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Digital Literacy of ELT Lecturers in Different Contexts:

A Case at Two Universities in Jakarta

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ABSTRACT

ICT has been implemented for language teaching in higher education since its advent. In the process, the utilization of ICT in language teaching has not comprehensively embraced for the level of digital literacies and the different context of universities. This research aims to explore the level of digital literacies at the universities and distinct context of General English (GE) teaching in two private universities in Jakarta. In this frame, the research describes the category of ICT implemented and the relevant aspects of the lecturers in both universities to teach General English. In supporting this, a triangular method of data collection is applied in the research. Technically, a questionnaire consisting of closed and open questions was distributed to lecturers from both universities. The data is analyzed qualitatively based on percentages indicator. The result revealed that the respondents have a good level of digital literacy. However, they lacked some knowledge and skills in managing the classes in an online platform. As a result, the research contributes to providing training to support them in coping with the need for teaching GE with accepted digital literacy.

CCS CONCEPTS

• Social and professional topics → Professional topics →
Computing education → Computing literacy

KEYWORDS

Digital, Literacy, ELT, Lecturers, ICT

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1 Introduction

ICT has been applied for the teaching-learning process in higher education for decades. At a closer look, an institution has set the importance of the use of ICT in the teaching-learning process since it offers many benefits. In this line, ICT has a strong implication for the whole process of language teaching and learning. Specifically, it provides technology with its capacity to enhance learning approaches with many opportunities for students and teachers to develop knowledge construction [1]. Moreover, it enables the institution to hold distance learning, which gives opportunities for learners from different places to study in which the distance or geographical side is no longer a barrier.

The use of the developed ICT in language teaching and learning process has proved that it provides some unlimited sources for improving the material for the teaching-learning process. According to Nakazny, an essential component of informatization of the educational process is the accumulation of experience of ICT use in the educational process of higher educational institutions [2]. Arguably, experience in applying ICT in language teaching becomes a crucial thing for teachers and lecturers. However, not all lecturers have experience or become familiar with applying ICTs in their classrooms. In other cases, they have applied it partially.

Jakarta, as the capital city of Indonesia, consists of many reputable universities that have applied ICTs in their teaching-learning processes. In this spectrum, every institution has its portal for the lecturers and students to access for at least the administrative and academic information. However, they may have different content and different use. Since its differences, this research study is seeking information about the type of ICTs applied in the two universities as the contexts. With this viewpoint, the different contexts may have distinct applications and experiences of the lecturers in using the ICTs for teaching-learning, especially the teaching of English. On that basis, the result of the study provides a big picture of the General English lecturers' level of digital literacy from both universities. If the result of the lecturers' digital literacy is low, it implies the idea of whether it is required for the

institution conducting a development program for the lecturers to cope with the more useful teaching-learning process by applying ICT. On the contrary, it broadens the insight that the lecturers only need to follow with the contemporary ICT application for better teaching and learning processes.

The research contributes to several stakeholders. For lecturers, it exposes their mind for the specific training on digital literacy uptake they required. For the institution, the result of the research engages the burgeoning digital nature as the cornerstone or the basic idea of further training for lecturers within the institution. For future researchers, they devise the wider scope of research in urban areas or suburban to identify the level of literacy.

2 Literature Background

2.1 ICT in Higher Education

Previous research studies proved that ICTs had been used in higher education. According to Gulavani and Jossi, ICT has made some changes in higher education, not only administratively but also academically [1]. By applying ICTs, higher education receives benefits in at least four significant areas, namely teaching-learning, administration, research, and the agent of change [3], [4]. The first area is related to teaching-learning. In this context, ICT provides unlimited resources for the lecturers to select them and to support the teaching-learning process in the classroom. Besides, it enables the students and lecturers to communicate virtually or design ICT-based projects. In this frame, ICT allows lecturers to create new methods of teaching, such as the use of PowerPoint Presentations, which stimulates the classroom process of teaching more comfortable and more enjoyable. The use of audio and video in the classroom can also be an example of how ICT has an impact on the teaching-learning process.

The second one is the administration benefit. Earlier than ICT was invented, most of the administrative works were done manually and paperwork based. With thousands of students in higher education, manual tasks consume too much time to handle. As this backdrop, the database can be saved and arranged easily by embracing technology. Moreover, it reduces the utilization of paper, which is agreed that it preserves the nature that almost all works are done paperless. The third point is the area of research. Nowadays, the number of research studies in higher education increases. One of the reasons is that ICT facilitates the researchers with open resources and links across the world in all subject matter. By applying ICT, they reduce the length of research time, budget, and effort to complete their research studies. Moreover, it supports them with more accessible data collection and analysis of extensive data by applying variously available and compatible software.

The final part emphasized ICT as the agent of change in higher education [5] [6]. Prior to the invention of ICT, the classroom method of teaching applied traditional solution renowned as a teacher-centred method in which student-teacher in the classroom is supported with books, chalks, and board; the teacher is the centre of teaching-learning activities. Following the invention of ICT, the method of teaching has changed into student-centred learning.

Undoubtedly, the students access the resources and work independently while the teacher becomes the moderator of the learning process. In this sense, ICT also enables the higher education to offer the distance learning that students are independent to choose the appropriate course. In this vein, the time for learning becomes wider in 24 hours a day and seven days a week. For the voices, students and teachers access material from the digital library and do activities without the drawback of time and distance.

2.2 Digital Literacy

The terminology of literacy has been coined by Kern effortlessly that emphasized the ability to read and write [7]. In this line, the activity of reading as the fundamental activity underscores that a person should be equipped with some capabilities, especially understanding the context of the text. In this part, it contains the ability to understand the situation beyond the text is created. Moreover, in writing, a writer composes, which needs some ability in some knowledge, such as the knowledge of the language in context.

As the literature indicates, digital literacy has its definition. According to Chick and Jones, digital literacies are considered in three different ways, the acquisition of information age skills, the cultivation of habits of mind, or the engagement in digital cultures and practices [8]. In this digital era, people are forced to acquire the skills of digital tools not only in education but in social practices which it needs the way how people change their mind to cope with the rapid changes caused by the invention of technology. Many people have changed the way they communicate from a conventional way to meet personally or using the letter for people far away to communicate using digital tools that support the virtual meeting.

In general, digital literacy is defined as the ability to use information and communication technologies (ICT) to find, evaluate, create, and communicate information, requiring both cognitive and technical skills [9]. In the context of higher education, the definition of digital literacy provided by Son stated that digital literacy is the ability to use digital technologies at an adequate level for creation, communication, collaboration, and information search and evaluation in a digital society [10]. In the same line of thought, a literate digital lecturer should have the ability to create an atmosphere of the teaching-learning process and content of the teaching based on the objective of the study and by applying ICT. In this token, the students should also get involved in the atmosphere of learning by applying digital media created.

A literate digital lecturer should be able to communicate and collaborate with the students, with other lecturers and other parties or stakeholders, by making use of ICT or digital technology. In this case, there are some tools to communicate with one another without the need to meet physically in a place. At a closer look, some applications have supported the users for communication and collaboration, this time, such as WhatsApp messenger, telegram messenger, Line messenger or many others. For collaboration, there are many applications available to use, such as Google's apps,

which provide room for students and lecturers to work together on a writing project.

A literate digital lecturer should acquire information search and evaluation. Since the digital world provides unlimited sources, a digital literate should have the ability to search the sources by the need. Presumably, the ability to search resources should be accompanied by the ability to evaluate them. Academically, not all sources can be used, such as personal blogs, online encyclopedia where everyone can be a contributor such as Wikipedia and other resources. Moreover, a digital literate lecture should have the skill to use the application and to figure out whether the students' work indicated plagiarism.

3 Research Framework

Figure 1 depicts the research framework in general. In this context, the fishbone diagram represents the flow of the research. Cause and Effect diagram or Fishbone diagram poses as a technique to find and significantly analyze the factors influencing in identifying the characteristics of work output quality [11]. In this setting, the study identified at least several possible causes of lecturers' digital literacy.:

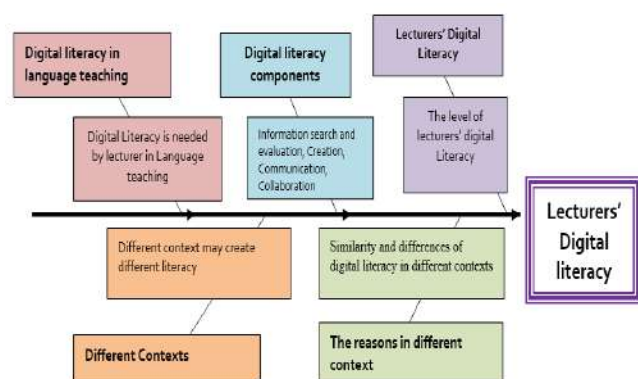


Figure 1: Fishbone Diagram

3.1 Method of Data Collection

The participants of the research are 20 lecturers teaching General English in two universities in Jakarta, private university A and private university B. Each consists of 10 participants. A triangular method is used in this research. An online questionnaire consisting of closed and open questions is distributed to the participants. Two participants from each university are chosen randomly to be interviewed to get more in-depth data and to support the questionnaire.

3.2 Method of Data Analysis

The data then will be analyzed qualitatively by describing each data taken to give the idea of the digital literacy of the lecturer and the reasons behind the level of their literacy.

4 Findings

4.1 The Different Context of General English Teaching

Higher education in Indonesia in its curriculum place General English course at least two credit for the students to learn. This program is a compulsory course for the student to take. In some universities, this course is not only a two-credit course but also four credits one. However, the content and the method of teaching depends on the institution since each institution has different goals for the graduates. The different goals of each institution create a different context from one another.

In this research, two institutions are in Jakarta. The private university A and private university B involves in the deeper loop of investigation. Both institutions hold a General English course for the students, and this course is a mandatory one. The context becomes different not only because they are two different institutions but the way the course is handled. In private university A, General English course for all programs and faculties is handled by the Language Center. There two major purposes set by private university A, that by learning English, the graduate can communicate in English for the global academically. To fulfil the need for the graduates, the Language Center stipulated two sets of achievement for different level language proficiency by requiring student candidates to take a paper-based on TOEFL®. The result of the test can be used to determine in which level the students enrolled. For those who achieved a minimum 500 score of TOEFL® -PBT, they will enrol in 4 credits English courses, two credits for Business Presentation Course, and two credits for Written Business Communication Course. Meanwhile, those who achieve score below 500, they have to join four credits to learn TOEFL®-PBT which emphasizes on the four skills of language; listening, reading, speaking and writing. In private university B, General English Course content and learning objectives are set by each faculty or each program. Different faculties may have different course credits, depends on the need of the faculty or program. The faculty which set only two credit for General English, commonly the students learn reading, grammar and vocabularies while for the four-credit course, students learn the General English and English for specific purposes (ESP). In the ESP course, the language skills the students learn reading, grammar and vocabulary. The materials for reading and vocabulary are linked to the department or faculty the students belong too, such as English for economics.

By the end of the semester, the universities hold assessment for the students. However, the type of examination for both is different. In private university B, the assessment for General English is by giving a paper-based test for reading, grammar, and vocabulary. On the contrary, the assessment for private university A, students are using a website-based assignment in which, reading, listening, and writing are tested while speaking is using the video-based file.

4.2 ICT Used in Teaching General English

In the digital words, it is undeniable that almost everyone makes use of technology in every single path of life. In the education world, especially in higher education, lecturers face the fact that the students have been well exposed to technology in their life. When there is a new feature, app, display, or anything related to technology, it doesn't take long for them to learn and adjust, which makes the lectures have to use it as well in the process of teaching and learning.

From the data, the twenty respondents range from 25 – 50 years old, with the 1 – 5 years' experience in teaching general English. All of them have engaged with ICT and social media in teaching and communicating. In teaching, some lecturers have utilized some applications such as Edmodo, Orai, eBook, YouTube, and TED. Edmodo, a global education network that helps to connect all learners with the people and resources targeted to reach their full potential, is commonly used by teachers in schools.

They also have utilized some applications and social media for communication such as Facebook, Twitter, WhatsApp, and email to support their teaching and learning process. However, not all lecturers have used them for teaching tools since most lecturers utilized email to communicate with students.

4.3 The Digital Literacy of Lecturer

Figure 2 exhibits the level of digital literacy perception. In the level of digital literacy, it is interesting to find out the perception of respondents. Figure 2 portrays that 65% of the respondent percept that they rate good of digital literacy, 20% very good, 5% excellent, and none stated limited or poor. It means that they have been exposed to use technology. In recognition of the perception, the data described that they understand the component of digital literacy. In this line, it is necessary to know the respondent's basic knowledge and skills in computers, websites and online applications.

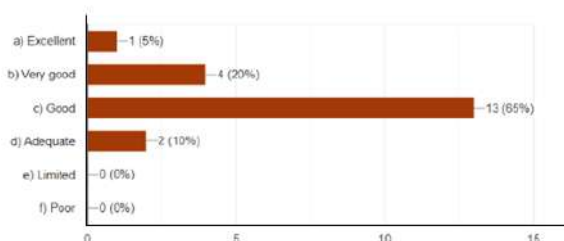


Figure 2: Digital Literacy Perception Level

To find out whether their perception meets the fact they understand the component of digital literacy, it is necessary to recognize the respondent's basic knowledge and skills in computers, websites, and online. All respondents understand how to download the files, unfortunately not 30% are not sure whether they know and able to use computer short keys to work. It becomes an interesting point since they have a good perception of digital literacy. There is 5% of participants do not know how to create a PowerPoint presentation with simple animation, and 15% are not sure if they

can make it. On the contrary, they can edit PPT slides. All respondents have basic skills in organizing the file to folder or subfolders.

To find out the respondents' skills in using the online application, six questioned were distributed, and diagram 5 shows the result. Only 10% is not sure if they can optimize online data. 95% can share the file via online to the students. Based on the interview, most of the data are sent through email. Concerning the Learning Management System (LMS), 80% of the respondents can check the audio and video device in it. There is 5% of the respondents not able to use features in the online teaching platform, while 80% have the skills to do it.

The interesting thing found in this research is more respondents do not have skills to revise and rewrite course documents in online platforms in CMS. Less than 50% of them can do it. The second interesting result is that 15% agreed not to have the ability to design, evaluate and deliver the English course using the online application, with 20% is not sure if they can do it. It means that 85% know how to do it.

Digital literacy in teaching does not mean that they can use the platform or application, but further, they can use it to manage it for teaching and learning processes — six points to dig up from the respondents in this part. The first three are about their knowledge and skills to check students' attendance online, assignments, and progress. In this study, the respondents indicated that more than 80% of them have the knowledge and ability to check students' words and progress, which means less than 20 are not sure, and only 5% do not know about it.

4.4 Similarity and Differences of Digital Literacy in Two Contexts

In the research, there are two different contexts of teaching GE in two universities. In the two institutions, the graduate competency, the contents, the delivery, and the method of teaching are different. Private university B focuses on reading, vocabularies, and grammar, while private university focuses on TOEFL-iBT®. This situation has created different contexts in the teaching process in the two institutions. However, from the result, the respondents from both universities share the same idea to apply ICT in supporting their teaching process or even to use it in the delivery of the class.

The two contexts also create the situation in which the lecturers exposed themselves to the use of ICT in teaching GE. In private university A, the use of technology is compulsory, and lecturers are directly exposed to the use of digital media in the teaching and learning process. The contents are available in soft copy embedded in the students and lecturer's portal desk. Attendance and examination are handles using digital mode. This situation forces the lecturers to update digital literacy.

In teaching GE at private university B, there is no requirement to use digital mode. Therefore, it is optional for them to use it. However, the questionnaire result explained that over 85% of the respondents use ICT in teaching. It can be said that the lecturers in this institution have the ability and willingness to involve digital tools to support the learning process, although the use of the platforms may still be limited. Although there are differences in the

contexts, respondents from the two institutions have the same desire that the institutions provide a better platform, so that the lecturers can teach more interactively using ICT. Besides, they require the institution to provide them with some training to develop their digital literacy, especially training in applying interesting digital platforms that finally they can create and design the content to support them in teaching GE.

5 Conclusion and Suggestion

5.1 Conclusion

From the discussion, it can be concluded that the two universities have a different context in teaching General English based on the objectives, target graduate, the content, and the delivery of the material. In this setting, the first institution is using digital mode even for the assessment, while the second institution is using the conventional mode, although in delivering the content, some have used ICT or digital mode.

Second, lecturers in both institutions have used ICT in supporting the GE teaching-learning process, and third, lecturers in both institutions have a good level in digital literacy, but in some points are still missing, especially in using the ICT during the delivery and in communication and collaboration.

The final point, lecturers in both universities have the same requirement for the institution to provide some training to develop their digital literacy. Although there are differences in the contexts, respondents from the two institutions have the same desire that the institutions provide a better platform, so the lecturers can teach more interactively using ICT. Besides, they need the institution to provide them with training to develop their digital literacy, especially training about how to apply interesting digital platforms that finally they can apply in the teaching-learning process interactively.

5.2 Suggestion

For the two institutions involved in this research, it is suggested to provide the lecturers with a platform in which lecturers can use it to teach in digital mode. It is also suggested to provide digital literacy training for them to be able to teach using digital mode interactively.

For future researchers, since the research is limited to the level of digital literacy in two institutions in a big city like in Jakarta, this topic can be used to search the wider scope and different contexts such as in the suburban and different courses.

ACKNOWLEDGMENTS

Thank you to the Bina Nusantara University for the supported grant.

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RE: Re:RE: MLNLP 2019-Paper Acceptance Letter-A370

Melania Wiannastiti <mwiannastiti@binus.edu>

Mon 12/16/2019 4:18 PM

To: MLNLP <mlnlp@aiase.net>

Cc: Kristianus Oktriono <koktriono@binus.edu>; Masda Simatupang <masdasimatupang@uki.ac.id>

Dear Ms. Oliver,

Attached is the requirement of conference registration

1. Registration Form
2. Camera ready paper (in doc and PDF)
3. Payment proof (There 2 proof : the first is 300 USD and the second is 50USD via Pay Pall)
4. Student ID

Please inform me if there is anything else needed.

Thank you

Regards,

Melania

From: MLNLP [<mailto:mlnlp@aiase.net>]

Sent: Wednesday, December 11, 2019 2:42 PM

To: Melania Wiannastiti

Cc: Kristianus Oktriono; masdasimatupang; Joice Yulinda Luke

Subject: Re:RE: MLNLP 2019-Paper Acceptance Letter-A370

Dear Melania Wiannastiti,

Yes, it's OK. You can transfer 350USD to us, but we suggest you to pay it by PayPal.

Ms. Oliver

Conference Secretary of MLNLP 2019

E-mail: mlnlp@aiase.net

Website: www.mlnlp.net

在2019年12月11 12时59分, "Melania Wiannastiti"<mwiannastiti@binus.edu>写道:

Dear Ms. Oliver

Thank you very much for the review and the LoA. I am preparing to do the payment but I need to get more information about it.

It is stated in the registration form that the student's fee is 450USD but a colleague of mine, Ms. Joice Yulinda Luke, once told me that based on your email to her, if author(s) are not able to attend the conference, the committee will cut the fee for 100USD.

I assume that since I am a registered student of a doctoral program in State University of Semarang and I (or one of the authors) am not able to attend the conference due to the time limitation, I should only transfer 350USD to the committee. Please advise us.

I look forward to getting the information soonest
Thank you

Regards,
Melania Wiannastiti

From: MLNLP [<mailto:mlnlp@aiase.net>]
Sent: Monday, December 9, 2019 4:51 PM
To: Kristianus Oktriono; Melania Wiannastiti; masdasimatupang
Subject: MLNLP 2019-Paper Acceptance Letter-A370
Importance: High

Dear Kristianus Oktriono, Melania Wiannastiti, Masda Simatupang,

We are glad to tell you that your paper **A370** has been accepted by MLNLP 2019 after the peer-review.

Please find the attached **Registration Form** and **Paper Acceptance Letter**. Please revise your final paper according to the review comments (see in the acceptance letter) and send back the registration documents before the registration deadline. If you want to ask for extension on the deadline due to some reason, please let us know in advance.

If you have any request or question about the conference, you are welcome to contact us.

--

Ms. Oliver
Conference Secretary of MLNLP 2019
E-mail: mlnlp@aiase.net
Website: www.mlnlp.net

Notification of Acceptance

2019 2nd International Conference on Machine Learning and Natural Language Processing (MLNLP 2019)

December 20-22, 2019 Sanya, China

Dear Author(s):

On behalf of the 2019 2nd International Conference on Machine Learning and Natural Language Processing (MLNLP 2019), we're glad to inform you that your paper:

Paper ID: MLNLP-A370

Paper Title: Digital Literacy of ELT Lecturers in Different Contexts

Author(s): Kristianus Oktriono, Melania Wiannastiti, Masda Simatupang

has been Accepted!

MLNLP 2019 provides a unique platform for global eminent researchers from the fields of Machine Learning and Natural Language Processing to share their research advancements and find solutions for the upcoming challenges in their respective areas.

All accepted and registered papers of MLNLP 2019 will be included in the ACAI 2019 Conference Proceedings (MLNLP 2019 is the workshop of ACAI 2019), published by **ACM (ISBN: 978-1-4503-7261-9)**, which will be archived in the **ACM Digital Library**, and indexed by **El Compendex and Scopus**.

MLNLP 2018 Conference Papers have been indexed by El Compendex and Scopus Successfully within 3 months after the publication by ACM (ISBN: 978-1-4503-6521-5), see more details: <http://www.mlnlp.net/history.html>



MLNLP 2019 Committee

**2019 2nd International Conference on Machine Learning and Natural Language Processing
(MLNLP 2019)**

Dec. 20-22, 2019 Sanya, China

**Reviewer Comments for Paper MLNLP-A370
Paper Title: Digital Literacy of ELT Lecturers in Different Contexts**

General Assessment	Excellent	Good	Fair	Poor
Originality of the paper			✓	
Quality of the paper			✓	
Completeness of the paper		✓		
Clarification of the paper			✓	
Applied value of the paper				
Specification Evaluation	Yes	No	Comments	
Is the title appropriate?	✓			
Is the topic appropriate?	✓			
Is the abstract gives a clear introduction?		✓		
Is the grammar correctly used?	✓			
Is the table and figure properly used?	✓			
Should material be added or removed?		✓		
Is the procedures, methods and data analysis appropriate?	✓			
Is the reference appropriate?	✓			
Final Decision for the Paper	Accept	Reject	Accept (need revision)	
			✓	

Comments:

The editing of the paper is overwhelming.

Have worked through the paper and have noted some typographical errors.

It would be shorter, cleaner and concise if they could bit shorten it.