



IJLLALW

International Journal of Language Learning and Applied Linguistics World
(IJLLALW)

Volume 25 (3), November 2020; 17-32.

Siti Sopiah., & Edi Purnama

ISSN: 2289-2737 & ISSN: 2289-3245

www.ijllalw.org

**TEACHING ENGLISH IN THE ERA OF INDUSTRIAL
REVOLUTION 4.0 :
STRATEGIES AND CHALLENGES
(A CASE AT FIVE PRIVATE UNIVERSITIES IN BANDUNG,
INDONESIA)**

Siti Sopiah

English Department Universitas Nasional PASIM Bandung Indonesia

Email: ambusitisopiah28@gmail.com

Edi Purnama

English Department Universitas Nasional PASIM Bandung Indonesia

Email: edpur88@gmail.com

ABSTRACT

The aim of this research is not only to find out strategies of English language lecturers to promote education 4.0 into their teaching but also to unveil challenges the lecturers encounter in the teaching. Descriptive qualitative analysis method is used in this research. The data was taken by questionnaires in this study and it took one semester. The result of the research shows that attributes of initiating process for most categories have index score between of 60-80. It implies that strategies in initiating processes carried out to promote Education 4.0 in five universities in Bandung are included into a Good category. Similarly, attributes in monitoring processes reaches the index score of 67,1 in total. It reflects that strategies in monitoring processes conducted by the lectures are included into a Good category. On the other hand, all attributes in the evaluating process are scored with the index score of 47.9. It reflects that lecturers' strategies in the evaluating process are categorized into Moderate. In terms of challenges lecturers encounter, difficulties to expose students language skill reaches a Very high index score of 83,7. In contrast, maintaining lecturers motivation in teaching has the lowest index score of only 53,3 which is included into a Moderate category. Meanwhile, other challenges carry High categories. The data implies that challenges the lecturers face seemingly more on techniques of teaching than external factors such as facilities and signal of internet.

KEYWORDS: education 4.0, industrial revolution 4.0, a distance learning, e-learning, personalized learning, project based learnin

17

The international journal of language teaching and applied linguistics world

www.ijllalw.org

Copyright 2020



IJLLALW



INTRODUCTION

Indonesia starts to introduce term industrial revolution 4.0 (IR 4.0) in the past years. The term refers to an era in which easier quality of life offered as a consequence of the application of high technologies in computer and technology. Industrial revolution 4.0 is marked by a developing technology in all fields of human life to align artificial intelligence, robotics, the internet of things, autonomous vehicles, 3D printing, quantum computing and nanotechnology (Schwab, 2016). By this, humans being's role is simplified to carry out the burden. The term, recently, is used not only to industry but also broader areas such as higher education. Education 4.0 then is formulated as a response to IR. 4.0 (Hussin, 2018).

Education 4.0 has different trends. One of the trends is an emergence of a flexibility for learning in which learning becomes borderless (Fisk, 2017). It implies that learning can be done anywhere anytime. For today's term, it tends to be known as a distance learning as an approach and e-learning as a method. The new concept of learning that is borderless affects to a different way of teaching and learning. Today lecturers need to provide teaching with information and technology. Besides, Education 4.0 proposes lecturers to promote autonomous and student centered learning as well as to make students get involved more on project-based learning (Fisk, 2017). Such trends bring a new formula for lecturers to deal with the new requirements and get a new role (Abdelrazed, Janscen et.al, 2016). To take the example, English language lecturers, nowadays, have to be capable not only with English speaking, writing, reading and listening but also skillful with critical thinking, creativity, communicative skill, collaborative skill, and technology mastery in hope they can create qualified and skillful students who are able to compete in the 4.0 IR era. The fact may signify that promoting Education 4.0 to students is crucial.

In Indonesia, education 4.0 features have been also included into curriculum. However, it may bring challenges for lecturers especially English language lecturers as facilitators in language learning. This is in line as what is stated by Brown (2001) that a language teacher may face challenges that may be more than what he expects since he has to assist students who are learning English as foreign language. The challenges seem to be more complicated when the lecturers have to teach in the era of 4.0 IR where today's learning needs to involve ICT, encourage self-regulated learning, strong and positive character. In other words, teaching English in the era of IR 4.0 needs a synergetic and multi-faceted model of education (Suhardi, 2019) in which seemingly it provides a tough challenge for Indonesian lecturers. Regarding Indonesian context, higher institutions in Indonesia are proposed to migrate to e-campus, provide e-laboratory, e-services, e-library, e-learning, online tutor, e-lecturer, and e-thesis (Djatmiko, 2018).





Among the features, e-learning seems to have been widely adapted by Indonesian higher education nowadays, especially since the world's order has been being ruled by covid-19. Under the covid-19 pandemic, lecturers are forced to deliver learning and teaching processes at a distance in which all of interaction and communication are done through e-learning. E-learning is linking technology as cloud computing, internet of things, with further artificial intelligence, and virtual augmented realities (Hocheng, 2018 in Suherdi, 2019) in which it is expected to bring positive impact into learning. E-learning helps to improve student learning and allow students to engage with the content (Lister, 2014). By this, he adds lecturers have to regard course structure, content presentation, collaboration and interaction, and timely feedback into main consideration when designing e-learning.

Relating to the issue, the research aims at investigating two problems. Firstly, it is to identify what English language lecturers strategies to promote 4.0 Education at five private universities in Bandung, Indonesia. Secondly, this research aims at finding out challenges the English lecturers encounter in the teaching. English is a general basic subject that is taught in every university in Indonesia. Both government and private universities are obliged students to take the subject. In academic year 2019/2020, students at first year must follow English into their credits. Early beginning, the subject includes general English course include speaking, writing, reading and listening. The five private universities in Bandung also provided general English for students in the first year.

LITERATURE REVIEW

There are literature reviews in teaching English in the era of Industrial Revolution 4.0 (IR4.0). The first is "Being an English teacher in industrial Revolution 4.0 : An Overview about Roles, Challenges, and Implications" In 2018 by Angelianawati. It discusses English language teachers' roles in the era, challenges may teachers face as well as implications behind the potrays. Second, it is entitled "Education 4.0 Made Simple: Ideas for Teaching" by Anealka Azis Hussin" in July, 2018. She shares some ideas on how to implement Education 4.0 trends in the language classroom and students' feedback on their experience in learning in Education 4.0 classroom.

The Third is the effectiveness using technology in teaching and learning the English language. the use of technology in learning and teaching the English language. Exploring the exercise by the advancements of technology in education. At the moment using of technology for teaching has become an integral part of successful learning and teaching languages in many parts of the world. (Razak et all)





The fourth is Teaching Arabic as a foreign language (TAFL) in Indonesia in the context of industrial revolution 4.0 had been discussed and conducted. They aimed investigating the challenges and opportunities in accelerating the quality of Arabic language. (Albantani AM, Madkur A)

Education 4.0

Education 4.0 adapts industrial revolution 4.0 (IR4.0) features. The features include the emergence of artificial intelligence, robotics, the internet of things, autonomous vehicle, bio and nanotechnology, 3-D printing, material science, quantum computing and energy storage (Diwan, 2017). Since of IR4.0, Education 4.0 then exists as the response to the needs of IR4.0 (Hussin, 2018). Education 4.0 maximizes the use of technology, internet, and information as well as highlights innovation. In education 4.0, students learn skills and knowledge they need and the source to learn these skills as well, peers are significant in their learning process, and collaborative learning among students is introduced while teachers are as facilitators in their learning (Fisk, 2017). In more detail, Fisk (2017) formulates nine features of Education 4.0.



Figure 1: 4.0 Education trends

Figure 1 shows nine trends of education 4.0. Firstly, learning becomes borderless. It implies that learning can be performed in a diverse time and place. Flipped classroom where students practice at classroom interactively but gain the theory outside classroom is recommended in which e-learning is used as a tool to facilitate that. Secondly, learning is personalized to individual students. It means that teachers will provide harder tasks after students achieve certain mastery level. Teachers will make more practices for students who haven't achieved target of the learning. In personalized learning, teachers need to promote positive learning experience so that students's confidence of academic ability can be possessed.

Thirdly, students are free to determine their own way to learn. A subject has output and it is predetermined by the institutions in charge of the curriculum. However, students are able to modify their learning process as long as it is in line with the target of the learning output. Fourthly, project-based learning for students has more room. The project requires students to





apply their skills in a short term projects to a variety of situation. As a result, they are imposed to practice their organizational, collaborative and time management skills that will be basic that can be used by every student in their academic further careers.

Fifthly, curricula will make more opportunities for students to require human knowledge and face-to-face interaction. As a consequence, internship, mentoring projects and collaboration projects need to be promoted to open more opportunities for students to obtain real-world skills that are representative to their jobs. Sixthly, students will be exposed to data presentation. It involves theoretical knowledge to numbers and uses reasoning skills to make interpretation based on logic and trends from given sets of data.

Seventhly, students will be assessed differently in which knowledge of a student will be measured during learning process, meanwhile the application of their knowledge will be measured when students work on projects in the field. Eighthly, designing and updating the curriculum needs students' opinion as consideration. Lastly, lecturers need to expose students to become more independent in their own learning. Lecturers are only as facilitators who will guide the students through their learning process.

A Distance Learning

An emergence of fast technology breakthrough changes what people think to learning. Learning initially is delivered traditionally in which both students and teachers attend in same place and time. However, recently it is being replaced by a different form of learning and teaching processes in which both interaction and communication between students and teachers are delivered online. Moreover, today technology provides borderless learning. Students in Indonesia can attend virtual classes taught by an English teacher in Canada. A distance learning works where students can study in different place and time with teachers (Simonson et al., 2015). The learning, however, is set in line with an institution schedule provided. What make a distance learning and e-learning different lies to the objectives of teaching. A distance learning is delivered to different places at different time. E-learning, however, can be delivered at classroom with face to face interaction with lecturers but students gain sources of learning, for example, from internet that can be done in classroom or outside classroom (Simonson et al., 2015).

The keys to successful of a distance learning to be as effective as face to face learning has a lot to do with design, development, and delivery of instruction, not to geography or time (Simonson et al., 2015). Traditional education takes place at the same time in the same place. This is typically is teacher centered. On the other hand, a distance learning can be delivered to different places at the same time and this is typically student centered in which students are able to choose, to learn, and to access instructional material independently. In a distance learning, different approaches





need to be considered. A distance learning boasts autonomous learning. Autonomous learning derives from the idea of learners can learn autonomously.

Autonomous Learning

Bekleyen and Selimoglu (2016) argue that autonomous learning helps the learners to have a positive attitude about learning processes and make the students be responsible with their learning. With regard to a language learning, autonomous learning is able to be implemented to help the students study language both in and out of the classroom. Orariwivatnakul and Wichadee (2017) point out autonomous language learning students need to know the way to improve learning environment in which they have their own self-organized language learning. Thanasoulas (2000) views that autonomous learning derived to the ideas that the learner's study independently with a goal to progress learners' responsibility for their own learning and for learners's right to decide their own learning. Student centered learning has been seen as a modern methodology in teaching. This is in line with what has been stated by Freeman (1987 in Sánchez Calvo, 2007) that "the general pattern in modern-day methodology is for the teaching to be learner-centred". Students centered learning is a process or activity that work more on how to do things than knowing what to learn (Sánchez Calvo, 2007). In terms of teaching in 4.0 revolution era, this approach also tends to become one of keypoints for 4.0 education. Under 4.0 industrial era, the use of information and communication technology is maximized to enhance learning that implies in the process of learning, learners have to take role actively than teacher. In other words, learners are demanded to be an active agent in the learning process. By this, it shifts the focus of teaching from teacher centered learning to student centered learning (Simonson et al., 2015). Besides, today learning to highlight project based learning (Fisk,2017). In term of learning English as second and foreign language, students centered learning was initiated from a concept that language acquisition could not take place through habit formation but through some innate capacity that humans possess (Chomsky,1959 in Sánchez Calvo, 2007). Acquiring language can not be achieved merely by imitated controlled language input but it has to do with learners have to be seen as active agents involved in the learning process. Language learning then has been seen as a natural cognitive process in which learners are finally responsible for their own learning. (Sánchez Calvo, 2007).

Challenges in Teaching English in Industrial Revolution 4.0

Every language teacher may encounter challenges in the process of teaching as Brown (2001) states that when someone chooses to be a language teacher, he may face challenges that may be more than what he expects because he has to assist students who are learning English as foreign language. The challenges seems to be clearer especially when they teach English in the era of industrial revolution 4.0. In her journal, Angelianawati (2018) suggests English language teachers have to face the fact that recently students are living surrounded by technology advancements and





industry. Therefore, language teachers should occupy themselves with ICT-literacy. As a result, teachers need to arrange lessons provided by technology itself which meet the need of Industrial Revolution 4.0, i.e online learning and hybrid/blende learning. Besides, lifelong learning should be maintained, and curriculum needs adjustment to meet the requirements of Education 4.0 as Schwab (2017) argues that Industry 4.0 generates continuous change in wide ranging fields and rapid emerges of technology.

In Indonesian context, through her research Anggraeni (2018) gains three challenges revealed in promoting Education 4.0 in English subjects which covers lecturer's teaching technique, students' speaking skill, and facilities. In more details, English language lecturers need to apply various teaching techniques to design in hope that the students can be more active and be interested in the classroom. Secondly, students' speaking skills. In promoting 4.0 education, different range of speaking fluently becomes challenge for lecturers. The last is facilities, lecturers assume that in promoting Education 4.0 especially in English for Survival class they encounter problem instabilize internet connections, occupy smartphone and the platform of WhatsApp and Instagram. The fact leads to a suggestion that both the lecturers and the students need to highlight those challenges and solve those problems.

RESEARCH QUESTIONS

Relating to the issue of teaching English in the era of Industrial Revolution 4.0. Accordingly, the following research questions are taken into consideration:

What are English language lecturers strategies to promote 4.0 Education at five private universities in Bandung, Indonesia?

What are challenges the English lecturers encounter in promoting 4.0 Education in the teaching?

METHODOLOGY

Descriptive qualitative analysis method is used in this research. The data was taken by questionnaires in this study and it took one semester. The respondents were 27 English language lecturers taught General English subject.

Participants

A group of 27 lecturers from both sexes (female and male) attended in this study. Their age was between 27 and 55. They were lecturers from five private universities in Bandung, Indonesia teaching General English subject in the first year academic 2019/2020. They taught students from management, logistics, computer science, logistics management, architectures, logistics management, accounting, architecture, and economics major. Students of General English often do not have a particular reason for going to English classes, but simply wish to learn to speak





(and read and write) the language effectively for wherever and whenever this might be useful for them (Harmer, 2007).

Instruments

The instrument which was used for collecting the data was a questionnaire with 28 items was prepared by the researchers. Each item of the questionnaire consisted of five options (Never, rarely, sometimes, often, always) based on Likert Scale about strategies and challenges for promoting 4.0 education in teaching during 2019/2020 academic years. The questionnaire items were validated by two experts holding magister degree in English Education who are also English lecturers. They were asked to validate and commented the questionnaire for its appropriateness. The questionnaire was then distributed to all the 27 English lecturers who taught General English subject. General English is a subject which is taught in the first year of every college students. Excel program was utilized to analyze the data quantitatively in addition to descriptive qualitative analysis.

Design

The design of this research is a descriptive survey study in which the researchers used data collection tool like questionnaires for the process of data collection. From time to time it is needed to use a survey in order to understand better how things are really operating in your own, personal environment, in classrooms or other learning settings or to describe the abilities, performances and other characteristics of the learners, teachers and administrators involved in the professional life (Brown, 2002, p. 117).

Data Analysis

The purpose of this study was investigating lecturer’s effort and challenges in promoting 4.0 education of five private universities in Bandung according to trends of 4.0 education to understand the problems and looking for appropriate and suitable policies and strategies to improve the quality of the teaching. So, for collecting the data, aset of questionnaire with 28 items was prepared by the researchers.

Table 1: Analysis key of quantitative data collected using questionnaire (Riduwan, 2011)

0 % - 20 %	<i>Very weak</i>
20% – 39,99%	<i>Weak</i>
40% – 59,99%	<i>Moderate</i>
60% – 79,99%	<i>Strong</i>
80% – 100%	<i>Very strong</i>



**RESULTS AND DISCUSSION**

This section reports the results of English language lecturers strategies and challenges in promoting 4.0 education. Questionnaire administered to the 27 lecturers of English who taught general English to academic year 2019/2020 students in five private universities in Bandung. It involved strategies used in the process of teaching in the era of IR. 4.0 which are classified into initiative process, monitoring processes, and evaluating processes. Strategy is “the art of planning the best way to gain an advantage or achieve success” (Collins dictionary, 2020).

Lecturers’ strategies to promote 4.0 Education

Table 2: Lecturers’ strategies in initiating process

No.	Attributes	Responses										Index Score	Category
		Never		Rarely		Sometimes		Often		Always			
		F	%	F	%	F	%	F	%	F	%		
1.	Having initiatives to search information of english learning in era 4.0 IR	1	3,7	7	25,9	10	37	7	25,9	2	7,4	61,5	Good
2.	Designing a distance learning material	0	0	0	0	4	14,8	17	63	6	22,2	81,5	Very Good
3.	Enhancing skill of information and communication technology mastery	0	0	4	14,8	13a	48,1	11	40,7	1	3,7	71,1	Good
4.	Designing learning that is personalized to students	0	0	1	3,7	3	11,1	11	40,7	2	7,4	48,1	Moderate
5.	Planning project based learning	0	0	1	3,7	10	37	11	40,7	1	3,7	60	Good
TOTAL		1	0,7	13	9,6	40	29,6	57	42,2	12	8,9	64,4	Good





Table 3: Lecturers's strategies in monitoring processes

No.	Attributes	Responses										Index Score	Category
		Never		Rarely		Sometimes		Often		Always			
		F	%	F	%	F	%	F	%	F	%		
1.	Making more practices when students need it during teaching	0	0,0	0	0,0	3	11,1	17	63,0	7	25,9	83,0	Very Good
2.	Teaching English using information and communication technology	0	0,0	1	3,7	4	14,8	11	40,7	11	40,7	83,7	Very Good
3.	Asking students to find out information for themselves, create their own materials, decide their own syllabuses, and self-asses.	10	37,0	15	55,6	1	3,7	1	3,7	0	0,0	34,8	Poor
4.	Asking for and respecting learners' request, lessening talk and increasing in learner activation	0	0,0	2	7,4	10	37,0	14	51,9	1	3,7	70,4	Good
5.	Giving Harder tasks after students achieve certain mastery level.	0	0,0	2	7,4	7	25,9	11	40,7	2	7,4	58,5	Moderate
6.	Providing positive reinforcements to promote positive learning experiences.	0	0,0	1	3,7	4	14,8	11	40,7	3	11,1	54,1	Moderate
7.	Providing project-based learning for students	0	0,0	4	14,8	8	29,6	11	40,7	2	7,4	63,7	Good
8.	Asking students to learn independently	0	0,0	0	0,0	2	7,4	11	40,7	10	37,0	74,1	Good
9.	Assessing learners for their readiness to learn before learning process	0	0,0	1	3,7	3	11,1	11	40,7	2	7,4	48,1	Moderate
Total		10	4,1	27	10,7	56	21,4	109	40,3	39	11,5	61,7	Good





Table 4: Lecturers' strategies in evaluating processes

No.	Attributes	Responses										Index Score		Category
		Never		Rarely		Sometimes		Often		Always		F	%	
		F	%	F	%	F	%	F	%	F	%			
1.	Giving advance test only after students achieve certain mastery level.	0	0,0	2	7,4	7	25,9	11	40,7	2	7,4	58,5	Moderate	
2.	Asking learners for their readiness in submitting assignment (the deadline)	0	0,0	1	3,7	8	29,6	11	40,7	1	3,7	55,6	Moderate	
3.	Measuring learning output based on conventional test	1	3,7	5	18,5	10	37,0	11	40,7	1	3,7	66,7	Good	
4.	Measuring learning output based on students project.	2	7,4	4	14,8	5	18,5	11	40,7	2	7,4	58,5	Moderate	
Total		3	2,2	12	8,9	30	22,2	44	32,6	6	4,4	47,9	Moderate	

Table 2 shows attributes of initiating process for most categories (having initiatives to search information of English learning in era 4.0 IR, enhancing skill of information and communication technology mastery, planning project based learning) have index score between 60-80. It implies that initiating processes carried out to promote education 4.0 in five private universities in Bandung are included into good categories. However, there is one attribute (designing a distance learning material) is included into Very good with 81,5 the index score. On the other hand, there is an attribute (designing personalized learning) that is categorized into moderate since it embedded with only 48,1 the index score. The data signifies that in the initiating process, the lecturers tend to be skillful and enthusiasm in designing a distance learning material than designing personalized learning. This lies for some reasons. They were teaching under Covid-19 pandemic so that the process of delivery material at a distance learning became a must. Furthermore, the researchers assumed that implementing personalized learning in a larger class consisting 30 students needs more lecturers effort.

Table 3 points out that attributes for monitoring processes reaches 61,7 for the index score in total. It reflects that attributes in monitoring processes perceived by English language lectures of five private universities in Bandung are included into Good. In more detail, attribute of teaching English using information and technology reaches the highest index score that is 83,7. The highest number implies that English language lecturers implemented teaching with information and communication technology in five private universities in Bandung significantly. It was performed through E-learning. It is linking technology as cloud computing, internet of things, with further artificial intelligence, and virtual augmented realities (Hocheng, 2018) in which it is





expected to enhance learning. E-learning helps to improve student learning and allow students to engage with the content (Lister, 2014). The technology the leacturers used includes the use of teleconference platforms, such as Zoom Meeting, G meeting, Cloud x meeting, and the use of learning platforms, such as Google Classroom and Khan Academy. The table also points out that the respondent seemingly have not promoted education 4.0 in terms of personalized learning significantly. This can be seen by the fact Giving Harder tasks after students achieve certain mastery level and providing positive reinforcements to promote positive learning experiences have only each 58,5 and 54,1 index score which indicates that they are included into a Poor category.

Table 4 finally points out all attributes (giving advance test only after students achieve certain mastery level, Asking learners for their readiness in submitting assignment (the deadline), measuring learning output based on test, measuring learning output based on students project)in the evaluating process are scored with the index score of 47.9 for the total. This suggests that lecturers' strategies in the evaluating process is categorized into a Moderate category.

Challenges lecturers encounter in teaching English in 4.0 IR era

Table with 14 columns: No., Attributes, Responses (Never, Rarely, Sometimes, Often, Always), Index Score, and Category. It lists 9 attributes related to teaching challenges and their corresponding scores and categories.





Table 5 indicates that lecturers encountered challenges both in internal and external factors during teaching. Difficulties to expose students language skill reaches a Very high index score of 83,7. In contrast, maintaining lecturers motivation in teaching has the lowest rank with index score of only 53,3 which is included into a Moderate category. Meanwhile other attributes carry High categories. A lack of skill in using information and communication technology obtains index score of 65,5, finding effective teaching technique for language exposure reaches 66,7 of index score. Meanwhile, facilities provided by universities is categorized into High with 66,7 index score. Sustaining students' motivation gets 70,4 index score. The last, internet signal problems is of 73,3 index score. The data implies that challenges the lecturers face largely on techniques of teaching than external factors such as facilities and signal of internet. As Fisk (2017) argues that one of the trends of education 4.0 is borderless learning which reflects a distance learning and e-learning. However, as English learning needs more practice than only material explanation (Harmer, 2017).

CONCLUSION

The research question of this study looked at strategies based on 4.0 education trends of English lecturers in promoting Education 4.0 and also to find out challenges in the teaching. As shown in the study, most of lecturers' strategies in the process of initiating are categorized into Good. Meanwhile, dominantly strategies delivered in monitoring processes is included into Good, and in evaluating processes is included into Poor. Among them, processes of monitoring got the highest index score. It implies that strategies of lecturers in providing learning experiences for students is more relevant than in terms of planning and evaluating. In evaluating, project based learning is not practiced significantly and the measurement of students skill is still on test based than project based. Besides, Education 4.0 trends that have been widely promoted in the private universities in Bandung is borderless teaching. Meanwhile, autonomous learning including project based learning and personalized teaching have not delivered significantly.

The research will be helpful for developing teaching especially English teaching in today issue that is teaching in the era of 4.0 industrial revolution. The results of the research is significant to higher institution especially private universities in Bandung to supervise lecturers to improve their quality in teaching. By unveiling the challenges the lecturers face, particular parties can take it into consideration to improve the quality of learning and teaching in the era of 4.0 industrial revolution. The study is significant to the theory and the educational practice of English education especially to the development of English for college student in Indonesian EFL context. From theoretical perspective, this study is expected to enrich the literature of English teaching especially in EFL Indonesian universities.



**LIMITATION OF THE STUDY**

The research has some limitations of this study. Firstly, the data taken only from questionnaire which the result of this research might not portray a real situation. As a result, observation and interview need to be gathered for the next advanced research. Secondly, a set of questionnaire was distributed to 35 English language lecturers who taught general English in the five private universities. However, only 27 respondents who gave back the questionnaire. This implies that the data gathered also might not represent comprehensive results. Finally, the researcher faced some problems through the process of data collection especially for validating the questionnaire among lecturers and they participated with some difficulty in this case.

ACKNOWLEDGMENT

This research was granted by the Ministry of Research and Technology of Education Republic of Indonesia (RISTEK DIKTI, Academic years' budget (2019 / 2020))

REFERENCE

- Abdelrazed, Janscen et.al. (November, 2016). *Requirements of the teacher of the future in the context of the fourth industrial revolution*. Conference International Technology, researchgate.net/publication/3111365200_teacher_40_requirement
- Albantani., A & Madkur. (2019) "A Teaching Arabic in the era of Industrial Revolution 4.0 in Indonesia" ASEAN Journal of Community Engagement | Volume 3, Number 2, 2019
- Angelianawati. (2018). *Being an English teacher in Industrial Revolution 4.0: An Overview about Roles, Challenges, and Implications*. E-Journal of UKI. Retrieved from <http://ejournal.uki.ac.id/index.php/jdp/article/download/896/732/> Taken 17/08/2019
- Aoun, J.E. (2017) *Robot-proof: higher education in the age of artificial intelligence*. Cambridge: The MIT Press retrieved from <https://musejhu.edu/book/55644>. Taken 13/07/2019
- Bekleyen, N., & Selimoglu, F. (2016). *Learners' behaviors and perceptions of autonomous language learning*. Journal for English as a Second Language, 20 (3), pp. 1-20. Retrieved from <https://eric.ed.gov/?id=EJ1122803>
- Brown, H. D. (2001) *Teaching by principles: An interactive approach to language pedagogy*. San Francisco: Longman
- Brown, H. D. (2002). *Doing second language research*. Oxford university press.
- Collins Dictionary Online. Retrieved from <https://www.collinsdictionary.com/>
- Diwan, Parag (2017) Is Education 4.0 an imperative for success of 4th Industrial Revolution? Retrieved from <https://pdiwan.medium.com/is-education-4-0-an-imperative-for-success-of-4th-industrial-revolution-50c31451e8ab>





- Fisk, P. (2017, January 24). *Education 4.0 ...the future of learning will be dramatically different, in school and throughout life*. Retrieved from <https://www.thegeniusworks.com/2017/01/future-education-young-everyone-taught-together/>
- Harmer, J. (2007). *How to teach English*. Harlow, England: Pearson Education
- Harmer, J. (2012). *Teacher knowledge: Core concepts in English Language Teaching*. Edinburg: England Pearson Education
- Hussin Azis, Anealka. (2018). *Made Simple Ideas for Teaching*. International Journal of Education and Literacy Studies. ISSN. 2202.9478 retrieved from https://www.researchgate.net/publication/327392112_Education_40_Made_Simple_Ideas_For_Teaching_Accessed_on_16/08/2019
- Lister, M. (2014). *Trends in the Design of E-learning and Online learning*. Journal of Online Learning and Teaching, 10 (4), 671.
- Magazine ristekdikti vol. 8/ 1/ 2018 “Reorientasi Kurikulum di Era Revolusi Industri 4.0” Intan Ahmad, direktur Jenderal Pembelajaran dan kemahasiswaan by wawan Bayu dan Citra. <https://ristekdikti.go.id/wp-content/uploads/2018/05/Layout-Majalah-Ristekdikti-I-2018-Update-Page-20180426.pdf>. Taken 21 July 2019 at 00.03 AM
- Orawiwatnakul, W., & Wichadee, S. (2017). *An investigation of undergraduate students' beliefs about autonomous language learning*. International Journal of Instruction, 10(1), 117-132. Retrieved from <https://eric.ed.gov/?id=EJ1125143>
- Razak, N.A., Alakrash, H., & Sahboun, Y. (2018) English Language teacher' Readiness for the Application of Technology Toward Fourth Industrial Revolution Demands” Asia-Pacific Journal of Information Technology and Multimedia Jurnal Teknologi. Vol. 7 No. 2-2, December 2018: 89 – 98 e-ISSN: 2289-2192
- Riduwan. (2011). *Dasar-dasar statistika*. Bandung: Alfabeta
- Schwab, K. (2016). *The fourth industrial revolution (1st ed)*. New York: Crow Business
- Schwab, K. (2017). *The fourth industrial revolution: what it means and how to respond Global Agenda*. Geneva: World Economic Forum.
- Sánchez Calvo, A. (2007). A Learner-Centred Approach to the Teaching of English as an L2. *ES: Revista de Filología Inglesa*, 28(28), 189–196.
- Simonson, M., Smaldino, S., & Zvacek, S. (n.d.). *Teaching and Learning at a Distance Foundations of Distance Education*.
- Suherdi, D. (2019). Teaching English in the industry 4.0 and disruption era: Early lessons from the implementation of SMELT I 4.0 DE in a senior high lab school class. *Indonesian Journal of Applied Linguistics*, 9(1), 67–75. <https://doi.org/10.17509/ijal.v9i1.16418>
- Suwandi, S. (2017). *The chalenges to realize the effective learning of Indonesian Language and literature in the industrial revolution era 4.0* . Bahasa Indonesia Xi congress . Jakarta. Oktober. Retrieved from





IJLLALW

International Journal of Language Learning and Applied Linguistics World
(IJLLALW)

Volume 25 (3), November 2020; 17-32.

EISSN: 2289-2737 & ISSN: 2289-3245

Siti Sopiah., & Edi Purnama

www.ijllalw.org

http://kbi.kemdikbud.go.id/kbi_back/file/dokumen_makalah/dokumen_makalah_1540468786.pdf

Thanasoulas, D (2000). *What Is Learner Autonomy and How It Be Fostered?*. Retrieved from http://www.seasite.niu.edu/tagalog/teachers_page/language_learning_articles/what_is_learner_autonomy_and_how.htm

WWW.IJLLALW.ORG

