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ABSTRACT

ICT not only allows access to wider educational resources, but also enriches the learning experience through various digital applications and platforms. In the context of project-based learning, digital technology plays a very important role in supporting collaborative processes, facilitating communication, and providing opportunities for students to develop their English skills creatively and interactively. However, there are challenges faced in the utilization of ICT among students, especially related to the limitations of technological infrastructure and digital literacy. Perception is the process by which individuals organize and interpret stimuli from their environment to form a picture of their world. This study uses Quantitative research. Quantitative research is a type of research conducted by collecting numerical data. Researchers will use a questionnaire as an instrument in collecting data. The scale used is Likert, a choice for the questioner to measure from strongly agree, agree, neutral, disagree, and strongly disagree. In this study, there were 39 students of the Public health study program at STIK Bina Husada Palembang in the 2024/2025 academic year who participated in this study, Students were asked to fill out the questionnaire adapted from Baran, E., & Maskan, A. (2021) the questionnaire filling period is November 11-12, 2024. The integration of ICT in English learning projects has been highly effective in enhancing the learning experiences of students in the Public Health Science Study Program at STIK Bina Husada Palembang. ICT tools and platforms have significantly contributed to improving discussions, project management, collaboration, and confidence in presentations, while also fostering communication and understanding through translation applications and social media. Despite the positive impact, challenges such as technical difficulties, limited internet access, and varying levels of ICT proficiency highlight areas for improvement.

Keywords: ICT, Project, English

ABSTRAK

TIK tidak hanya memungkinkan akses ke sumber daya pendidikan yang lebih luas, tetapi juga memperkaya pengalaman belajar melalui berbagai aplikasi dan platform digital. Dalam konteks pembelajaran berbasis proyek, teknologi digital memainkan peran yang sangat penting dalam mendukung proses kolaboratif, memfasilitasi komunikasi, dan memberikan kesempatan bagi siswa untuk mengembangkan keterampilan bahasa Inggris mereka secara kreatif dan interaktif. Namun, ada tantangan yang dihadapi dalam pemanfaatan TIK di kalangan siswa, terutama terkait dengan keterbatasan infrastruktur teknologi dan literasi digital. Persepsi adalah proses ketika individu mengatur dan menafsirkan rangsangan dari lingkungan mereka untuk membentuk gambaran tentang dunia mereka. Penelitian ini menggunakan penelitian Kuantitatif. Penelitian kuantitatif merupakan jenis penelitian yang dilakukan dengan mengumpulkan data numerik. Peneliti akan menggunakan kuesioner sebagai instrumen dalam mengumpulkan data. Skala yang digunakan adalah Likert, pilihan bagi penanya untuk mengukur dari sangat setuju, setuju, netral, tidak setuju, dan sangat tidak setuju. Dalam penelitian ini, terdapat 39 mahasiswa program studi Kesehatan Masyarakat STIK Bina Husada Palembang tahun ajaran 2024/2025 yang mengikuti penelitian ini, Mahasiswa diminta untuk



mengisi kuesioner yang diadaptasi dari Baran, E., & Maskan, A. (2021) periode pengisian kuesioner adalah 11-12 November 2024. Integrasi TIK dalam proyek pembelajaran Bahasa Inggris sangat efektif dalam meningkatkan pengalaman belajar mahasiswa di Program Studi Ilmu Kesehatan Masyarakat STIK Bina Husada Palembang. Alat dan platform TIK telah berkontribusi secara signifikan untuk meningkatkan diskusi, manajemen proyek, kolaborasi, dan kepercayaan diri dalam presentasi, sementara juga mendorong komunikasi dan pemahaman melalui aplikasi penerjemahan dan media sosial. Meskipun berdampak positif, tantangan seperti kesulitan teknis, akses internet terbatas, dan berbagai tingkat kemahiran TIK menyoroti area yang perlu ditingkatkan.

Kata Kunci: TIK, Proyek, Bahasa Inggris

INTRODUCTION

Along with the rapid development of technology, the use of Information and Communication Technology (ICT) has become one of the key elements in the world of education, including in English language learning. ICT not only allows access to wider educational resources, but also enriches the learning experience through various digital applications and platforms. In the context of project-based learning, digital technology plays a very important role in supporting collaborative processes, facilitating communication, and providing opportunities for students to develop their English skills creatively and interactively.

The use of ICT in the Project-Based Learning (PBL) approach allows students to be actively involved in real projects that are relevant to everyday life, so that English language learning becomes more meaningful and contextual. In English language learning, the application of ICT has been proven effective in improving language skills, such as listening, speaking, reading, and writing, which are needed in today's digital era. ICT allows students to access rich and varied learning materials, such as videos, podcasts, e-books, and interactive language learning applications, so that the learning process becomes more dynamic and interesting (Hockly, 2012). In addition, the use of online platforms and collaborative applications such as Google Classroom, Zoom, and Microsoft Teams supports group work on projects, enabling easier communication and collaboration across time and place. In Project-Based Learning (PBL), ICT also facilitates the development of more authentic projects, where students can conduct research, create digital content, and present the final results virtually (Kokotsaki, Menzies, & Wiggins, 2016). Thus, ICT provides wider access to global resources that can enrich student project content, increase engagement, and encourage more contextualized English learning.

However, there are challenges faced in the utilization of ICT among students, especially related to the limitations of technological infrastructure and digital literacy. Unequal internet access in various regions and the lack of adequate technological training are often obstacles to the optimal application of ICT (Lai & Zheng, 2018). In addition, some students may feel less familiar with the various digital tools used in project-based learning, which can affect the effectiveness of their learning. Therefore, it is important to further explore how students use ICT in project-based English learning and how these challenges can be overcome. This study seeks to provide a descriptive overview of the utilization of ICT among students in this context, focusing on the impacts and challenges that arise during the learning process. In the context of health students, the ability to communicate in English is very important, especially since English is a global language in medical literature and health professional communication. With ICT, students can access resources such as international journals, medical audio-visual materials in English, and collaborate across countries in global health projects. Project-Based Learning using ICT also encourages students to think critically and creatively, where they can

In Indonesia, support for the integration of ICT in learning is growing with programs such as PembaTIK and education digitalization initiatives. This provides opportunities for students across the region, including health study programs, to utilize technology in project-based learning.

The word "Perception" comes from the word perception or percipio which means to collect or receive. In general, understanding perception can be understood as a person's ability to see, to hear, to feel, and to present or understand or become aware of something or someone's feelings towards the environment and social.

Perception is the process by which individuals organize and interpret stimuli from their environment to form a picture of their world. According to Robbins and Judge (2013), perception is a process by which individuals organize and interpret their sensory impressions to give meaning to their environment. Perception is not only influenced by external stimuli, but also by previous experiences, expectations, and social context. In the context of education, students' perceptions of learning tools can greatly affect the effectiveness of their use.

Utilization of ICT: ICT includes various digital and communication technologies such as computers, the internet, learning applications, software, and other digital tools used to support the teaching and learning process. In the context of English learning, ICT can include things like the use of language learning applications, online learning platforms, video conferencing, and social media to support language interaction.

English Language Learning: English language learning refers to the teaching and learning process that focuses on English language skills, be it speaking, listening, reading, writing, or grammatical comprehension and vocabulary.

Project-Based: Project-Based Learning (PBL) is an approach in which students learn by completing real projects or relevant problems. In this context, students are asked to complete projects such as creating videos, presentations, or written works in English with the help of ICT. This approach emphasizes the active involvement of students in activities that have real results.

RESEARCH METHOD

This study uses Quantitative research. Quantitative research is a type of research conducted by collecting numerical data. Researchers will use a questionnaire as an instrument in collecting data. A questionnaire is one of the research instruments that aims to collect data in survey research and can also be considered a written interview. The type of questionnaire used in this study is a closed questionnaire. The scale used is Likert, a choice for the questioner to measure from strongly agree, agree, neutral, disagree, and strongly disagree.

Research Steps

1. Students are divided into groups, 1 group consists of 2 people
2. Students are asked to make posters, leaflets, or videos about Health promotion in English
3. Students are asked to present the results of their work
4. Students fill out the questionnaire
5. Researcher check the results of the questionnaire

RESULTS AND DISCUSSION

Result

In this study, there were 39 students of the Public health study program at STIK Bina Husada Palembang in the 2024/2025 academic year who participated in this study, Students

were asked to fill out the questionnaire adapted from Baran, E., & Maskan, A. (2021) the questionnaire filling period is November 11-12, 2024

Table 1. Students' response toward the statement

No.	Statement	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1.	I use online applications (Zoom, Google Meet) to discuss in English projects.	28	7	2	1	1
2.	I use ICT tools such as image/video editing for English project presentations.	29	7	1	2	0
3.	The use of learning platforms (Google Classroom, Moodle) helps me in English project management.	31	5	3	0	0
4.	I use a translator application (Google Translate) to make it easier to understand texts in English.	16	14	6	1	2
5.	I use social media (WhatsApp, Telegram) to communicate with friends in English projects.	29	4	6	0	0
6.	ICT makes it easier for me to find the information needed for my English project.	29	8	1	0	0
7.	The use of ICT makes me more motivated in completing my English project.	26	10	3	0	0
8.	ICT improves my collaboration skills with colleagues in my English project.	30	7	2	0	0
9.	ICT helps me develop my English skills, such as writing and speaking.	29	8	2	0	0
10.	I feel more confident in presenting my English project using technology.	32	5	2	0	0
11.	I often experience technical difficulties when using ICT in English projects.	9	7	7	11	5
12.	Limited internet access hinders the use of ICT for English projects.	12	13	7	3	4
13.	I have difficulty operating some applications or platforms used in English projects.	9	5	10	10	5
14.	The use of ICT takes more time than conventional methods in English projects.	8	5	9	9	8
15.	I need more training to use ICT effectively in project-based English learning.	16	14	6	1	2



Based on student response data on the use of online applications (such as Zoom and Google Meet) in English projects, the majority of students showed positive responses. As many as 28 people (70%) strongly agreed that online applications are effective for discussions, while 7 others (17.5%) agreed. This shows that 87.5% of students feel the benefits of using this application in the learning process and discussion of English projects. A small number of respondents are in a neutral position, namely 2 people (5%), and only 1 person disagrees and 1 person strongly disagrees (2.5% each). From these results, it can be concluded that the use of online applications has been well received by most students for discussion activities in English projects.

The results of student responses regarding the use of ICT tools, such as image or video editing applications, for English project presentations showed a very positive response. As many as 29 students (72.5%) stated that they strongly agreed that they used this tool, and 7 others (17.5%) also agreed. Thus, 90% of respondents felt comfortable and utilized ICT tools to support their project presentations. Only 1 person (2.5%) gave a neutral answer, and 2 people (5%) disagreed, while none strongly disagreed. These data reflect that most students feel that ICT tools are very helpful in improving the quality of their English project presentations.

The results of student responses regarding the role of learning platforms, such as Google Classroom and Moodle, in helping English project management showed a very positive response. A total of 31 students (77.5%) stated that they strongly agreed that these platforms were useful in their project management, while 5 others (12.5%) also agreed. Thus, 90% of respondents felt the benefits of using these platforms in supporting project assignments and coordination. A total of 3 people (7.5%) gave neutral answers, and none answered disagree or strongly disagree. These results indicate that the majority of students feel helped by the learning platforms in managing their English projects.

Based on the responses of all students, namely 39 people who all agreed to the use of translation applications (such as Google Translate) to facilitate understanding of texts in English, it can be concluded that translation applications are very helpful in the process of understanding English language materials. The absence of neutral or negative responses indicates that translation applications have become a tool that students rely on to support effective understanding of English texts.

Based on the data collected, the majority of respondents showed strong agreement in using social media such as WhatsApp and Telegram to communicate with friends in English language projects. As many as 29 people (the majority of respondents) strongly agreed, and 4 people agreed, indicating that most felt that social media facilitated communication in this context. Meanwhile, only 6 people were neutral, and no respondents disagreed or strongly disagreed. Thus, it can be concluded that social media is considered effective and supports collaboration between friends in English language project activities for most respondents.

Based on the data obtained, the majority of respondents felt that ICT (Information and Communication Technology) made it very easy for them to find the information needed for English language projects. As many as 29 people strongly agreed, and 8 people agreed, which showed that most respondents felt great benefits from the use of ICT in supporting information searches. Only 1 person was neutral, and no respondents disagreed or strongly disagreed. Thus, it can be concluded that ICT is considered an effective and useful tool in helping students access relevant information for English language projects.

Based on the data obtained, the majority of respondents felt that the use of ICT (Information and Communication Technology) increased their motivation in completing English projects. As many as 26 people strongly agreed, and 10 people agreed, which showed that most respondents felt a strong motivational boost with the support of ICT. Only 3 people were neutral, and no respondents disagreed or strongly disagreed. Thus, it can be concluded



that the use of ICT is considered effective in increasing students' motivation to complete English projects.

Based on the data obtained, the majority of respondents felt that the use of ICT (Information and Communication Technology) had improved their collaboration skills with colleagues in English language projects. As many as 30 people strongly agreed, and 7 people agreed, indicating that most respondents felt a significant increase in their collaboration skills through the help of ICT. Only 2 people were neutral, and no respondents disagreed or strongly disagreed. Thus, it can be concluded that the use of ICT is generally considered effective in strengthening collaboration skills between students in working on English language projects.

Furthermore, the majority of respondents felt more confident in presenting their English projects with the help of technology. As many as 32 people strongly agreed, and 5 people agreed, indicating that most respondents felt a significant increase in confidence when using technology in presentations. Only 2 people were neutral, and no respondents disagreed or strongly disagreed. Thus, it can be concluded that the use of technology is generally considered capable of increasing students' confidence in presenting their English projects.

Based on the data obtained, respondents have diverse views regarding technical obstacles in using ICT (Information and Communication Technology) for English language projects. As many as 9 people strongly agree and 7 people agree that they experience technical obstacles, indicating that some respondents face obstacles in using ICT. On the other hand, 11 people disagree and 5 people strongly disagree, indicating that some respondents feel they do not experience significant technical difficulties. With 7 respondents who are neutral, this data reflects the variation in respondents' experiences. Overall, although some respondents experience technical obstacles, many also feel that these obstacles are not an obstacle in their English language projects.

Then, on the statement of limited internet access being an obstacle in the use of ICT for English language projects for some respondents. As many as 12 people strongly agreed and 13 people agreed that limited internet access hinders the use of ICT, indicating that almost half of the respondents experienced this challenge. On the other hand, 3 people disagreed and 4 people strongly disagreed, meaning that a small number of respondents felt undisturbed by limited internet access. Meanwhile, 7 respondents were neutral. Thus, it can be concluded that limited internet access is a significant obstacle for many students in utilizing ICT for English language projects, although there are also some who do not feel this obstacle.

Based on the data obtained, respondents showed varying experiences related to difficulties in operating applications or platforms used in English language projects. As many as 9 people strongly agreed and 5 people agreed that they had difficulties, indicating that some respondents felt less comfortable or skilled in using some applications or platforms. On the other hand, 10 respondents disagreed and 5 respondents strongly disagreed, indicating that for some others, difficulties in operating applications were not a significant problem. With 10 respondents who were neutral, this data reflects the variation in the level of ease or difficulty experienced by students. Overall, some students found it difficult to use ICT, while others did not face significant obstacles in operating the applications or platforms.

Respondents' views on the time spent using ICT compared to conventional methods in the English project were quite varied. Eight strongly agreed and five agreed that ICT took more time, indicating that some respondents felt that using ICT was more time consuming than traditional methods. However, nine disagreed and eight strongly disagreed, indicating that some felt that using ICT was no more time consuming than conventional methods. With nine respondents being neutral, these data reflect a variation in experiences in terms of time efficiency. Overall, there was a difference of opinion among respondents, indicating that perceptions of time efficiency in using ICT varied among students.



In the last statement, most respondents felt that they needed more training to use ICT effectively in project-based English learning. As many as 16 people strongly agreed and 14 people agreed, indicating that the majority of respondents felt that additional training was needed to maximize the use of ICT in learning. Only 6 respondents were neutral, and only 3 respondents disagreed or strongly disagreed, indicating that a small number of respondents felt that they were already skilled enough or did not need further training. Thus, it can be concluded that most students felt that additional training on the use of ICT was very important to support project-based English learning.

Discussion

The findings indicate that the integration of ICT in English learning projects is largely perceived positively by students of the Public Health Science Study Program at STIK Bina Husada Palembang. A significant majority of students reported that online applications, ICT tools, and learning platforms have enhanced their learning experience, particularly in discussions, project presentations, and project management. These tools have also fostered collaboration and improved students' confidence in presenting their projects. The overwhelmingly positive feedback on translation applications and social media usage highlights the importance of these technologies in facilitating communication and understanding, essential components of language learning. However, some students faced challenges such as technical difficulties, limited internet access, and a lack of proficiency in operating certain applications, which suggests that not all learners are equally equipped to utilize ICT effectively.

Despite these challenges, the study underscores the potential of ICT to motivate students and enhance their collaboration skills, confidence, and overall learning outcomes in project-based learning. However, the variation in experiences regarding technical obstacles and time efficiency suggests the need for further support and training. The majority of respondents expressed a desire for additional training in ICT usage, which could address gaps in skills and improve the effectiveness of ICT integration in learning. Moreover, addressing infrastructure issues, such as internet access, could further support the full utilization of ICT tools, ensuring equitable learning opportunities for all students. These insights provide valuable guidance for educators in optimizing ICT use to support English language learning in project-based contexts.

The findings of this study align with previous research that emphasizes the benefits of ICT in enhancing language learning outcomes. For instance, Ahmad et al. (2020) found that ICT tools significantly improved student engagement, collaboration, and confidence in language learning activities, particularly in project-based settings. Similarly, Zou et al. (2021) highlighted that the use of online platforms and applications, such as Zoom and Google Classroom, not only facilitated effective communication but also supported task organization and project management, as seen in this study. The results also corroborate the theoretical framework of constructivist learning proposed by Vygotsky (1978), which emphasizes the role of social interaction and tools in knowledge construction. ICT serves as a mediational tool, enabling students to collaborate and communicate more effectively while engaging in meaningful learning experiences. However, as noted by Hartnett (2016), challenges such as technical obstacles and disparities in access to resources must be addressed to ensure equitable learning. These findings underscore the need for targeted training programs, as suggested by Alshammari (2022), to enhance students' ICT competencies and optimize its integration into language learning. This literature reinforces the importance of ICT as a transformative element in modern education while acknowledging areas that require attention for its effective implementation.

CONCLUSION

The integration of ICT in English learning projects has been highly effective in enhancing the learning experiences of students in the Public Health Science Study Program at STIK Bina Husada Palembang. ICT tools and platforms have significantly contributed to improving discussions, project management, collaboration, and confidence in presentations, while also fostering communication and understanding through translation applications and social media. Despite the positive impact, challenges such as technical difficulties, limited internet access, and varying levels of ICT proficiency highlight areas for improvement.

The alignment of these findings with previous research underscores the transformative potential of ICT in language learning, supporting theoretical frameworks like constructivist learning, which emphasizes social interaction and tool-based knowledge construction. However, to maximize ICT's benefits, targeted training and infrastructure improvements are essential. Addressing these challenges will not only enhance students' ICT competencies but also ensure equitable and effective integration of technology in language education. This study reinforces the critical role of ICT in modern education while advocating for continued support and development to optimize its use.

REFERENCES

Ahmad, M., Hussain, Z., & Farooq, M. U. (2020). The impact of ICT on student engagement and learning outcomes in language education. *International Journal of Language Studies*, 14(2), 45-60.

Alshammari, R. (2022). Enhancing students' ICT competencies in language learning: A case study. *Education and Information Technologies*, 27(1), 135-156.

Baran, E., & Maskan, A. (2021). ICT Integration in Project-Based Learning in Higher Education: A Case Study. *Journal of Educational Technology & Society*, 24(3), 121-134.

Ertmer, P. A., & Ottenbreit-Leftwich, A. T. (2010). Teacher Technology Change: How Knowledge, Confidence, Beliefs, and Culture Intersect. *Journal of Research on Technology in Education*, 42(3), 255–284.

Harris, J., Mishra, P., & Koehler, M. (2009). Teachers' Technological Pedagogical Content Knowledge and Learning Activity Types: Curriculum-Based Technology Integration Reframed. *Journal of Research on Technology in Education*, 41(4), 393–416.

Hartnett, M. (2016). *The importance of motivation in online learning*. Singapore: Springer.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Zou, B., Wang, D., & Xing, M. (2021). Applications of online learning platforms in language education: A project-based learning perspective. *Language Teaching Research*, 25(3), 347-362.