

Technology Role in Improving Autodidactic Learning Outcomes at English Language Education

Nurul Azmi^{1*}, Sholihatul Hamidah Daulay²

^{1,2} Universitas Islam Negeri Sumatera Utara

* Corresponding author: nurul0304203160@uinsu.ac.id

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This article focuses on the influence of technology on autodidact learning outcomes obtained in the field as a source of data information in our research. We get information from various sources such as google scholar, elicit, and various websites. Furthermore, we tried to review our findings at school with the findings of previous studies to be able to formulate the results of our study. Technology has an important influence on students' interest in learning at school. The results show that the use of technology has an influence in improving students' English language skills by learning autodidactically. Students are expected to be able to utilise technology to support the quality of education at school by learning English autodidactically. The results of this study are expected to be useful for related parties and further research.

Keywords: Autodidact; learning; school; outcomes

Introduction

Technology has become an integral part of our daily lives, shaping the way we communicate, work and interact with the world. Technology can be defined as the application of science for practical purposes, involving the development, use and understanding of tools, machines, techniques and processes to meet human needs covering a wide range of fields. The internet, smartphones and social media platforms have connected people around the world, fostering a globalized world where information is shared at an unprecedented speed. The development of technology that is increasingly advanced is influenced by the development of science that is getting better. In the education system, there are also elements of technology created to improve learning performance. Learning using technology is not a trend, but the demands of the times in every learning process (Tulasi & Rao.C.S., 2021). Technology has been the driving force

behind the globalization of communication and the rapid exchange of information. Information and communication technology in schools includes all forms of computer and internet usage for learning (Munti et al., 2020).

Various learning content can be accessed through various application platforms that are already available using technology. For English language learning, many people access English content with apps to get videos and learning materials (Juliana, 2022). Wikipedia notes that there are more than 70 million educational blogs on YouTube. Apart from YouTube, websites are also used to search for knowledge. Website is a collection of interconnected web pages that can be accessed through a homepage that can be accessed through a browser and internet network (Latubessy et al., 2021). There are many supplementary educational websites that contain various knowledge sharing pages provided by well-known specialists (Lachhwani, 2022). The use of these technologies can help enrich the foreign language learning experience and make it more flexible, interactive and fun.

In the last decade, technology has transformed the world of language education promising many new ideas to improve language skills (Chávez-mejía et al., 2019). The role of technology in self-directed English language learning is of key importance in improving language skills and meeting the demands of global competence. As we continue to witness the rapid advancement of technology, the importance of understanding and managing technology responsibly is becoming increasingly important. Balancing innovation with ethical considerations is essential to ensure that technology serves the best interests of learners and contributes positively to education. Learning English autodidactically can have an influence on their learning outcomes at school. Autodidactic learning means that they themselves make reasoning about what they learn by searching for its meaning, comparing it with prior knowledge, and resolving

differences between prior knowledge and new knowledge (Kartika et al., 2019). Technology can support learners to improve learning outcomes by utilizing technology as a learning tool independently. By incorporating technology in self-directed English learning, individuals can optimize their time and effort, improve language skills, and open up opportunities to participate in an increasingly connected global world.

The use of technology is closely related to schools, especially schools that are quality and modern and also implement the latest curriculum, namely the *merdeka* curriculum. Education reflects every social transformation (Senkivska, 2022). Some schools have implemented the *Merdeka* curriculum where the *Merdeka* curriculum makes learning independent. According to the Ministry of Education and Culture (2020) independent learning is giving freedom and autonomy to educational institutions and freedom from bureaucratization, teachers are freed from complicated bureaucracy and students are given the freedom to choose the fields they like (Nurmitasari et al., 2022).

Mastery of English can affect education. By mastering English, students will feel that they have acquired abilities or skills that will help them achieve their goals (Karlina, 2022). The utilization of technology for learning can increase motivation and learning effectiveness. Previous research (Juliana, 2022) tells about technology has made it easier for students to learn foreign languages because it is easily accessible and easy to use. However, there are still many teachers and students who still do not utilize technology in learning English even though technology has been recognized to improve learning outcomes. The positive results of the Effective Teaching test support the use of technology in English language learning and look for ways to develop learning further. They found that the use of technology in the classroom increases students' enthusiasm when doing assignments because students learn new things.

After reviewing the literature above, the researchers found that there are many researchers who focus more on discussing internet technology in education. But there are still few studies that focus on discussing the effect of technology on autodidact English learning outcomes. Perhaps there are only a few studies that discuss the role of technology on autodidact English learning outcomes, therefore the researchers have observed some knowledge gaps in the field of the influence of technology on autodidact learning outcomes in English education and decided to use it. In this study, what is the role of technology for students to autodidact English learning outcomes in English language education? Through research into autodidact learning as the role of technology in educational outcomes, we can better understand how technology can be used effectively to improve the quality of education, preparing students for success in an increasingly digitally connected world. The reason I chose autodidact learning as the role of technology in supporting English learning is to evaluate the effectiveness of students' English learning by utilizing technology in an autodidact way to support learning outcomes in English education.

Method

This research is a descriptive qualitative research because this research aims to determine the influence of technology based on facts and phenomena that occur and study the relationship, cause and effect of the influence of the development of information and communication technology. The process of collecting data through questionnaires that we conducted on 46 students of class XI MAN 2 Model Medan and interviews with 2 teachers and we also collected data from documents that sourced data through various platforms such as google scholar and elicit.

The analysis process that we used through questionnaires distributed to 46 students of class XI MAN 2 Model Medan and only 28 students answered the

questionnaire questions. The type of questionnaire in this study is a closed questionnaire because there is a complete list of questions with alternative answers that have been provided by the researcher, the answer choices in the questionnaire are every day, often, sometimes, and never. We also took data from interviews with 2 teachers at the school. These teachers are teachers who actively use technology to teach. The first teacher interview (T1) lasted for 5 minutes 19 seconds and the second teacher (T2) lasted for 3 minutes 44 seconds. Then we summarized the results of the data that had been found. In the end, we came to the conclusion that the important points are relevant to answer the problem and hypothesis of this study. The analysis process we used included data reduction and clarification until in the end, we came to the conclusion that the important points were relevant to answer the problems and hypotheses of this study. The following are some of the stages of the study implementation that we conducted to get serious resistance to the role of technology in innovating English language learning to get optimal results (Juliana, 2022).

Result and Discussion

The results section presents the findings of this study which aims to gain an in-depth understanding of the role of technology in improving autodidact learning outcomes in English education. Given that students' English language skills at school are still uneven so that the need for special handling of teachers to overcome these problems to improve students' English learning outcomes at school. To improve language skills, especially English can be honed by learning regularly, not only obtained from teachers but also can learn autodidactically. Autodidactic learning can be formed by increasing their awareness of the importance of learning foreign languages and establishing their abilities in the process of autodidactic learning both inside and outside the classroom (Sergeeva & Guzeva, 2019).

In the findings in the field, the school uses the latest curriculum, namely the *Merdeka* curriculum to support students' learning outcomes to be better. The *Merdeka* Curriculum in Indonesia is related to the use of technology. This curriculum is designed to be more flexible and focuses on developing student competencies and character. One important aspect of the *Merdeka* Curriculum is the integration of technology in the learning process. The use of technology in schools is expected to make teachers more innovative and creative to encourage students to concentrate and participate in class (P & Sherine, 2024). In the school we found teachers to interview who use technology as a learning medium. Based on the results of the interview, one of the teachers argued that:

"Teachers and students must be ee... friendly with technology". (T.2)

"The material will be more interesting when it has ee more information that uses technology, for example, there are videos, pictures, or other information." (T.1)

The teacher also believes that the reason technology is used for learning is because it is more interesting as stated by the teacher.

"So it's more interesting. So because it is interesting, students are interested in following the lesson. If the material is monotonous, ee students are not motivated, not interested in learning the material outside of the teacher's style of presenting the material." (T.2)

Another teacher also believes that using YouTube can train students' English skills.

"Because on YouTube there are lots of videos whose teaching is more interesting for children's audio-visual language in this English learning language." (T.1)

In addition to conducting interviews with several teachers, a questionnaire was also distributed to students at the school. This questionnaire examines how often they use technology to learn autodidactically in improving their English language skills.

The following is a summary of the questionnaire to calculate what percentage of students often learn English by using technology both at school and autodidactically. The results of the questionnaire were used to support the data findings in addition to the interview results. Several questions were distributed to 46 students and only 28 students answered the questionnaire. Students were asked whether they often study autodidactically. The results showed that 17.9% of students studied every day, 60.7% often and 21.4% rarely studied autodidactically. The next question was whether they use technology to study. The results show 32.1% use it every day and 67.9% use it frequently. Then the third question is whether they use information technology to learn English. The results show that 17.9% of students use technology every day, 60.7% often and 21.4% rarely use technology to learn English. Furthermore, the fourth question is whether there is an improvement in academics after learning English autodidactically. The results showed that 7.1% of students daily, 53.6% of students often and 39.3% rarely experienced improvement in academics after learning by autodidact. And the last question is whether they are motivated to learn English independently to improve language skills in their academics. And the results show 21.4% of students every day, 57.1% of students often and 21.4% rarely motivated to learn English in order to improve language skills in their academics. Of all the questions the result that shows never is 0% so that these results support the data findings for this study.

Actually, students often use technology as their learning media but the use of technology media for learning is still not optimal. Students still need motivation to consistently learn and practice English. Given that English lessons at school every week

are limited. However, with today's technology they can learn English anywhere independently every day.

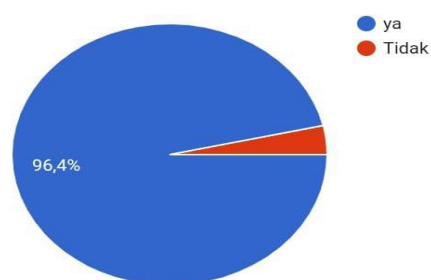


Figure 1. Results of technology presentation as an effective solution for students

The figure shows that 96.4% of them think technology can be an effective solution in overcoming the obstacles of learning English autodidactically. Learning English autodidactically can optimize their learning outcomes at school.

Evidence of technology's influence on students' willingness to learn English

Technology has made access to information easier than ever. With the internet, one can quickly search for information on any topic they are interested in. This can increase learning motivation as there is an opportunity to explore the topic more deeply. This becomes a trigger to increase students' willingness to learn, especially learning English. The perspective of foreign language teachers is to teach students to use foreign languages not only as a means of communication but also as cognition (Victoria & Predko, 2020). Based on the results of the research, some evidence related to students' interest in learning through technology was found from the interviews of several teachers at the school. At school we found that teachers use learning videos from YouTube. The teacher argues that information technology that produces videos or images is more interesting for students to learn because the material is not monotonous. Audio visuals presented from videos learning through information technology increases students' interest in learning.

In addition to the interview results, we also showed questionnaire results from students. The questionnaire results show that around 67.9% of students often use technology to learn. Then we have the same result that 60.7% of students often learn English using technology and learn autodidactically. From the results also show the effect after learning autodidact about 53.6% of students often experience improvement in academics but only 7.1% of students every day experience improvement. This shows that the motivation of students' interest in learning is not fully maximized because learning by autodidact does not make students experience academic improvement every day at school. However, this number is good enough to prove that learning English autodidactically makes a good improvement in improving English language skills. We also found the reason why students are not maximized in learning based on the results of the interview is the quality of the teacher in choosing media for learning. Students are also required to be selective in choosing learning media to learn autodidactically in order to create a more enjoyable learning space. A pleasant learning space can be created through technology that has developed to date (Ulil & Nurdian, 2022).

The Merdeka curriculum supports student autodidact learning

The *Merdeka* curriculum has been adapted to the needs of today's students so that it can create independent learning that presents a relevant and interactive learning system (Asri et al., 2023). The *Merdeka* curriculum provides flexibility for schools and students in determining learning methods and materials that suit their needs and interests. This allows teachers to be more independent in choosing the material they want to teach according to student needs and keep up with the times. It is similar to the autodidact approach where individuals learn independently based on their own interests and needs. Not only teachers, but students can support their learning outcomes at school by learning independently.

From the observations obtained, it was found that the *Merdeka* curriculum focuses more on students to deepen the material and the teacher is a facilitator. So according to the teacher, technology is very helpful for providing material to students without having to explain at length about the material. So the teacher only gives short questions or what is commonly called lighter questions. From these sparking questions, students can be motivated to learn through information technology. Other teachers also argue that technology can increase students' interest in learning English by using media such as the YouTube application to get learning videos because from these videos there are images and sounds that can train their English skills. To increase students' interest, YouTube media should be incorporated into the world of education because there are many videos presented on YouTube so that it varies and can increase students' interest. YouTube media is present as the best-selling site today as a medium used for learning through audio visual (video) (Murdianto & Nizzam, 2021).

The use of YouTube media for learning for students in schools has great potential to improve the learning process. YouTube can be a very useful tool in improving the quality of student learning in schools. Teachers and students need to work together to ensure that YouTube is used wisely and effectively. So YouTube is a learning media that supports the principles of the *Merdeka* curriculum principles which emphasize independence and flexibility in learning. YouTube has great potential to support the *Merdeka* curriculum and autodidactic learning. By its accessibility, visualization and variety of content on offer, the platform can be an effective tool in enriching students' learning experience. However, it requires proper strategy and oversight to overcome the challenges and ensure optimal learning.

Improving the quality of education at school with English language skills

Learning is an important part of the overall education process (Abdilah, 2021). There are many modern educational technologies, applications and learning platforms that use English. Students who master English are better able to utilize these technologies to learn and grow. Many ways can be done to improve the quality of education in schools. One way is to improve students' English language skills. Technology can be a strategy to improve English language learning and provide greater opportunities to make learning nationally and internationally important (Rasmani et al., 2022).

Improving the quality of education with English using technology is one of the efforts that can be done in schools. This is one of the main priorities in an effort to produce a generation that is ready to face global challenges. By learning English, the quality of students' education also increases. English is an international language that is widely used in academic and research literature. With good English skills, students can access various learning resources from around the world that may not be available in the local language. In the era of globalization, students must be ready to compete at the international level. With English language skills, students can make the school superior because students who have quality English language skills have a competitive advantage in the global job market, because many multinational companies are looking for candidates who are fluent in English. With the achievement of improving English language skills at school, it is expected to increase the quality of education at school.

Innovation using technological media in learning is used to improve the quality of learning (Nur Aini H & Hepnyi Samosir, 2021). Students can utilize technology as a medium for learning English. English learning with technology is not only obtained at school by teachers, but also can be autodidactically. Overall, technology plays an important role in supporting Autodidactic learning of English by providing tools and resources that support a flexible, effective, and engaging learning process. The final result

of the research that discusses the role of technology in improving autodidact learning outcomes in English education can be summarized with several important points that are relevant according to our findings.

Conclusion

Basically, the use of technology cannot be separated from daily life so that students are expected to make the best use of current technology. At school, it is also inseparable from using technology as a learning medium as applied in the current curriculum, namely the *Merdeka* curriculum. The use of technology in the *Merdeka* curriculum is a major focus in educational research. The *Merdeka* curriculum has evolved to meet the needs and conditions of students at this time (Asri et al., 2023). Until now, students are required to use technology as a learning medium. In implementing a *Merdeka* curriculum, the teacher is a facilitator and students are expected to be able to deepen the material. In this case, technology takes an important role as a medium for autodidact learning in improving English language skills at school.

In this research we have limitations in data collection, namely limited time and interview participants.

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