UTILIZING TECHNOLOGY IN CONSTRUCTING PAPUAN EFL STUDENTS' SELF-DIRECTED LEARNING

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ABSTRACT

This study aimed to find out the utilization of technology in constructing Papuan EFL students' self-directed learning by using one research question: Have Papuan EFL students utilized technology to construct their self-regulated learning? This research combined two methods namely quantitative and qualitative to gain the data from participants. The number of participants was 36 Papuan EFL students from a private university in Timika, Papua Tengah. A purposive sampling technique was employed to choose these participants. They contributed to this study by filling out the questionnaire and 5 of them were interviewed by the researcher. The results revealed that most Papuan EFL Students had attempted to utilize the technology to increase their capabilities in the learning process. Similarly, the results also suggested that the participants learned how to be self-directed students by utilizing the presence of technology in this era. Thus, their motivation to learn gradually enhanced.

Kata Kunci: Papuan EFL Students' Self-directed Learning, Utilizing Technology

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pemanfaatan teknologi dalam membangun pembelajaran mandiri siswa EFL Papua dengan menggunakan satu pertanyaan penelitian: Apakah mahasiswa Papua program studi pendidikan bahasa Inggris telah memanfaatkan teknologi untuk membangun pembelajaran mandiri mereka? Penelitian ini menggabungkan dua metode yaitu kuantitatif dan kualitatif untuk memperoleh data dari peserta. Jumlah peserta adalah 36 siswa EFL Papua dari sebuah universitas swasta di Timika, Papua Tengah. Teknik purposive sampling digunakan untuk memilih partisipan. Mereka berkontribusi dalam penelitian ini dengan mengisi kuesioner dan 5 dari mereka diwawancarai oleh peneliti. Hasil penelitian mengungkapkan bahwa sebagian besar mahasiswa Papua program studi pendidikan Bahasa Inggris telah berupaya memanfaatkan teknologi untuk meningkatkan kemampuan mereka dalam proses pembelajaran. Begitu pula, hasil penelitian juga menunjukkan bahwa para peserta belajar bagaimana menjadi siswa yang belajar mandiri dengan memanfaatkan kehadiran teknologi di era ini. Dengan demikian, motivasi belajar mereka secara bertahap meningkat".

Kata Kunci: Mahasiswa Papua, Pembelajaran Mandiri, Memanfaatkan Teknologi

INTRODUCTION

In the 21st century, technology has grown rapidly around the world. it is undeniable that the development of technology influences many aspects of life, such as the economy, business, science, health, education, and so on. In the academic context, technology can be considered a supporting tool for teaching. According to Zaitun et al. (2021) technology provides valuable information that enables teachers to make the learning process enjoyable for students. In other words, technology can be utilized by teachers to design enjoyable learning materials and activities in the classroom. In line with this, Ciroma (2014), asserts that designing learning materials with technology enables teachers to provide contextual materials that can easily stimulate students' interest in learning.

On the other hand, through technology, students can explore beneficial information that can assist them in accelerating their understanding and facilitating interpretation (Romrome, 2023; Jeong, 2022). In this sense, learning English with technology can simplify abstract things to be concrete which makes students easily achieve their learning goals (Geng et al., 2019; Romrome, 2023). Since technology offers many opportunities for them to gain beneficial information that can contribute to developing and maximizing their capability in the learning process (Garrison, 2018), they are expected to be able to appropriately use various media of technology such as YouTube, Instagram, TikTok, Facebook, or even a particular website.

However, they need a specific ability to lead and guide them in their learning process with technology. According to Ciroma (2014), self-directed learning is an ability that students should acquire to accelerate their capabilities. Lee et al. (2014), define self-directed learning as one's ability to control themselves purposively and consciously in gaining knowledge, solving problems, and developing or strengthening a certain skill". Based on this definition, it can be seen that self-regulated learning enables students to be more aware of their own needs in the learning process and struggle to achieve them in their lives effectively. It also indicates that self-regulated learning gives students the self-control to perform a particular activity to maximize their ability and skills (Gokcearslan, 2020). In this case, when self-regulated learners want to learn a specific topic by utilizing technology, they will be more aware of their needs and able to manage them by planning, monitoring, and evaluating their learning strategies and achievements (Gu, 2016). Consequently, self-regulated learning can facilitate students to enhance and achieve personal knowledge and skills successfully.

Since self-regulated learning is crucial to be investigated in academic settings, several existing studies tried to delve into this issue. For example, Sumuer (2018) conducted a study regarding the "Factors related to college students' self-directed learning with Technology". He found that by using technology, students' communication skills regularly and automatically developed. Similarly, Zainuddin et al. (2019) scrutinized the utilization of technology in shaping Indonesian students' self-directed learning. Their findings depicted that utilizing technology in academic settings could be very beneficial for students. In this sense, fascinating content that was posted by lecturers can stimulate students' interest in learning.

Moreover, the study by Asfar and Zainuddin (2015) revealed that Malaysian students are comfortable with ICT, which enhances their self-directed learning and facilitates interactions with peers and teachers. Furthermore, it found a connection between gender, ICT utilization, and self-directed learning, indicating that urban students tend to exhibit more autonomy in their learning compared to those from rural areas. By looking at the previous findings above, it can be inferred that since information, communication, and technology (ICT) are utilized in academic settings, students can undergo a shift in determining and implementing the appropriate strategies to accelerate their level of understanding. Thus, technology can facilitate students to achieve their autonomy to be self-regulated learners.

Despite this issue has been widely scrutinized by some scholars, no study focused on Papuan settings. Therefore, this issue should be undertaken to provide specific information regarding the utilization of technology in constructing Papuan EFL students' self-directed learning. Consequently, one research question is delivered to be investigated: 1. Have Papuan EFL students utilized technology to construct their self-regulated learning?

METHOD

This study employed a mixed method that comprises quantitative and qualitative techniques to obtain the data. According to Creswell (2014), a mixed method is a combination strategy that can be used to identify, analyze, and merge the data between quantitative and qualitative. Therefore, in gathering both data, the researcher employed two instrumental tools namely, a questionnaire

and an interview. Thus, the data would be richer and more valid to be reported.

This study was carried out in 2023 at a private university in Timika-Papua, Indonesia. Before collecting the data from participants, the researcher contacted the head of the English Education Department to ask permission to conduct this study. After getting his permission, the participants were then selected using a purposive sampling technique based on their willingness to participate in this study. Since purposive sampling is a technique to choose the participants based on specific criteria, these Papuan EFL students were then selected to find out whether the technology has been utilized by them or vice versa. 36 Participants were willing to fill out the questionnaire. They consist of 12 students from the third semester, 16 students from the fifth semester, and 8 students from the seventh semester.

Pertaining to the questionnaire, the researcher employed self-directed learning with technology scale (SDLTS) which was proposed by Timothy et al. (2010). It comprised of 2 main topics namely, self-management and intentional learning. Self-management consisted of 2 items, whereas intentional learning encompassed 4 items. These items were then distributed to the participants through Google Forms and analyzed using the percentage of each item. In measuring the percentage of each item, the researcher utilized 5 types of Likert Scale that encompassed Never (N), Seldom (S), Sometimes (Ss), Often (O), and Always (As).

In addition, 5 of the participants were selected to be interviewed separately by the researcher via Zoom meeting. Those participants were chosen based on their willingness to get involved. In interviewing the participants, the researcher made a recording and highlighted keywords that were mentioned by participants. Afterward, the recorded videos were tabulated into transcripts to simply grasp the interviewee's intention by the researcher.

FINDINGS & DISCUSSION

Since the aim of this study was to scrutinize the utilization of technology in constructing Papuan EFL students' self-directed learning, the researcher then employed self-directed learning with a technology scale (SDLTS) to measure each aspect of utilizing technology. Therefore, the result of self-management was provided first to show Papuan EFL Students' self-management in learning using technology.

Table 1. Self-Management

Statement	N	S	Ss	O	As
I go online to ask my teachers questions on my lessons when I am not in school	2%	6%	16%	25%	51%
I use the computer to share my thoughts and ideas about my schoolwork (e.g., through multimedia storytelling, voice recording, blogs)	1%	5%	18%	37%	39%

Table 1 shows that the majority of the participants employed technology to ask the teachers about the materials that had been learned previously when they did not attend the class. The first statement result showed that 51% of the participants utilized technology to get the information easily. It indicated that their self-management in using technology was at a good level. This result was underpinned by one of them when interviewed.

> "In my point of view, the presence of technology has a positive impact on me. In this case, through the Internet, I could easily contact my teacher to get any important information whenever I did not attend his/her class. Therefore, I will be not left behind by my classmates". (St 2, Interview)

Another participant also admitted that:

> "If I did not go to a classroom, I would contact my teacher directly to ask about the materials that have been learned".
> (St. 1 Interview)

Looking at Papuan EFL students' responses above, it can be considered that the participants employed technology in their daily lives, specifically clarifying up-to-date information from their teachers. On the other hand, table 1 also depicted that the majority of the participants usually shared their ideas and thoughts using technology. The data shows that 39% of them utilized it. One participant pointed out that:

> "I usually used a computer that has been connected to the internet in expressing my ideas to other people"
> (St.3 Interview)

Thus, it implies that the participants' self-management has been set and developed regularly and effectively. These findings were supported by Asfar and Zainuddin's (2015) study which found that using technology to share ideas and communicate with people enabled students to become more active and creative. Moreover, Geng et al. (2019) also found that when students used technology to clarify and get beneficial information from teachers or other people, their readiness to adapt to the new circumstances would be constructed automatically.

Furthermore, Romrome and Mbato (2022) asserted that using technology to share students' ideas could shape their motivation to be self-directed learners. In this sense, when students try to use technology to share or ask the information from others could accelerate their understanding and construct their minds to set appropriate goals that they need in the learning process. Consequently, they will attain knowledge without any forces from others.

On the contrary, this research also examined the intentional learning from participants, its result, therefore, has been provided to the readers in order to get a new overview. The participants' responses to intentional learning items can be viewed in Table 2.

Table 2. Intentional Learning

Statement	N	S	Ss	O	As
I find out more information on the Internet to help me understand my lessons better	2%	2%	16%	27%	53%
I use the computer to work with information for my learning.	4%	18%	11%	21%	46%
I use the computer to become better at a skill that I am interested in e.g., learning a language	2%	8%	11%	21%	58%
I use the computer to get ideas from different websites and people to learn more about a topic	1%	3%	17%	18%	61%

Based on the table above, it can be seen that the majority of the participants employed technology such as the Internet to get ideas from different websites and people (61%), to become better at a specific skill (58%), to find out more information to accelerate understanding (53%), and to work based on the gained information (46). Therefore, it can be concluded that Papuan EFL Students have used and utilized technology intensively by identifying their needs and wants. One of them shared that:

"I usually tend to seek resources from the internet to help me understand the learning materials in my class". (St. 4 Interview)

Another participant also stated that:

"In my experience, I will find useful materials from the Internet if I am learning a certain topic. It enables me to dig into that topic". (St. 5 Interview).

The integration of technology in language learning has gained significant momentum in recent years, particularly in fostering self-directed learning among EFL students. In the context of Papua, where access to educational resources and opportunities may be limited, technology can serve as a powerful catalyst for enhancing learner autonomy and self-regulation.

One of the primary benefits of utilizing technology is the accessibility it provides to a vast array of authentic English language materials and resources. Online platforms, such as language learning websites, educational apps, and multimedia resources, offer Papuan EFL students the opportunity to engage with content tailored to their proficiency levels and interests (Wang & Chen, 2020). This access empowers learners to take control of their learning journey, explore topics that resonate with them, and develop their language skills at their own pace.

Furthermore, technology facilitates collaborative learning experiences, which are crucial for self-directed learning. Through online forums, discussion boards, and virtual study groups, Papuan EFL students can interact with peers, exchange ideas, and receive feedback, fostering a supportive learning community (Lee et al., 2014). This collaboration not only enhances language skills but also cultivates critical thinking, problem-solving, and self-reflection abilities, which are essential for self-directed learners.

Additionally, technological tools such as language learning apps, gamification techniques, and virtual classrooms offer personalized and adaptive learning experiences. These tools can track students' progress, identify areas for improvement, and provide tailored feedback and recommendations, enabling learners to take ownership of their learning process and make informed decisions about their learning paths (García Botero et al., 2019).

To effectively utilize technology for self-directed learning, it is crucial to provide Papuan EFL students with the necessary digital literacy skills and guidance. Educators and instructional designers can develop training programs and instructional materials that equip learners with the knowledge and strategies required to navigate and effectively utilize various technological resources (Gokcearslan, 2020).

CONCLUSION

The present study investigated the extent to which Papuan EFL students utilized technology to foster self-directed learning. The findings revealed that the majority of the participants were actively leveraging various technological tools and resources to enhance their language learning experience and cultivate learner autonomy.

Through the use of online platforms, multimedia resources, and collaborative tools, the Papuan EFL students were able to access a wealth of authentic language materials, engage in personalized learning experiences, and participate in virtual learning communities. These technological affordances empowered them to take control of their learning journey, explore topics of interest, and receive feedback and support from peers and instructors.

Notably, the results suggested that the integration of technology not only facilitated access to learning resources but also played a crucial role in developing self-regulated learning strategies among the participants. By utilizing adaptive learning tools, gamification techniques, and progress-tracking features, the Papuan EFL students were better equipped to monitor their learning progress, identify areas for improvement, and set personal goals, thus fostering a sense of ownership and responsibility over their learning process.

Furthermore, the qualitative data highlighted the positive impact of technology on the participants' motivation and engagement. The interactive and multimedia-rich learning experiences provided by various technological tools captured their interest and sustained their enthusiasm, leading to a gradual enhancement in their motivation to learn.

While the study contributes valuable insights into the potential of technology in promoting self-directed learning among Papuan EFL students, it is essential to acknowledge the need for continued support and guidance. Providing training in digital literacy skills and effective strategies for utilizing technological resources is crucial to ensure that learners can fully harness the benefits of these tools for self-directed learning.

In conclusion, this research underscores the significance of integrating technology in language education, particularly in fostering learner autonomy and self-regulation among Papuan EFL students. By leveraging the affordances of technological tools and resources, educators and instructional designers can create learning environments that empower students to take charge of their learning journey and develop the essential skills for lifelong language acquisition.

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