

Prospects and Challenges in Accessing Education 4.0 English Classes

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Abstract—This paper discusses the prospects and challenges in accessing learning in Education 4.0 era in English classes. The study is qualitative as it uses descriptive survey which was used to discover and describe the prospects and the challenges faced by English teachers and students in accessing learning in Education 4.0 era in the English classes of junior high schools. The data were collected by observing online materials on the internet in order to assess its relevance with instructional purposes. Other data were collected by using observe English teachers and students in actual classes. Interviews were also conducted to the teachers and two students from each class of the 1st grade, the 2nd grade and the 3rd grade. The data were analyzed by using the following procedure: content analysis and assessment of the online materials by reading and re-reading the data, coding the data, generating initial funding based on themes, reviewing the themes, and defining and re-defining the themes. The study found that internet materials offer promising prospects to English teachers and students to fulfil requirements of Education 4.0 English classes but challenges appeared from limited bandwidth, computer apparatus, time, and learning time compared to great number of students. Lack of access to authentic material resources, lack of internet access for students, and misappropriation of online media with student worlds appear to be the major obstacles.

Keywords—online materials, access, suitability Education 4.0

I. INTRODUCTION

The education system in Indonesia is currently focusing on the learning activities where students became the center of the process. Unlike traditional rules where the learning process focuses on the teacher, in which the teacher as an educator will provide and deliver material in the classroom. But currently students are the center of the process, as we know as ‘Student Centered Learning’.

According to Jacob and Renandya, student-centered learning, also known as learner centered teaching, is the learning process where students will be more active and independently in the learning process and students will be more power over their own learning [1]. Students will be able to do more than just following the teachers’ order in the classroom, while the teacher in the class will talk much less and the teacher will become a facilitator who will guide and monitor the process of learning.

At this time we are in the 4.0 era, where technology has developed rapidly and made people are able to do many things such as working, shopping and learning more practically through the use of internet. With the development of these technologies, the government and schools are expected to be able to provide device, media and learning resources that will facilitate the learning process to achieve the purpose of the learning. Students are also expected to

participate by learning independently. In this 4.0 era, teachers and students can access learning resources to support the coursebook that they use in class.

According to Hariharasudan and Sebastian, the technology-based teaching and learning method is known as Education 4.0, which is inspired by Industry 4.0. Education 4.0 aims to improve the digital technological competences to all levels, and to enhance the use of digital technologies for teaching and learning [2].

Further, the important thing for teachers and students to consider is the characteristics of Education 4.0 concept. According to Sadiyoko in Anggraeni’s research, there are nine characteristics of Education 4.0, namely: 1) It can be done anywhere and anytime, 2) It is based on students’ needs, 3) It is flexible delivery, 4) It reflects peers and mentors, 5) It is about sharing information to answer “why” and “where” questions, 6) It is about practical application, 7) It is about modular and project, 8) It reveals students’ ownership in which the students participate a lot, and 9) It contends evaluation process [3].

In this era, using technology for teaching and learning especially for English course is common. Technology can develop and improve our societies. There are many modern technologies around us that we can use, and we must know for sure the technology that is suitable for our environment or school. The technology here is the device to access the materials and support the process of learning. In 21st century, technology in all forms plays an important role in learners’ daily lives and professional activities. Therefore, students need digital and electronic literacy skills to connect internationally using diverse and up-to-date media tools and to become independent EFL/ESL [4].

Sadiyoko in Anggraeni’s research states that Industry 4.0 gives impact to other fields including education in which the use of information, internet, and technology in education derives to the idea on the viewpoints of how the students learn and develop their skills to work in the future [5].

Technology make every person is able to do many things more practically especially in education. With technological development in this era, schools and teachers will be facilitated in administrative matters and many other things. Besides being able to facilitate many things in the education environment, schools certainly can face the emergence of challenges from this era. And this will also have an impact on both teachers and students.

This paper aimed to explore the prospects and challenges faced by the teachers and students in accessing learning in 4.0 era especially in English classes.

II. METHOD

The study is qualitative Case Study research as it uses descriptive survey which was to discover how the prospects and challenges that faced by English teacher and students in accessing learning in 4.0 era in the English classes of junior high school SMPN 2 Tanjung and describe how the prospects and challenges faced by the English teacher and the students of English classes.

According to Simons, case study is a study that conducted in depth exploration from some perspectives of the complexity and uniqueness of a particular project, policy, institution or system in a “real-life” context. It is research based, including various methods and is supported by some evidence [6].

In this qualitative study, the data were collected by using observation and interviewing English teachers and two students in each grade of classes; two students from 1st grade, 2nd grade and 3th grade about some aspects which is considered as prospects and challenges and also by observing online materials on the internet in order to assess its relevance with instructional purposes.

Leavy [6] states that interviewing is the most effective style of collecting the data for qualitative case study to get in-depth data, multiple perspectives and experiences with unstructured interview, active listening and open questioning. And through questioning, probing, listening, and paying attention to informant or the participants researcher can get closer to the meaning of participants’ experiences and unstructured interviewing is useful for engaging participants in the process of research, rather than asking the participant questions one at a time. Further, according to Leavy [6] observations in a case study are likely to be close-up descriptions of events, activities, and incidents that detail what happens in a particular context.

The data found in field were analyzed by using Thematic Analysis, following the procedure of Thematic Analysis according to Braun & Clarke, i.e. content analysis and assessment of the online materials by reading and re-reading the data, coding the data, generating initial funding based on themes, reviewing the themes, and defining and re-defining the themes [7].

The researcher used deductive approaches, in which deductive approach involves coming to the data with some preconceived themes you expect to find reflected there, based on theory or existing knowledge [8].

III. RESULTS AND DISCUSSION

In this part, the researcher will show the result of the observation and interview from this research. In the process of observation, researcher observes the material on the internet and the learning process. The material observed on the internet including materi from the 1st grade to the 3rd grade of junior high school (greeting, apologies, nouns, texts, etc). In observing the learning process, researcher focuses on the teacher and students in English class, observing their coursebook that school provided, observing the media and observing how students respond in the process of learning.

In the interview part, researcher interviews the English teacher and some students about the device that provided by school, the media that are commonly use in the English class, their opinion about the technology development in this era and the use of the internet in learning. And researcher

collects data from the results of these observations and interviews into Table 1.

Based on observation data and interview, researcher sort out each theme and items.

TABLE 1. SCHOOL FACILITISES

No	Themes
1.	<p>Devices and coursebook</p> <p>Prospect Items:</p> <ul style="list-style-type: none"> - Devices (LCD, computer room) that provide by the school - Coursebook that provide by government - The application of the coursebook in the class <p>Challenge Items:</p> <ul style="list-style-type: none"> - Internet access provided by/in the school
2.	<p>Online/internet access</p> <p>Prospect Items:</p> <ul style="list-style-type: none"> - Internet as other media/support for teachers <p>Challenge Items:</p> <ul style="list-style-type: none"> - Internet access in the school for students
3.	<p>Students and Education 4.0 era</p> <p>Prospect Items:</p> <ul style="list-style-type: none"> - Internet and the student - The access for internet in their own - The advantage of using internet <p>Challenge Items:</p> <ul style="list-style-type: none"> - Internet and the student - The access for internet in their own - The disadvantage of using internet

A. Prospect

The first theme describes about the devices and coursebook provided by school. The devices in the school are LCD for support the learning process, internet access for the teachers, and the English coursebook that provided by government for junior high. The use of LCD in the classroom and internet access for teachers is part of promoting education 4.0. because by using the LCD the teacher can more easily convey the material and with the teacher's internet access, they can also access the material through it.

Further, the English coursebooks provided by government for junior high school already gives good visualization about the materials with many interesting pictures that illustrated the event in some materials and the coursebooks have many practice sessions that make students more active in classroom.

The other theme is how English teacher and students use internet to help them in learning process. Based on the teacher opinions, internet helps him to find out many examples and explanations about the material that are not included in the coursebook that can support material in class, so the English teacher does not depend to coursebook. For the students, they use internet to help them do their tasks at home, find more explanation for the material they do not understand yet.

Observing course materials for junior high school on the internet, researcher found that some of the material are

relevant for instructional purposes, because in this era almost every example of materials in English coursebook especially for junior high school are available on internet even though they do not perfectly give the detail about the material. The material is sufficient to be supporting material for students and teachers in increasing knowledge about various examples which are not widely given on coursebooks.

The next theme describes the ways students access internet. Some students use internet to do their tasks, such as looking for the other example outside the coursebook, looking for explanation about the material that mostly not attached in their coursebook. Through the internet, the students can more easily find out the explanation and answers if they don't fully understand the coursebooks they have.

B. Challenge

The first theme describes about the devices and coursebook that provided by school. The school provides LCD for support the learning process and internet access for the teachers. The learning based on Education 4.0 era in junior high school cannot be fully achieved because the devices in school to support the learning does not have the computer room and internet access for students. In the school, the teacher promoted Education 4.0 in the classes by using the media such as LCD, but not for internet access. The internet can only be accessed by the teacher, because junior high school students are considered still not able to managed the use of the internet properly or positively.

Dealing with the coursebooks, even the English coursebook provided for junior high school gives good visualization about the materials, many students got difficulties in using the coursebook, because all the materials in the coursebook are fully written in English including every instruction. Students found that understanding the material is difficult because of the language, especially for first grade of junior high school for reading the coursebook that 98% is using English. For first grade of junior high school, it is difficult for them because they not learning English course in their Elementary school and they face it in the first grade of junior high school.

The next theme describes the ways students access the internet. Some students used the internet to do their tasks, such as looking for the other examples outside the coursebook. However, some students thought that the internet distracts them from their tasks, because for students using internet has many temptations. They were distracted by their social media notifications, such as Facebook, Instagram and there are online game and YouTube that can distract them from looking for English materials. And for some students, accessing the internet is not always easy, one of the reasons is not all of the students have smartphone, notebook or internet access (Wi-Fi), internet access or the Wi-Fi is not free and the other reason is their parents economy.

Erben [9] discuss about challenges of technology use in classroom that school also commonly faced. Some of the challenges are a burnt-out bulb on an overhead projector to the computer screen freezing on you during the middle of a PowerPoint presentation. Other potential problem situations

are restriction. In some schools, school district administrations have security blocks in place so that students cannot access questionable sites from school computers. Often these security programs search for key words, regardless of context.

Industry 4.0 era makes social life integrated with cyber world and makes every job or work done using electronic devices and the internet, learning becomes easier through internet access. The development of technology makes the communication between people mostly using social media, it causes by there are many applications that make it easier and more interesting with every features on social media applications today. Although the internet and online media help students to do their tasks, the internet is very tempting for them to access or do the other things while learning, because along with the development of the social media, games, and YouTube more easy and interesting to access and use with the many new features that available.

In this era students have to develop their ability in new technology and grow with knowledge and skill to be able to live in a society. According to the relevant research conducted by Dr.Vichian Puncreobutr in his study, he states that 4.0 era is more than era that purposes to build the individuals for being ready to be creative and innovative. According to him, challenge from this era is that students have to learn with social media, and it is difficult to confirm whether it is successful and another challenge hence it remains as another challenge [9].

Students who have graduated and have good technology skills in the era of the industrial revolution 4.0 will be able to compete in the world of work and have a clear career later [10]. In Tanjung's research, it is found that in general, the students do not use technology optimally in supporting the success of their academics [10]. It can be seen from the data in his research showing that more than 50% students do not use technology optimally in supporting their academic success. Further, Sadiyoko [3] in his research, tried to introduce industry 4.0 to the faculty of industrial technology (FTI) at UNPAR as a challenge that must be faced with careful preparation and deep understanding.

To conclude, the 8 interviewed students commonly answer that they need smart-phone and social media for both social and school life.

IV. CONCLUSION

Industry 4.0 era makes social life integrated with cyber world, and Education 4.0 makes the learning process inseparable with technological devices and how the readiness of our country, especially the province of West Nusa Tenggara in the face of Education 4.0. Accessing Education 4.0 has some prospects and challenges, such as lack of devices, lack of access to authentic materials, lack of access to authentic material resources, lack of internet access for students, and misappropriation of online media with student worlds appear to be the major obstacles. Technology in learning process needs to be used wisely, so that technology does not create harm. This research already gives how prospects and challenges faced by the school in this era. The researcher hopes that this research can be used by the other researchers and also by the readers to get more information

about prospects and challenges in facing access to Education 4.0 in English class.

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