

ESP Students' Perception Towards the Use of ICT in English Learning

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ABSTRACT

This study aimed to explore ESP students' perceptions towards the use of Information and Communication Technology (ICT) in English learning. Data obtained was analyzed by employing the descriptive analysis techniques using questionnaire distributed to 50 students from the Economic Faculty of Yogyakarta State University in the form of Google form. The questionnaire adapted from Davis (1989) Technology Acceptance Model (TAM). The study revealed that a significant majority of students perceive ICT as beneficial tool in improving their performance in ESP course, with 77% recognizing its usefulness and 79% agreeing on its ease of use. Additionally, 76.5% of students demonstrated positive attitudes toward ICT use, while 81% expressed a strong intention to continue using it in their learning. These findings highlight the importance of ICT in fostering language skills relevant to students' academic and professional goals

INTRODUCTION

In the 21st century, Information Communication and Technology (ICT) in has a substantial influence on various aspects of life, including work, leisure, communication, knowledge acquisition, and education. Technology is increasingly becoming a fundamental component of the modern learning environment, with scholars and educators continuously exploring ways to leverage it for enhanced learning experiences. In language learning, ICT integration has shown to support students in developing their language skills (Balbay & Kilis, 2017), additionally ICT utilization can motivate and empower learners in English language learning (Le & Tran, 2020). ICT utilization can create changes for collaboration and interaction in the learning process, however, the instruction must be scaffolded for learners to benefit from such opportunities (Zam & Al Arif, 2019).

ICT is now widely used in classrooms at all educational levels, from kindergarten through college, offering students access to learning resources and opportunities to practice English language skills. Through ICT, students can engage in real-world setting of English (Lamb & Arisandy, 2020). Teachers can also use video resources in the classroom to support English learning in the classroom (Boutonglang & Flores, 2011; Rosell-Aguilar, 2018). Furthermore, ICT can play a key role in developing students' listening, reading, speaking, and writing skills in English (Jakob & Afdaliah, 2019).

Technology has the potential to greatly enhance classroom learning if students and teachers can utilize it effectively. With the integration of technology, traditional learning methods are evolving into more modern and innovative approaches, especially when combined with teachers' creative teaching strategies. This shift aligns with the current landscape where students have increased access to technology in their learning experiences. Consequently, researching students' perceptions of ICT use in English learning is essential, as the effectiveness of ICT in improving English skills relies on students' abilities and choices in using accessible technology both in and outside the classroom. ICT supports both teachers and students by making teaching and learning more engaging, assisting teachers in lesson preparation, and fostering educational innovation. Students also use technology to deepen their understanding of subjects, while ICT benefits teaching skills, supports innovative teaching methods, aids in preparation and student evaluation, and enhances classroom effectiveness (Bhattacharjee & Deb, 2016).

The use of ICT in ESP allows students to learn English tailored to specific goals, accommodating diverse learning styles and motivations in the language learning process (Dashtestani & Stojković, 2015). ICT use in ESP provides benefits such as increased engagement, activities that reflect real academic or professional scenarios, and opportunities for collaborative learning (Motteram, 2013). In addition, the use of ICT in ESP courses enables students to interact and engage in real communication with their professional group, acquire career-relevant knowledge, and express their ideas, which can give students a sense of empowerment (Arnó-Macià, 2012).

Several researchers have conducted research in the field of ICT use. Prasetyo (2022) examined junior high school students' perceptions and beliefs about internet usage in English learning. Three points were highlighted by the study's findings. The first point was that students developed positive attitudes and views about the use of the Internet in education. The second observation was that there were connections between perception and belief, although only at a moderate degree (r -value of .551). Third, there were no differences between male and female students regarding their perceptions of internet usage. Another research is conducted by Sabti & Chaichan (2014), This study includes 30 students from Saudi Arabia attending a high school in Kuala Lumpur, Malaysia, focuses on examining the attitudes and barriers of the students. Gender variations in views toward the use of technologies in English learning were found after the study's analysis. Female students displayed higher levels of positivity than male classmates. Zam & Al Arif (2019) also conducted study on the expectations and perceptions of Indonesian university students on the use of ICT in learning English as a foreign language. The results showed that students had good attitudes toward using ICT to study English and that they expected teachers to use ICT more frequently during the teaching and learning process. Additionally, they anticipated that the campus would be able to supply each classroom with the necessary tools and access to ICT.

Previous research has already conducted research about students' perceptions on internet usage in various stages of education. However, there are still excessively rare research undertaking the study to discuss the ICT usage for ESP students in Economic Faculty context. Therefore, ICT integration is required to be investigated further to know the students' perception towards the use of ICT in English learning at ESP classroom. So, this study aims to explore students' perceptions towards the use of ICT in ESP context. This study attempts to describe students' perception on using ICT for English language learning in ESP classroom with some dimensions namely perceived usefulness, perceived ease of use, and attitude toward use and behavioral intention.

LITERATURE REVIEW

The Concept of Perception

Researchers have proposed numerous definitions of perceptions. According to Mahdum et al., (2019), perception is the process of condensing, categorizing, and interpreting received information within an individual's existing knowledge framework. This means perception involves gathering information and stimuli from one's knowledge base. Barry (1998) further defined perception as a series of processes for recognizing, organizing, and generating stimuli from the environment. Additionally, some philosophers have described perception as a cognitive process influenced by an individual's interaction with their surroundings, which includes actions like remembering, reflecting, and interpreting language.

In a limited sense, perception refers to how individual perceives things, however in a broader context, perception is how individual comprehensively perceives things. Perceptions allows us to comprehend our surroundings by integrating cognitive elements with extensive information, enabling us to make

informed decisions in our roles, such as English teaching. Everyone has a different tendency to perceive the same situation differently influenced by various factors including both internal and external elements.

a. Internal Factors

Internal factor is a factor that originates within an individual. They are influenced by psychological aspects such as thoughts, emotions, desires, needs, motivations, and attention. Each person possesses distinct characteristics and temperaments, shaped by their family background and environment.

b. External factors

External factors pertain to influences outside the individual, including stimuli, environmental conditions, and societal beliefs. Our lives are intertwined with both the physical and social environments, which play a significant role in shaping our perceptions.

Information and Communication Technology (ICT)

Information and communication technology (ICT) incorporates a variety of tools and technologies that serve diverse purposes, such as generating, displaying, storing, manipulating, and sharing information. It consists of computer and network-based technologies that facilitate the production, distribution, and exchange of information (Murray, 2005). In a broad sense, ICT covers computers, hardware and software, smartphones, devices, networks, internet, websites, e-mail, television, radio, and other computer-based technologies. The widespread adoption of ICT has had a transformative impact on education, particularly by enhancing English language learning and teaching in recent years. Kennewell (2004) describes information and communication technology (ICT) as an inclusive term that includes various components, such as computers, networks (including the Internet), and other devices that can store and process information, such as televisions, mobile phones, and autonomous control system. For the purposes of this study, ICT refers specifically to computer and internet-based technologies such as desktops, laptops, smartphones, devices, email, social media, websites, and software that are relevant to English language teaching and learning (Davies & Hewer, 2009).

In recent decades, Indonesian universities have made substantial investments in ICT infrastructure and training, aligning with the global movement toward integrating ICT in education. Similar to other countries, Indonesia's primary goal with ICT integration in education is to assess its impact on teaching and learning practices. Incorporating ICT into these activities can enhance engagement, making teaching and learning more dynamic. In English language education, ICT use has been shown to promote positive student attitudes and perceptions toward its classroom application (Pan & Shao, 2020). The utilization of ICT in English language classrooms offers significant potential for enhancing language acquisition by creating interactive learning environments and motivating students. Technological tools such as televisions, laptops, projectors, and interactive play a role in shaping students' attitudes, offering them greater flexibility and encouraging them to use technology in developing their language skills (Wang & Hsu, 2020).

The use of technological tools like internet not only streamlines and simplifies the teaching and learning process but also boosts student engagement and motivation (Al Arif & Handayani, 2021; Rafiee & Naghneh, 2021). ICT offers multiple advantages for students, including access to a wide range of resources. Using ICT in education, such as Social Networking Services (SNS) provides social benefits such as peer discussions and a platform for student-lecturer communication, while also enhancing learning motivation and supporting learning experiences (Habibi et al., 2018).

Technology Acceptance Model

Davis (1989) introduced the Technology Acceptance Model as a framework to assess the acceptability of computer-based information systems, specifically in relation to individuals' perceptions and attitudes towards Information and Communication Technology (ICT)-based learning. The model identifies four relational indicators and two fundamental beliefs that influence the acceptance of ICT innovations: perceived usefulness (PU) and perceived ease of use (PEOU). Perceived usefulness (PU) measures the extent to which individuals believe that using a particular system will enhance their job performance. On the other hand, perceived ease of use (PEOU) measures individual' beliefs regarding the system's usability and the absence of excessive workload or cognitive effort. Another indicator in the Technology Acceptance Model is attitude toward technology, which evaluates how individuals perceive the impact of using a specific system on their performance. Additionally, actual technology use (ATU) refers to individuals' direct usage of the technology in the context of their performance. ATU represents repeated and multiple actions specific to the target system, action (direct usage), and context (job-related), without concerning the period.

METHODOLOGY

This research employed qualitative descriptive research. The study focused on students from the Economic Faculty at Yogyakarta State University who were studying English for economic purposes. The participant sample consisted of fifty students from a single class. Data collection was conducted through an online questionnaire, which was adapted from the Technology Acceptance Model (TAM) constructed by Davis (1989). The questionnaire utilized a closed-ended format, requiring participants to select one of five options: Strongly Agree (SA), Agree (A), Neutral (N), Disagree (D), and Strongly Disagree (SD). A 5-point Likert response scale was used, with 5 indicating Strongly Agree, 4 for Agree, 3 for Neutral, 2 for Disagree, and 1 for Strongly Disagree.

The data collected were then analyzed using descriptive statistical analysis. Responses for each questionnaire item were categorized into five response category, followed by the determination of percentages to identify trends in students' perceptions. presented in the form of graphs and tables to facilitate statistical interpretation. The data were further visualized in the form of graphs and tables to provide a clear and systematic summary of the findings. This approach ensured the data were comprehensively represented and easily interpretable in alignment with the research objectives.

RESEARCH RESULT

1. Demographic Profile

Participants' Profile

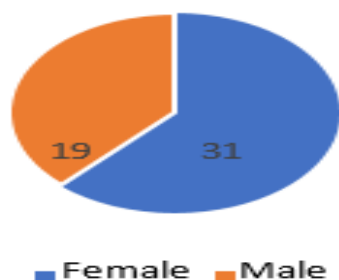


Figure 1. Participants' Profile

Figure 1 above shows the respondents' demographic profile. Based on the total number of respondents (50), It is known that 62% (31 respondents) are female, while 38% (19 respondents) are male.

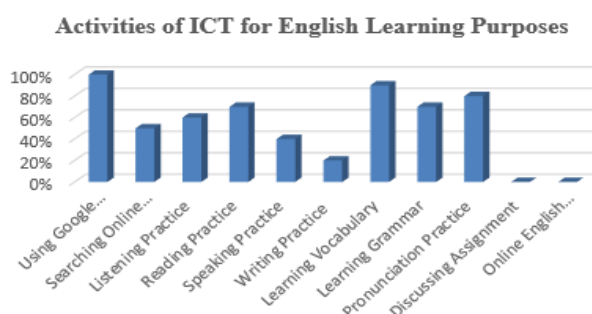


Figure 2. Activities of ICT use for English Learning Purposes

Based on the table above, it can be seen that the most preferred tool among students for English language learning in the ESP classroom is Google Translation, with 100% of students using it. This is followed by vocabulary learning at 90% and pronunciation practice at 80%. Reading practice and learning grammar also show substantial usage rates, each at 70%, while listening practice is used by 60% of students. In contrast 50% of students use Online material searches, while Speaking practice and Writing practice are less utilized at 40% and 20%. Discussing assignments and online English learning tools show no engagement.

2. Students' Perception on Using ICT in ESP Course Based on Perceived Usefulness

Table 1. Perceived Usefulness

No Items	Students' Response					Total
	SD	D	N	A	SA	
1	0	0	12	32	6	50
2	1	0	13	27	9	50
3	0	1	12	28	9	50
4	1	1	6	29	13	50

5	0	1	11	27	11	50
6	0	2	12	23	13	50
7	0	0	14	22	14	50
8	0	2	7	28	13	50
9	0	1	12	27	10	50
10	0	0	7	30	13	50
Total	2	8	106	273	111	500
Percentage	0%	2%	21%	55%	22%	100%

According to the findings from the survey involving 50 students, it was observed that a significant majority (77%) held the view that ICT had the potential to enhance their performance in the ESP course, with 55% expressing agreement and 22% strongly agreeing with this notion. Conversely, a small percentage (2%) of students believed that ICT would not contribute to their improvement in vocabulary mastery, while the remaining 21% remained neutral on the matter. Based on the collected data, it can be inferred that students perceive the process of learning English through the utilization of ICT in ESP courses to be straightforward. Furthermore, students actively employ ICT to augment their access to information and expedite task completion within the realm of ESP. This finding aligns with the research conducted by Fu, J., (2013), which highlights the benefits of ICT in creating learner-centered environments that promote autonomy and efficiency in accessing information. Fu, J., (2013), underscores ICT' role in assisting students to effectively find, organize, and interpret digital information, supporting active engagement in language acquisition. In summary, all students unanimously acknowledged the usefulness of integrating ICT in ESP courses, highlighting its growing prominence and vital role in facilitating the English language learning process as an instructional medium. Consequently, the students' perception of the efficacy of ICT in ESP courses was positive.

3. Students' Perception on Using ICT in ESP Course Based on Perceived of Ease of Use

In this study, perceived ease of use relates to students' beliefs that learning with ICT in an ESP course is straightforward and uncomplicated. There were questions intended to elicit students' responses regarding ICT use in the ESP course. The results of the questionnaire are shown in the table that follows:

Table 2. Perceived of Ease of Use

No Items	Students' Response					Total
	SD	D	N	A	SA	
15	0	2	13	28	7	50
16	0	1	8	29	12	50
17	0	1	10	24	15	50
18	0	0	7	28	15	50
Total	0	4	38	109	49	200
Percentage	0%	2%	19%	54,5%	24,5%	100

The research shown in Table 2 demonstrates that there are differences in the students' perceptions of how simple it is to use ICT. Out of the 50 students surveyed, a majority of 79% (consisting of 54.5% who agreed and 24.5% who strongly agreed) believed that incorporating ICT in the ESP course was easy to learn. Specifically, 24.5% of students strongly agreed that ICT is easy to use for learning English, while 54.5% agreed that the use of ICT facilitates their comprehension of English learning materials, indicating its effectiveness in supporting understanding and knowledge acquisition. Conversely, 2% of students expressed the opinion that ICT was either difficult to use or not easy to operate. The remaining 19% of students maintained a neutral stance on the matter. Moreover, the integration of ICT tools in the teaching and learning process of the ESP course was found to simplify students' access to and understanding of course materials. Overall, the findings of the second indicator suggest that the majority of students held positive perceptions regarding the ease of utilizing ICT in the ESP course.

4. Students' Perception on Using ICT in ESP Course Based on Attitude Toward Use

Actual use is the degree to which students utilize technology in this investigation. There were Four statements were devised to elicit responses based on students' ICT application in the ESP course. The survey results are presented in the table below:

Table 3. Attitude Toward Use

No Items	Students' Response					Total
	SD	D	N	A	SA	
11	1	0	11	24	14	50
12	0	1	13	27	9	50
13	0	1	10	27	12	50
14	0	0	10	24	16	50
Total	1	2	44	102	51	200
Percentage	0,50%	1%	22%	51%	25,50%	100%

The analysis of the data collected indicates that a majority of participants have a positive stance towards incorporating ICT-based learning. Among the respondents, 25.5% strongly agree and 51% agree that using an ICT-based is a good idea for English Language Teaching courses. Furthermore, the data demonstrates that 22% of participants hold a neutral stance. On the other hand, a small percentage of participants, 1%, expressed disagreement with the idea, while an even smaller percentage, 0.5%, strongly disagreed. Students' Perception on Using ICT in ESP Course Based on Behavioral Intention.

Table 4. Behavioral Intention

No Items	Students' Response					Total
	SD	D	N	A	SA	
19	1	0	9	30	10	50
20	0	1	8	29	12	50

Total	1	1	17	59	22	100
Percentage%	1%	1%	17%	59%	22%	100

According to the findings presented in Table 4, the results indicate that 81% of students displayed motivation to utilize ICT in their ESP course, while only 2% expressed a lack of motivation in using ICT. The remaining 17% of students remained neutral on the matter. These students acknowledged the usefulness of ICT tools and their contribution to English language learning. This observation aligns with the findings of Basri and Paramma (2019) who reported that the majority of students expressed intentions to incorporate ICT-based learning in their future studies. Consequently, ICT can be recommended as a viable application for supporting learning in classrooms, as it is perceived as a valuable tool for enhancing the quality of education, particularly in the context of learning English for specific purposes. In conclusion, the fourth sign shows that almost students strongly agreed that using ICT in the ESP course inspired them to continue using it. These results indicate that students' perceptions regarding behavioral intentions were positive.

CONCLUSIONS AND RECOMMENDATIONS

The study concludes that Information and Communication Technology (ICT), which encompasses various technologies for information creation, display, storage, manipulation, and exchange, plays a crucial role in supporting English teaching and learning activities in English for Specific Purposes (ESP) classroom. The integration of ICT in the classroom significantly enhances students' language learning experiences by promoting active learning, boosting motivation, and improving overall learning outcomes. The findings of this research indicate that ESP students at Yogyakarta State University have a positive of ICT's utility and ease of use in their English learning process. Specifically, a substantial majority of students (77%) recognized ICT's potential to enhance their performance in ESP courses, demonstrating its growing prominence as an instructional medium. Furthermore, (79%) of respondents expressed that incorporating ICT in their studies made learning straightforward and uncomplicated, highlighting the effectiveness of these tools in facilitating comprehension and knowledge acquisition.

However, while this study showcases the benefits and positive perceptions towards ICT usage in ESP courses, it also emphasizes the need for further efforts to establish guidelines that promote discipline and deeper engagement with lesson content. Enhancing ICT usage in the ESP teaching and learning process is essential for developing students' language skills that are relevant to their future careers. To maximize the benefits of ICT, educators should scaffold instruction to ensure that students can effectively leverage technology for language development. Given the significance of ICT in English teaching and learning, it is recommended that future research explores other aspects of ICT use in ESP and adopts different research designs to broaden the understanding of its impact. This includes investigating how different technologies can be integrated into various teaching methodologies, as well as

examining the long-term effects of ICT on students' language acquisition and professional success. By doing so, the educational community can further enhance the effectiveness of ICT in fostering successful learning outcomes in ESP contexts.

FURTHER STUDY

Future studies should focus on exploring the ICT use in ESP classrooms across different disciplines beyond the economic faculty. Investigating whether students in different fields of study share similar perceptions or face unique challenges will provide a broader understanding of ICT's role in diverse academic contexts. Additionally, research should examine the direct impact of ICT on specific English language skills, such as writing, speaking, reading, and listening, to determine its effectiveness in enhancing proficiency in ESP learning. It is equally important to address barriers and challenges to ICT integration, including issues related to infrastructure, access, and teacher readiness, as well as pedagogical approaches. Focusing on these areas will help refine ICT implementation strategies and ensure that its potential benefits are fully realized in ESP education.

REFERENCES

- Al Arif, T. Z. Z., & Handayani, R. (2021). Factors Influencing the Use of ICT for English Language Learning of Indonesian EFL University Students. *Journal of English Language Studies*, 4(1), 24-33.
- Arnó-Macià, E. (2012). The role of technology in teaching languages for specific purposes courses. *The modern language journal*, 96, 89-104.
- Balbay, S., & Kilis, S. (2017). Eurasian Journal of Applied Linguistics Students' Perceptions of the use of a YouTube channel specifically designed for an Academic Speaking Skills Course. In *Eurasian Journal of Applied Linguistics* (Vol. 3, Issue 2).
- Barry. (1998). A Study Of Students Perception In English Classes. 3(2).
- Basri, M & Paramma, M. (2019). EFL Students' Perspective on the Usefulness of ICT based Learning in Indonesian Higher Education. 6. 105-120. 10.26858/eltww.v6i2.10515.
- Bhattacharjee, B., & Deb, K. (2016). Role of ICT in 21st century's teacher education. *International Journal of Education and Information Studies*, 6(1), 1-6.
- Boutonglang, D., & Flores, F. (2011). A Study on Integrating Technology to Engage 7th Grades into an English as a Foreign Language (EFL) Classroom in A Rural Secondary School, Thailand. In *International Journal of Arts & Sciences* (Issue 18).
- Dashtestani, R., & Stojković, N. (2015). The Journal of Teaching English for The Use of Technology in English for Specific Purposes (ESP) Instruction: A Literature Review. In *Specific and Academic Purposes* (Vol.3)
- Davies, G., & Hewer, S. (2009). Introduction to New Technologies and How They Can Contribute to Language Learning and How They Can Contribute to Language Learning and Teaching. *Information and Communication Technology for Language Teachers (ICT4LT)*. Thames Valley University.

- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.
- Fu, J. (2013). Complexity of ICT in education: A critical literature review and its implications. *International Journal of education and Development using ICT*, 9(1), 112-125.
- Habibi, A., Mukminin, A., Riyanto, L. D Sulistiyo, U., Sofwan, M., & Saudagar, F. (2018). Building an online community: Student teachers' perceptions on the advantages of using social networking services in a teacher education program. *Turkish Online Journal of Distance Education*, 19(1), 46-61.
- Jakob, J. C., & Afdaliah, N. (2019). Using oxford smart choice multi-ROM to develop the students' listening ability. *Journal of Education, Literature, and Culture*, 4(1), 25-34.
- Kennewell, S. (2004). *Meeting the Standards in Using JCT for Secondary Teaching*. London: Routledge.
- Lamb, M., & Arisandy, F. E. (2020). The impact of online use of English on motivation to learn. *Computer Assisted Language Learning*, 33(1-2), 85-108.
- Le, T., & Tran, N. (2020). Perspectives and Attitudes towards Self-directed MALL and Strategies to Facilitate Learning for Different Learner Groups. In *Computer-Assisted Language Learning Electronic Journal* (Vol. 21, Issue 3).
- Mahdum, Hadriana, & Safriyanti, M. (2019). Exploring teacher perceptions and motivations to ICT use in learning activities in Indonesia. *Journal of Information Technology Education: Research*, 293-317.
- Motteram, G. (2013). *Innovation in Learning Technology for English Language Teaching* (Innovations Series). British Council.
- Murray, D. E. (2005). Technologies for second language literacy. *Annual Review of Applied Linguistics*, 25(1), 188-201.
- Pan, X., & Shao, H. (2020). Understanding factors influencing EFL students' technology-based self-directed learning. *International Journal of Social Sciences and Education Research*. <https://doi.org/10.24289/ijsser.781472>, 6(4), 450-459.
- Prasetyo, D. E. (2022). Exploring Students Perception and Belief Toward the Internet Usage in English Learning. *Jurnal Teknologi Pendidikan*.
- Rafiee, M., & Naghneh, S. A. (2021). E-learning: development of a model to assess the acceptance and readiness of technology among language learners. *Computer Assisted Language Learning*, 34(5-6), 730-750.
- Rosell-Aguilar, F. (2018). Autonomous language learning through a mobile application: a user evaluation of the busuu app. *Computer Assisted Language Learning*, 38(1), 854-881.
- Sabti, A. A., & Chaichan, R. S. (2014). Saudi high school students' attitudes and barriers toward the use of computer technologies in learning English. *SpringerPlus*, 3(1), 1-8.
- Wang, Y. C., & Hsu, L. (2020). Shall we go to the MALL? – Students' perceptions of a business English learning app. *International Journal of Information and Education Technology*, 10(2), 110-116.

Zam, T., & Al Arif, Z. (2019). Indonesian University Students' Perception and Expectation towards I CT Use in Learning English as a Foreign Language. *Indonesian Journal of English Language Teaching and Applied Linguistics*, 4(1), 2019. www.ijeltal.org