Readiness of English Language Lecturers in Implementing Online Learning Based on Their ICT Skills and Needs

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Abstract. This study focuses on the lecturers' readiness in the English departments to apply online learning. The research objectives are to explore (1) the level of lecturers' readiness of in the English departments to apply online learning based on their knowledge and skills; and (2) the lecturers' needs in relation to their readiness in implementing online learning. This research uses descriptive quantitative method. The number of respondents who filled out the questionnaire was 121 consisting of 58 lecturers from state universities and 63 from private universities. They are spread over 48 public and private universities in Indonesia. The instrument used is a questionnaire with a Likert scale. The data collected through questionnaires were analyzed using descriptive analysis techniques. The results of this study indicate that (1) the level of lecturers' readiness is in the high category based on their level of knowledge and ICT skills; and (2) there are 3 main aspects needed, namely the need for ICT facilities, institutional support, and ICT training in learning.

Keywords: readiness, online learning, ICT skills

INTRODUCTION

The use of technology in learning activities has been widely applied in the forms of blended learning, hybrid learning, and/or fully online. It has become an important part as a tool to help English lecturers facilitate learning for their students (Gilakjani, 2017). Many studies have proven the advantages, effectiveness, and contribution of the use of ICT tools in improving the academic ability and affective domain of English learners (Liu & Yu, 2012; Kreutz & Rhodin, 2016; Hazarika, 2017; Parvin & Salam, 2015; Pirasteh, 2014; and Suriaman, Rahman, & Noni, 2018).

Due to the development and advancement of information and communication technology (ICT), online learning is continuously prospective and friendly to use. The numerous applications with diverse features allows teachers/lecturers to use and integrate ICT into their teaching. Many ICT applications are specifically designed for

learning purposes, such as learning management systems/LMS (eg: Moodle, Edmodo, Schoology, Claroline, and ATutor), ebooks, workbooks/worksheets, interactive encyclopedias, and online quiz makers applications (eg quizizz, Hot Potatoes, iSpring, Kahoot, and Socrative). There are also many websites or online learning applications containing ready-use materials that can be used by lecturers, both to support learning content in class and for enrichment. Basically, current ICT tools are good enough to support the teaching and learning process.

The question is whether lecturers have the readiness to use available ICT tools, especially online media, to achieve their teaching objectives. Research shows that teachers are not yet fully ready to implement digital and online-based learning in the teaching and learning process (So, 2005; and Al-Awidi & Aldhafeeri, 2017). On the other hand, other studies have shown that English teachers/lecturers are ready to integrate technology into their learning (Ventayen, 2019; Pusparini, Santosa, & Myartawan, 2017; and Qazaq, 2012). This indicates that the level of readiness of teachers/lecturers to use ICT in learning varies.

Apart from the readiness, the lecturers' needs in applying technology in learning should also be paid attention. Two of them are hardware and software. These two types of devices are an absolute requirement for online learning. Hardware can be in the forms of computers, laptops, smartphones, and tablets. While software consists of programs and applications used through the hardware. In the context of learning, there are two types of applications, namely generic applications and learning applications. Generic applications are made for general functions and are used for various types of purposes, while learning applications are specifically designed for learning purposes and are used to support teaching and learning programs. In university level, learning management system (LMS) has become a commonly used application to manage learning activities. Unfortunately, even though the LMS has been prepared by the institution, there are still many lecturers who do not use it (Noni, 2013).

Another type of leacturer's need is training on the use of ICT in learning (Noni, Jefri, & Nasrullah, 2017). This is important, especially if there is a specific or new application recommended by the management of higher education institution. The main goals is to equip lecturers with the knowledge and skills to apply it to deliver their lessons. Thus, the learning programs they carry out will be more effective and meaningful. This of course will certainly have an impact on achieving learning objectives.

This study focuses on two important issues, namely the readiness of lecturers to apply online learning and the needs of lecturers in relation to the use of online technology as a mode of learning in higher education institutions. This research specifically discusses the use of online technology in learning English as a foreign language.

In general, the results of this study are expected to contribute to the use of technology in learning in the English departments. In particular, this research is expected to be useful to: (1) provide information to lecturers in the English departments for further feedback in order to improve their performance in integrating technology into their learning; (2) provide information to stakeholders in the English departments of higher education institutions to be followed up with policies; and (3) enrich research references related to the use of technology in the teaching and learning process.

RESEARCH METHOD

This study uses a descriptive quantitative method. There are two variables studied, namely, the lecturers' readiness based on their ICT knowledge and skills and lecturers' readiness based on their needs. The first one refers to the level of readiness of lecturers in the English department in terms of their knowledge and skills in using various online technology applications in learning; while the latter one refers to the need for ICT facilities and internet connections, literacy and ICT skills training, and institutional support. The population consists of lecturers at the English departments in higher education institutions. Sampling was carried out based on the cluster of higher education institutions, namely state and private higher education institutions. The number of respondents who filled out the questionnaire was 121 lecturers consisting of 58 lecturers from state higher education institutions and 63 from private higher education institutions. They are spread across 48 public and private higher education institutions in Indonesia. The instrument used was a questionnaire with a Likert scale. The data collected through questionnaires were analyzed using descriptive analysis techniques.

RESULT AND DISCUSSION

In this section, the researchers presents the result of data analysis and discussion on the readiness of English language lecturers in implementing online learning based on their ICT skills and needs.

Result

The result of data analysis consists of two parts, namely the lecturer's knowledge and skills in using ICT tools and the lecturer's needs in relation to the implementation of online-based learning.

1. The lecturer's knowledge and skills in using ICT tools

This sub-section presents the result of data analysis on the lecturer's knowledge and skills in using ICT tools. It includes the lecturer's competence in using internet-based and e-learning programs, word processing and presentation software, social media, learning management system, and video conference applications, as shown in detail in the following table.

Table 1. Lecturer's knowledge and skills

No.	Statement	Score
1	I am competent in using e-mail.	91,57
2	I am competent in using word processing software, such as Microsoft Word	86,28
3	I am competent in using presentation software such as Microsoft PowerPoint.	90,08
4	I am competent in creating a blog.	66,61
5	I am competent in using LMS, such as Moodle, Google Classroom, and Edmodo.	77,19
6	I am competent in using social media, such as WhatsApp, Facebook, Instagram, YouTube, and Twitter in my teaching.	85,62
7	I am familiar with the e-learning application used at my institution.	81,98
8	I am competent in using video conference application, such as zoom, Google Meet, and Skype	84,30
9	I am competent in surfing information or learning resources in the internet.	87,11
	Mean score	83.42

Table 1 includes 9 statements on the knowledge and skills of English lecturers in using online technology in their teaching delivery. Of the 9 items, 5 items were included in the very high category, 3 items were included in the high category, and 1 was in the medium category. Each category is presented based on the score gained for each item which is described in order from high to low.

For the very high category, item 1 is in the highest score, namely 91.57. This item is about the lecturer's competence to use e-mail. This score indicates that most of lecturers have already been using email. Although the score of this item is very high, it is actually quite surprising in this digital information era that there are still a small number who state that they cannot use e-mail. The second highest is item 3 with a score of 90.08. This item about the lecturer's competence to use presentation applications, such as 'Microsoft PowerPoint. This means that the lecturers have excellent skills to use presentation applications and at the same time it means that the lecturers are very well prepared to use online technology to support their teaching and learning process.

The next item in the very high category is item 9 which includes a statement about the competence to surf the internet to browse information or learning resources. This score is 87.11, which means that the lecturers have excellent skills to use internet media in searching teaching materials and other sources of information. Another one is item 2 which is about the competence of lecturers to use 'word processing' applications, such as Microsoft Word. This item scores 86.28, which

means that the lecturers have very good skill in using word processing applications to support their teaching tasks. In other words, the lecturers of English department are very familiar with the 'word processing' application. For item 6 which is also included in the very high category, the score gained is 85.62. This item is about the competence of lecturers to use social media, such as WhatsApp, Facebook, Instagram, YouTube, and Twitter in their teaching. With this category, lecturers are considered to have excellent mastery in integrating social media applications to support their teaching and learning activities.

In the high category, there are 3 items, namely items 5, 7, and 8. The following is described in order from higher to lower score. The highest in this category is Item 8 (84.30). This item is about the lecturers' competence in using video conferencing applications, such as Zoom, Google Meet, and Skype. It can be further elaborated that the lecturers have adequate skills to deliver their lesson through video conferencing applications. The next is Item 7 with a score of 81.98. It is about the familiarity of the lecturers with the e-learning application used in their respective institutions. This indicates that the lecturers are familiar with the e-learning application implemented in their institution. It may vary from one higher education institution to another. The third one in this category is Item 5 (77.19) which is about the competence of lecturers to use LMS applications, such as Moodle, Google Classroom, and Edmodo. The score gained is 77.19. This shows that the lecturers are competent enough to use the LMS application to manage their classes online.

In the medium category, there is one item, namely Item 4 with a score of 66.61. It is about the lecturers' competence to create a weblog. With this category, it can be concluded that lecturers already have the skills to create their own webblog and at the same time indicate that they have adequate readiness to apply online learning in their learning process. Based on the results above, it can be inferred that generally the lecturers of English department have high level of readiness in implementing online learning. This is in line with the average score gained, namely 83.42 which is in high category.

2. The lecturer's needs in implementing online-based learning

This sub-section presents the result of data analysis on the lecturer's needs in implementing online-based learning. It includes the lecturer's needs for ICT-related training, support for ICT facilities, and institutional support, as illustrated in detail in Table 2.

Table 2 is about the needs of lecturers at the English department in implementing online learning. Of the 8 items, 6 items are in the very high category and 2 items in the high category. The description of each item is presented according to the categories. Two items are in the highest score of the very high category, namely items 6 (88.43) and 7 (88.43). Item 6 is about the need for support of ICT facilities on campus. This data indicate that the need for ICT facilities on campus is

still very high. In addition, institutional support for ICT implementation is also very much needed (item 7). Furthermore, item 5 (88.26) is about the need for a faster internet connection on campus. In other words, lecturers still really need a faster internet connection to support the implementation of online-based learning on campus.

Other items in the very high category are items 8, 4, and 1. Item 8 (87.77) is about the students' need for training of using computer-based applications used on campus. In other words, lecturers expect training for students to familiarize them with the applications recommended by the campus. Item 1 (85.79) is about training needs related to information and communication technology. Lecturers still want the ICT training. In particular, lecturers expect to have a training in developing web-based materials for better online learning deliveries (item 4).

Table 2. Lecturer's needs

No.	Statement	Score
1	I need ICT training	85.79
2	I need training to familiarize myself with the application used in my campus	81.98
3	I need training on pedagogical skills with ICT use.	84.96
4	I need training on web-based materials development.	86.28
5	Faster internet connection in campus is still very much needed.	88.26
6	Support for ICT facilities in campus is still needed.	88.43
7	Institutional support for the implementation of ICT is still needed.	88.43
8	Students need training in using computer-based applications used in campus.	87.77
	Mean score	86.49

Based on the description above, it can be concluded that the lecturers still have a very high need in terms of the implementation of effective and efficient online learning. The intended needs are related to ICT facilities and infrastructure, training for both lecturers and students, and institutional support. The fulfillment of these needs will greatly affect the level of readiness of lecturers to carry out online learning which can have an impact on increasing student learning outcomes significantly.

Discussion

The discussion consists of two parts, namely the lecturer's readiness based on their knowledge and skills in using ICT tools and the lecturer's readiness based on their needs in relation to the implementation of online-based learning.

1. The lecturer's readiness based on their knowledge and skills in using ICT tools

One of the factors determining the readiness of lecturers to implement an online learning system is their knowledge and skills in using ICT tools, especially those recommended by their institution where they work. Based on the results of data analysis above, the knowledge and skills of the lecturers are in the high category. This means that the level of knowledge and ICT skills of lecturers is good enough to support the online learning system on their respective campuses and therefore have a high level of readiness to implement digital technology-based learning.

The results of data analysis for each item indicate that there are several aspects of ICT knowledge and skills that are in the very high category. Email is one of the electronic facilities that can be used by most lecturers. In other words, almost all lecturers can use email very well. This is very logical because email has become a very common medium of communication used for many purposes today, such as sending letters, documents, audio and video recordings, sending assignments to students, and sharing information. This also applies to presentation applications, such as PowerPoint. The lecturers also have very good skills to use it. This is also very reasonable because it is very widely used, especially for teaching and learning activities. Word processing applications, such as Microsoft Word are also very familiar with the lecturers. This application is very often used for various purposes, such as making RPP (lesson plan) documents, teaching materials, and questions.

The emergence of internet has been very spectacular. It has been very massively used in all sectors due to its capacity and usefulness that can meet various human needs. Humans become dependent on it. That's why, humans are trying to figure out how to use it for the various activities they need. Lecturers are one of the groups of users who are interested in the internet with various purposes. Based on the results of data analysis, the lecturers already have very good knowledge in terms of using internet facilities to search information or learning resources. In addition, lecturers are also capable of using social media, such as WhatsApp, Facebook, Instagram, YouTube, and Twitter in their teaching. In conclusion, the lecturers are very familiar with various internet-based applications for various activities. Thus, in terms of this aspect they have very high level of readiness. This is very favorable for the lecturers to be more creative and innovate in deliver their online learning programs.

On a more technical aspect, the lecturers seem to have quite good competence. For example, they stated that they were quite good at using video

conferencing applications, such as Zoom, Google Meet, and Skype in carrying out online learning. This can be understood because during the COVID-19 pandemic all lecturers were forced to continually doing their tasks in teaching their courses online, both synchronously and asynchronously. For synchronous mode, many lecturers choose video conferencing applications to interact with their students. Of course there is no other way for lecturers except they have to find out how to use the application. The result shows that the lecturers already have a fairly good readiness for this aspect.

Furthermore, the lecturers' readiness based on their ICT knowledge and skills can also be seen from their competence in using e-learning applications used in their institution. The results of data analysis showed that the lecturers were quite familiar with the e-learning applications recommended by their institution. They also stated that they had already used LMS applications, such as Moodle, Google Classroom, and Edmodo. However, there should be more data to explore the common features used in each LMS used. Another indicator related to the variable of ICT knowledge and skills is the ability of lecturers to create weblogs. The results of data analysis show that the level of lecturers' competence to make blogs is in the medium category. This is actually quite good even though it is still in the medium category. The competence lies not only in how to create a weblog, but also how they write and optimize it with various kinds of contents. Blog content can vary depending on the interests of the blog owner.

The description above indicates that the lecturers already have the adequate competence to use ICT tools. Therefore they have a high readiness to apply online learning in their classes. Unfortunately, there is no data on how well lecturers are able to integrate these applications in their teaching and learning process, especially the generic applications, such as word processing, presentation application, spreadsheet, and social media applications. This can be used as research residue for further research.

2. The lecturer's readiness based on their needs in implementing online-based learning

This section discusses the lecturers' needs regarding their readiness to implement online technology-based learning. There are 3 aspects discussed, namely the needs for ICT facilities, institutional support, and ICT training for learning activities. The results of data analysis show that the need for ICT facilities on campus is still very high, including internet connections. These ICT facilities are of course very diverse, ranging from hardware such as computers, LCD projectors, laptops, and printers, to software such as LMS applications with various main and additional features. The need for a faster internet connection is also very high. In other words, the subscribed internet bandwidth must be sufficient to meet the internet needs of lecturers and students, so that online learning activities run well.

The next need is institutional support for the application of online technology-based learning. This need is in the very high category. This means that campus management from all levels are needed to facilitate online learning. Such support can be in the forms of adequate ICT facilities, sufficient internet connections, and capacity building for lecturers related to the use of ICT devices, digital technology-based learning systems, development of web-based teaching materials, computer-based assessments, and distance learning systems. For the needs of developing the capacity of lecturers and students in using ICT facilities, the results of the analysis show that the lecturers very highly need trainings on the use of information and communication technology. These trainings are certainly broad in scope; it could be related to how to use certain applications and their features, such as the LMS used in their institutions; it could also be related to the integration of ICT use into pedagogical aspects; or even online assessment systems. Lecturers also urgently need web-based material development training to meet more appropriate online learning contents. In addition, they also expect ICT training for students, especially applications that are recommended on campus. This is an important issue and policy makers must follow up with a feasible programs.

CONCLUSION

This conclusion consists of 2 points. The first is the level of readiness of lecturers to apply online learning based on their knowledge and skills. The level of readiness of lecturers is in the high category. This is evidenced by their high level of ICT knowledge and skills. It can be concluded that based on their level of ICT knowledge and skills, the lecturers of English department of higher education institution have good readiness related to online learning. The second is the ICT needs of lecturers in implementing online technology-based learning. In relation to this point, there are 3 main aspects studied, namely the needs for ICT facilities, institutional support, and ICT training in learning. The results of the analysis show that the intended needs are in the very high category. Therefore, there should be a serious effort in order to fulfil the needs for a better implementation of online learning.

Based on the discussion of the research results and conclusions above, the following are some suggestions. The management of each higher education instution should provide a program for lecturers in the form of capacity building on ICT literacy and skills to support online learning. The lecturers needs regarding the application of online learning is quite high. Therefore, it is necessary to identify these needs based on priorities for further follow-up.

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