



STUDENTS' CHALLENGES IN LEARNING ENGLISH THROUGH INDUSTRIAL REVOLUTION ERA 5.0 USING QUIPPER APPLICATION

Putri Nabilah Maharani¹, Mulyadi²

¹PGRI Senior High School number 2 of Palembang

²Universitas PGRI Palembang

E-mail: [1aabhiln.20@gmail.com](mailto:aabhiln.20@gmail.com), [2mulyadialiusman@gmail.com](mailto:mulyadialiusman@gmail.com)

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Corresponding Author:

Mulyadi

Email Corresponding :

mulyadialiusman@gmail.com

ABSTRACT

This study focuses on the challenges faced by students learning English during the era of the Industrial Revolution. It has two main objectives: 1) to explore how teachers implement the Quipper application for English instruction in the context of Industrial Revolution 5.0; and 2) to identify the challenges experienced by both students and teachers. The research adopts a qualitative descriptive approach, employing observation, interviews, and documentation as data collection methods. The analysis of the findings indicates that the teacher effectively utilises the Quipper application as a teaching tool for English, aligning with lesson plans and previous studies. The challenges faced by students and teachers in the industrial revolution era are influenced by various internal and external factors, particularly the level of interest and motivation. These factors can affect both students and teachers alike. Additionally, a slow internet connection emerges as a significant challenge not only for students but also for teachers in the teaching-learning process during the era of Industrial Revolution 5.0.

Keywords: *Industrial Revolution, Quipper, Challenges*

1. INTRODUCTION

The world has now reached era 5.0 of the industrial revolution, which is characterized by the increasing of connectivity, interaction, and the growth of digital systems, artificial intelligence, and virtual reality. Digital Technology is not something new or unexpected; it has been developed for decades, from the 1980s to the twenty-first century, and is now referred to as the digital era.

The rise of digital technology in today's world has made it an essential tool not only for adults but also for teenagers and children under the age of 18. Digital gadgets, such as smartphones, tablets, and computers, have become a window to the world, providing access to a vast amount of information through

various media such as Google, Yahoo, Blogs, and E-mail.

The impact of information technology and communication is vast, as it has changed the way we communicate, learn, and work. It has also transformed many aspects of life due to the blurring of boundaries between humans, machines, and other resources. The integration of digital technology has also had a significant impact on Indonesia's educational system.

Digital technology has revolutionised the way students learn and interact with teachers. The use of digital tools and resources has enabled students to access a wealth of information and knowledge, expanding their learning opportunities beyond the classroom. Online learning platforms and educational apps

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have made education more accessible and convenient for students, especially those in remote areas.

Moreover, digital technology has transformed the traditional classroom environment, making it more interactive and engaging. Digital tools such as interactive whiteboards, tablets, and multimedia content have made learning more enjoyable and effective. Teachers can use technology to create personalised learning experiences for each student, catering to their unique learning needs and styles.

The rapid pace of technological advancement and the emergence of the fourth industrial revolution have brought about significant changes in the global economy and job market. These changes have made it necessary for individuals to acquire new skills and competencies in order to adapt and compete on a global basis. It is important to note that this change of era is inevitable and requires proper human resource preparation.

One of the key factors in preparing the workforce for the challenges of the Industrial Revolution 5.0 is improving the quality of human resources through education. This education route should start with elementary and secondary education and go all the way to academies. A strong foundation in the basics of science, technology, engineering, and math (STEM) is essential for preparing students for the future job market.

The quality of education is crucial to preparing the workforce for the future. It is essential to provide students with the necessary

skills and competencies to compete in the global market. The curriculum must be updated and aligned with the needs of the current job market. Teachers must be trained and equipped with the latest teaching methods and tools to provide students with a quality education.

Furthermore, it is important to provide access to vocational and technical training programmes to equip students with the practical skills and knowledge necessary for the job market. These programmes should be designed to meet the demands of the current job market and provide students with hands-on experience in their respective fields.

Digital Technology is becoming more vital in the twenty-first century, and it motivates learners to learn so that they can develop new skills and innovations in learning system. Digital technology skills assist in gaining information faster and improving life skills as a working asset, and educators may simply create learning materials (Muhasim, 2017).

The quality of educators, such as teachers, can be used to assess a country's readiness to face the Industrial Revolution 5.0. Teachers must have the ability to adapt to new technology as well as global concerns. In this situation, every educational institution must develop orientation and new literacy in the educational field. The old literacy, which is based on reading and writing, should be strengthened by the preparation of new literacy, which is based on data, technology, and human resources (Arjunaita, 2020).

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Various types of e-learning have been implemented in various educational institutions, from elementary schools to college. Quipper is one of the most recent e-learning enterprises to emerge. Despite the fact that Quipper is still a new sort of e-learning, it contains thousands of themes of learning material that teachers can share with their students, as well as thousands of assignment questions that students can work on. Quipper is intended to improve the efficacy and efficiency of learning while also serving as a supportive medium for joyful learning for both teachers and students (Uma, 2016).

2. LITERATURE REVIEW**Students' Challenges**

Something that, by its nature or character, serves as a call to make a special effort, an urge to explain, justify, or difficulty in an attempt that motivates one to engage in it is referred to a challenge (Baporikar, 2020). Students occasionally have trouble with their studies, and getting through these challenges is an essential aspect of learning (Oxford, 2022). There are two factors that can affect students' challenges in learning English through Industrial revolution era, internal factors and external factors.

a. Internal Factors

Internal factors are factors that can affect learning, which come from students (Djarwo, 2020). Factors that include in the internal factors are intelligence, motivation, interests and talents.

1) Intelligence

The ability to learn requires intelligence. The foundation of learning, in other words, is intelligence. The level of intellect affects how effectively people learn. It is widely accepted that intelligence plays a crucial role in the educational process and that it can determine a person's academic success or failure. It is common knowledge that intelligent students are simpler to educate, mentor, and advise than less intelligent ones (Mondal, 2010).

2) Motivation

The fundamental impulse that prompts someone to behave is called motivation (Uno, 2008). Learning success can be seen in the motivation shown by the students when carrying out teaching learning activities (Sudjana, 2016). Students who have high motivation in learning will have high passion and desire in their learning process, and vice versa.

3) Interest and talents

According to Djarwo (2020), interest is a person's propensity toward specific things because they are interested in them and are typically accompanied by a sense of pleasure. The conventional wisdom holds that one would succeed better if they studied in the field that best suited their skills. It is crucial to consider students' talents as early as possible in order to provide them with excellent learning opportunities that are tailored to their individual talents. It might be difficult to determine someone's talent.

b. External Factors

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External factors are factors that come from outside the students, which affect the process and learning outcome (Djarwo, 2020). These factors include the social environment and non-social environment (Aprilia, 2020).

1) Social Environment

The social environment in consideration is a human one. Three factors in these students' social environments-their families, teachers, and society-can be categorized as having an impact on their learning.

2) Non-Social Environment

The non-social environment at school includes physical condition and materials such as teaching method, curriculum, school's infrastructure, class facilities and learning media. Especially now that we are in Industrial Revolution era 5.0, digital learning devices such as Laptop or Hand phone and Internet Connectivity is a must to carry out the learning activities.

In conclusion, the students' challenges are difficulties they encounter in learning that spur them to participate in it, could happen because of the internal and external factors.

Teachers' Challenges

The role of a teacher in the twenty-first century is distinct from that of a teacher in the earlier decades. Teachers' existence in the digital age of today is not determined solely by their charisma. Given that students nowadays no longer favor the teaching methods of the 1980s, teachers in the digital era must be innovative and creative (Latif, 2020).

According to Mulyono (2021), there are five challenges faced by the teachers in order to teach in digital era.

1) Critical thinking.

This includes being able to quickly receive different data and information, assisting students in finding solutions to their difficulties, and doing so by way of discussion.

2) Competent in communication.

Ability to work closely with other students and teachers in delivering learning material, questions, critiques, and ideas simply to boost students' excitement for learning.

3) Creative and innovative.

Always striving to make learning enjoyable, being able to relate the learning material being taught to current events can motivate students to learn it and ensure that they fully comprehend it.

4) Media literacy.

To maximize the benefits, teachers and students seek a thorough understanding of the media. The appropriate information is delivered, and the content is not speculative.

5) Technology infrastructure.

Information and other digital assets that assist the learning activity can be accessed

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equally and without difficulty.

From the discussion above it could be concluded that teachers' challenges are hardships that teachers have to face and encounter in order to teach the students. Media literacy and technology infrastructure are the biggest challenges teachers have nowadays.

Learning English

According to Ambrose et al (2010), learning can be defined as a transformation process that occurs as a result of experience and improves one's ability to perform better and learn more in the future. Gross (2010) defines learning is the process of getting new understanding, knowledge, skills, values, behaviors, attitude and preferences. Learning is something that students do for themselves, rather than something that is forced upon them. So learning English means process of getting and improves knowledge, skills, information about English to a better understanding.

Since English, as International language has become an important subject in both junior and senior high school in many countries, including Indonesia, it is impossible to deny that the importance of English has gotten much attention (Abduh, 2017). So the students need to learn about English (EFL Students). EFL means English as a Foreign Language is learning English in a nation that does not speak English.

When people desire to learn, understand, and use the English language, they learn English. In language learning, we discuss about language skills (speaking, listening,

reading and writing) and language systems (vocabulary, grammar, pronunciation and discourse).

Industrial Revolution Era 5.0

According to Piacentini et.al (2021), The term "industrial revolution" refers to a period in history when significant changes occur that have a significant impact on society. The first iteration of the Industrial Revolution was the Industrial Revolution 1.0. During this time, agriculture began to give way to industry as the primary activity. One of the main features that defined the beginning of this period was changes in power production (steam machine, etc.) for improving industrial operation. Then came the Industrial Revolution 2.0. The change in production method, which progressed to chain mass production and automation was a defining feature of this age, particularly in the automobile sector. The third industrial revolution, known as Stage 3.0 began in UK and converted human power into mechanical power. Technology, information, data, the internet, and artificial intelligence advancements dominated the fourth industrial revolution (also known as revolution 4.0). The Industrial Revolution 5.0 is the current stage being developed in Japan. A vision of technology-and human-based civilization emerged during the Industrial Revolution. In other words, the development of artificial intelligence (AI) will enable people to have more fulfilling lives (Syarif, 2019).

English is one of many fields that have been impacted by the industrial revolution. The

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development of twenty-first century learning presented difficulties for English language teachers in the era of revolution 5.0. Multiple electronic learning tools were used to identify the challenge (Sari, 2020). Indonesia is expected to be able to follow industry 4.0 procedures while also being able to adapt to society 5.0 (Ellitan, 2020).

QuipperApplication

Quipper is a well-known online learning tool for students of all levels. Quipper is outfitted with a number of elements that can aid in the learning process, particularly for the language it offers that can help students through effective instructional design when studying English and to convey the implications of its use in the context of Indonesian education (Mizal & Tathahira, 2022).

Nowadays teachers and students can share the learning material and their assignments in digital media learning platform, such as Quipper application, while doing the teaching-learning activities in classroom. It is more flexible and easier because you can access it anytime anywhere. Notebook or guidebook is not an essential element in teaching-learning activity anymore because they just open their hand phones or laptops to see the material and do their assignments.

Q-Learn is a portal intended for students, where each student has an account to be able to join a particular class and every student who has joined the class will get materials and assignments related to the

subjects in the class. Via Q-Learn students can work on assignments from certain topics given by teachers, as well as studying subject topics related to assignments provided by the teacher both inside and outside the classroom through the device each student connected to the internet.

To be able to join Q-Learn, students only need to register themselves on the Quipper website. The registration process is as follow:

- 1) First, open the website and enter the link address <https://school.quipper.com/id>, wait until the main Quipper School screen appears and then click on the student portal.
- 2) Second, students register, which can be done in 2 ways: by registering through a Facebook account or by creating a new account by filling out the registration form and clicking "Create a Quipper Account."
- 3) Next, students only need to fill out the advanced registration form with create the required username and password to login.
- 4) And the last step, students only need to fill in the class code that has been entered given by their teacher which consists of 7 character combinations between letters and numbers to be able to join the online class.

According to Uma (2016), Quipper School has a straightforward method of operation. The teacher only needs to create real classes in schools online, and then organize assignments into detailed topics that can help students build an understanding of science, and the teacher will receive simple, easy-to-understand analysis of student progress while

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teachers continue to work on developing the curriculum.

3. METHODS

This study aimed to explore the experiences and perceptions of 10 eleventh-grade students and an English teacher at SMA PGRI 2 of Palembang in regards to their use of English language learning applications. To gain an in-depth understanding of the participants' experiences, a qualitative descriptive approach was employed.

The qualitative descriptive approach is a research method used to describe and understand the phenomena being studied in a specific context. In this study, the phenomenon being studied was the participants' use of English language learning applications. The approach focused on using natural language to describe the experiences of the research subject. This approach allowed the researcher to capture a rich and detailed description of the participants' experiences.

To collect data, this study utilised qualitative methods such as observation, interview, and documentation. The researcher observed the participants' interactions with the English language learning applications in the classroom setting. The researcher also conducted interviews with the participants to gain their insights on the use of English language learning applications. Lastly, documentation such as journals, assignments, and other materials related to the participants' use of English language learning applications were also analysed.

The data collected through these methods was analysed using a thematic analysis approach. The data were categorised into themes that emerged from the participants' experiences and perceptions. These themes were used to gain an understanding of the participants' experiences with English language learning applications.

In conclusion, this study utilised a qualitative descriptive approach to explore the experiences and perceptions of eleventh-grade students and an English teacher at SMA PGRI 2 of Palembang in regards to their use of English language learning applications. The study utilised qualitative methods such as observation, interview, and documentation to collect data, which were analysed using a thematic analysis approach. The findings of this study provide insights into the use of English language learning applications in the classroom setting and can inform future research in this area.

4. RESULTS AND DISCUSSION

Based on data gathered through observation, interviews, and documentation, this study offers three findings:

The Implementation of Quipper Application in Learning English

Based on the data above, the writer found that the teacher is following the rules of the school and using Quipper as a teaching tool or media in teaching English in the classroom. The way teacher implemented the media to the classroom also in accordance with the

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guidelines that allow students to understand the lesson well. The teacher's approach to teaching and explaining the learning material is consistent with the lesson plans that are being used. With the discussion method used in class, it allows students and teachers to exchange ideas and different perspectives in solving problems.

For implementing the media itself, the teacher used three stages; 1) preliminary activities, 2) core activities, and 3) reflection and confirmation. On the first stage, preliminary activities the teacher gave a warm-up to the class before filling out an attendance list. When the teacher asked the class's first question, which was about what they knew about personal letter text, the students quickly responded. During the first class period, the teacher instructed the students to open Quipper on their phones and look at the lesson regarding the text of personal letters. She also instructed them to watch the video about text of personal letter provided by Quipper and make notes regarding what they learned from it. She set a deadline for them to complete the assignment. They might talk with pals about the lesson and collaborate on projects. When they were through, teacher would discuss the content of the video they have watched and taken note, together with students.

On core activities, the teacher then asked them to write personal letters that are relevant to them and the people around them after they had discussed the text of personal letters. They were asked to write a letter to a friend on whatever topic they desired using the appropriate text structure and language

elements according to the context of use. After they have done writing the letter, they read it in front of the class.

The last stage was reflection and confirmation. The teacher inquired about the students' reactions to today's lesson. The teacher examined the material of the text of a personal letter and involved the students in recalling and discussing the social function, text structure, and linguistic aspects contained in the text of a personal letter that they had learned. Reflection on student achievement, also known as formative assessment, is a teacher's reflection on the learning process's achievement and improvement.

Students' Challenges in Learning English Using Quipper

It can be obtained from the data that there were two factors that affected students' challenges in learning English using Quipper, internal (intelligence, motivation, and interest) and external (family support facilities, teacher's explanation, and school's facilities) factors.

a. Intelligence factor

It can be obtained from the data that students' challenges can be caused by intelligence. What intelligence means here is the students' understanding about the lesson and material being taught. From the result of the interview of the students and observation conducted by the writer, it is shown that some of the students lack in understanding the lesson material. It can be seen when the teacher explained the lesson and asked the students the question related to the material taught, they

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could not answer it. Also when they did the drill asked by the teacher, they got confused about what to do and took long enough to understand and started to do it by themselves.

b. Motivation factor

This factor is still related to the previous factor, because they lack in understanding the lesson, they also lack in motivation in learning. Some students aren't enthusiastically following the teaching-learning process, especially the students at the back row. Students who sit in the back row intend to not much paying attention to their teacher and the lesson explained, this also applied in the class the writer observed. Most of the students who didn't motivate in learning were the students who sat in the back row.

c. Interest factor

This factor is a combination of the two previous factors, when students lack in understanding and motivation, they didn't have any interest to do anything, in this case interest in learning English. It can be seen from the way the students behaved in class, when the class started, some students were still outside the class, and when the teacher explained the lesson, some students didn't pay attention and chatted with their friends. However, the Quipper role is to engage the students' interest to learn English, and somehow it worked to some students, while the other still didn't have any progress.

d. Family Support Facilities

This factor is part of the external factor that really affected students' challenges. Family support facilities are facilities provided by the families of students to help and facilitate

students in carrying out learning process using Quipper, in this case is the quota for them to study. This is the biggest issue that students have because most of their families didn't provide or give them the special quota to learn using Quipper, so they have to use their own quota to access the Quipper which is very burdensome for students. Most of them thought that it was so wasteful of quota because Quipper took so much data to the watched video and they need the quota for other thing not only for Quipper.

e. Teacher's Explanation

Intelligence and the teacher's explanation were very closely related in influencing students' challenges in learning English. Because of the explanation explained by the teacher wasn't clear enough, so that the students couldn't understand the lesson very well. This is caused because while the teacher explained the lesson, she used English in explaining the material to the students. Not every student liked English lesson, nor they understood how to speak and listen well in English, so they were hard to understand what their teacher told them.

f. School's Facilities

Based on the interview from the students, they all agreed that their school provided the computer lab and wi-fi access to help them in learning using Quipper and it proven right, but not every class studied in the computer lab or the wi-fi connection didn't reach to all classes, which means the school's infrastructure was indeed well but from the facilities was not. It can be seen from the observation conducted, there were still some

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students that almost could not join the teaching-learning process because they didn't have a digital gadget which is very essential to do the learning in today's era, whether they forgot to bring it or they really didn't have one. Also some students run out of internet quota and they have to ask for their friends help by sharing the tethering to them because the wi-fi signal didn't reach their class.

Teacher's Challenges in Teaching English Using Quipper

According to the data before, the challenges faced by teacher in teaching English in the Industrial Revolution era 5.0 are from technology infrastructure; slow internet networks, which can hinder learning when using online learning media such as Quipper. In the world of technology, internet access is the key to running all online features, including Quipper. If the signal is bad, then learning in the Industrial Revolution era cannot run optimally.

Furthermore, the lack of digital gadgets in learning is a challenge for teachers. If certain students are unable to participate in teaching-learning activities as a result of this, it can disrupt all learning activities as well as the classroom environment.

The final factor is students' interest and motivation. Not only for students; this also a challenge for teacher in teaching students in this era of the industrial revolution. If students lose interest and motivation in learning, it will affect the teacher's teaching. As a result, teachers are encouraged to be able to tap into students' interest and motivation to learn English using Quipper by employing

educational games such as Kahoot to get students interested in taking lessons.

5. CONCLUSION

The following conclusions could be drawn from the study and discussion findings: there are 3 stages the teacher used in implementing the Quipper as media in learning English: preliminary activities, core activities, and reflection and confirmation. Students' challenges were influenced by their intelligence which means their understanding in lesson and material being taught, their motivation to do the learning process, and their interest to learning English using Quipper application as the internal factors. As for the external factors, there were family support facilities which provide them quota to learn English using Quipper, teacher's explanation that wasn't clear enough for the students, and the school's wi-fi that didn't reach every class. Then, the teacher's challenges in teaching English through Industrial Revolution era 5.0 are slow internet networks, the lack of digital, and students' interest and motivation.

6. REFERENCES

- Abduh, M. (2017). Self Concept in English Learning. *IAIN Palopo* , 1-11.
- Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How Learning Works: Seven Research-Based Principles for Smart Teaching*. San Francisco: Jossey-Bass.
- Aprilia, N. E. (2020, Maret 31). *Faktor-faktor yang Mempengaruhi Belajar*. Retrieved November 6, 2022, from 14 Kompasiana: <https://www.kompasiana.com/nurelsaayuap>

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- rilia/5e82d9e4f1110c441c0419a2/faktor-faktor-yang-mempengaruhi-belajar
- Arjunaita. (2020). Pendidikan di Era Revolusi Industri 5.0. *Prosiding Seminar Nasional Pendidikan Program Pascasarjana* , 179-196.
- Baporikar, N. (2020). *Senior Entrepreneurship and Aging in Modern Business*. IGI Global.
- Djarwo, C. F. (2020). Analisis Faktor Internal dan Eksternal Terhadap Motivasi Belajar Kimia Siswa SMA Kota Jayapura. *Jurnal Ilmiah IKIP Mataram* , 1-7.
- Ellitan, L. (2020). Competing in the Era of Industrial Revolution 4.0 and Society 5.0. *Jurnal Maksipreneur: Manajemen, Koperasi, dan Entrepreneurship* , 1-12.
- Gross, R. (2010). *Psychology: The Science of Mind and Behaviour 6th Edition*. London: British Library.
- Latif, A. (2020). Tantangan Guru dan Masalah Sosial di Era Digital. *Jurnal Ilmu Sosial dan Pendidikan* , 613-621.
- Mizal, B., & Tathahira. (2022). The Role of Quipper Application for English Language Teaching . *Journal of English Language Teaching, Linguistics and Literature* , 99-107.
- Mondal, P. (2010). *Use of Intelligence in Teaching and Learning*. Retrieved November 6, 2022, from Your Article Library: <https://www.yourarticlelibrary.com/trending/use-of-intelligence-in-teaching-and-learning-938-words/6048>
- Mulyono, S. (2021, November 2). *Tantangan Guru di Era Digital*. Retrieved November 13, 2022, from Jawa Pos RADAR KUDUS: <https://radarkudus.jawapos.com/pendidikan/02/11/2021/tantangan-guru-di-era-digital/>
- Oxford, R. (2022, November 28). *7 Common Study Problems and How to Deal with Them*. Retrieved Desember 4, 2022, from Oxford Royale Academy: <https://www.oxford-royale.com/articles/common-study-problems/>
- Piacentini, R. D., Vega, M., & Mujumdar, A. S. (2021). Beyond Industrial Revolution 4.0: How Industrial Revolution 5.0 is Related to Drying Technology. *An International Journal* , 437-438.
- Sari, D. P. (2020). Challenge of Learning English from Revolution as 21st Century Learning for Communities 5.0. *Acitya: Journal of Teaching & Education* , 34-41.
- Sudjana, N. (2016). *Penilaian Hasil Proses Belajar Mengajar*. Bandung: PT Remaja Rosdakarya.
- Syarif, M. (2019, January 29). *Revolusi Industri 5.0 ala Jepang: Human-Centered Society*. Retrieved November 6, 2022, from Karinov: <https://Karinov.Co.Id/Revolusi-Industri-5-Jepang/>
- Uma, E. R. (2016). Pemanfaatan Quipper School di Kalangan Siswa SMA (Studi Deskriptif tentang Pemanfaatan Quipper School sebagai Media Pendukung Belajar Siswa di Madrasah Aliyah Negeri Jombang). *ADLN - Perpustakaan Universitas Airlangga* .
- Uno, H. B. (2008). *Teori Motivasi dan Pengukurannya*. Jakarta: PT Bumi Aksara.