be found everywhere in everyday life today.”

“AR is one of the technologies used to make objects as if they were alive like real.”

One of the research questions to be answered is the understanding of informants related to AI and AR. This instrument uses interview techniques to the informants and the results of our interviews are as simple as there is a table 4 above. Above table contains data about their understanding of AR. The answers collected indicate the level of understanding of lecturers related to AR is still not quite right if we refer to the definition of (Arvanitis:2012) who define that Augmented Reality (AR) as a real-time direct or indirect view of the physical real world environment that has been enhanced / augmented by adding virtual computer generated information to it. Various assumptions that appear there who think that AI is the application of 3D technology in the real world (). Some others assume that AI is the application of virtual objects in the real world. Basically, they already have an understanding that AI focuses on visualizing digital objects in 3D. This question is still in their understanding apart from linking AI in the context of learning. We do this to see if they have a comprehensive understanding to continue on the next question.

Table 5. The informants' views on their understanding of AR

“Technology using systems, this is also commonly referred to as artificial intelligence which is managed in a scientific context”

“Technology with the ability to understand computers”

“Technology to test the ability of the brain.”

“Intelligence that can be created, not natural”

“the use of technological developments with computational systems that are able to resemble human intelligence at work or in accordance with environmental conditions”

“Artificial Intelligence technology is the application of technology in everyday life that can change the behaviour of an individual for example using a computer or smartphone”

“In this case, technology is used to help people work. For example, Google's search engine, which can be used by humans anytime, anywhere related to various things.”

“AI is the stimulation of intelligence carried out by machines or man-made.”

After asking the informants' views on their understanding of AR, we then continued the question related to their understanding of AI. Still the same as the response given before, they have not been able to describe AI comprehensively. Most of them do provide good answers that AI is a technological development whose purpose is to help humans. Some of them are even optimistic that AI will replace the role of humans in the future.

Table 6. Lecturers' opinions on its implementation

“Can be applied in the form of IT-based teaching through the creation of a database-based teaching system”

“Use certain applications related to English education”

“As a multimedia-based learning media”

“More lively interactions by combining technology and learning tools or Inserting learning material”

“all will use computer and digital systems such as teaching no longer use human power but use technology”

“For example in the course that I teach I use smartphone media as a means of learning both in the process of teaching or doing assignments”

“The application of Augmented Reality can be used in the form of translation, when for example students read text and find unfamiliar words, they can scan the text and utilize the scan translation feature to find out its meaning. For learning basic speaking, use Augmented books that are audio visual. The application of Artificial Intelligence itself has been widely used in learning English, both in presentations, discussions and other activities.”

“AR can be applied in learning English such as the skills available in English. for example, in speaking, the teacher/lecturer can use audio-visual contained in the AR itself so that the technology can increase student interest in the learning process. AI can replace the teacher's role in learning English for example as a substitute for the expert and the teacher himself.”

Basically, AI and AR are not fully created and intended for learning, but rather to the entertainment world and application-based digital business. The informants believe that in the future technological developments will force the world of Education to use AR and AI. So the next question is to explore data on

how the forms of AR and AI implementation in learning English in class. The answers obtained are indeed varied and are simply presented in table 5.6 above. Some informants gave abstract answers assuming that the application was in the form of a databased. Another answer is also by using applications and based on multimedia and combined with technology. There are two informants who answer in detail and dichotomize the specific application between AR and AI. Overall, the informants' answers have illustrated the application of these technologies in learning, although they have not specified the applications used.

Table 7. Lecturers' prediction on future English Language teaching

"English learning must be able to adapt to technology, so that all learning devices must be integrated"

"Always update about new concepts in the world of education and technology in order to facilitate the delivery of material"

"The concept tends to online learning processes, and media-based."

"More interactive and innovative"

"learning English will be more sophisticated and no longer use human in doing activities but robots or computers"

"Learning English in the future is indeed inevitable from technology, especially now that there have been many applications that can facilitate us in teaching English and we are required to be able to master it"

"Technological development from a few years ago is growing faster, in a few years the application of technology will be more effective and efficient. Lecturers as educators must update with technological developments in order that be able to apply online learning in the learning process."

"Learning English will use the latest technology, but technology also has a negative impact if used excessively. students and lecturers must be wise in using it to produce meaningful learning."

In the last part of the interview process, we did it by asking the informants' responses regarding the description of the process of teaching English in the future. They assume that English language learning in the future must be integrated with existing technological developments. There are also those who expect that in the future there will be a new concept born in facilitating classroom learning activities.

They are very confidence in the rapid development of technology is very high. They believe that the next few years the world of Education can no longer break away from technology. Both in terms of instructors and students. Some even predict that in the future; if the teacher is unable to compete then the teacher's role will be replaced by artificial intelligence such as robots or others.

CONCLUSION

Based on the findings above, we can see for a while that most of the informant have a big enthusiasm in this research. From the whole series of data collection to data processing, the researchers draw several conclusions.

1. Most subjects have not utilized technology in their learning while all agree that the application of digital technology in learning is important.
2. Understanding the subject of AR and AI is approaching the actual concept that has been used in the entertainment industry.
3. Although not yet utilized in learning, they all agree that the technology can be utilized in the future in certain subjects such as Translation, Speaking and some multimedia-based learning.
4. In the future they believe that learning English will experience significant changes in the aspects of technology utilization (AR and AI) so that lecturers must push themselves to improve their main competencies, digital literacy in order to remain able to compete with the times.

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