

Students' Perspectives on the Usefulness of ICT - Based Learning by Using Technology Acceptance Model (TAM)

Amrullah¹, Husnul Lail², Sofia Rahmi Sumayani³, Nurul Huda Binti Hamzah⁴

University of Mataram, Indonesia ^{1,2,3}

University Malaya, Malaysia⁴

Email: nurul.huda.hamzah@um.edu.my⁴

Submitted: 27/12/2022

Revised: 10/01/2023

Accepted: 10/03/2023

E-ISSN : 2579-4574

P-ISSN : 2549-7359

Abstract. In this new era, teaching and learning activities have been associated with the use of Information and Communication Technology (ICT). In the context of English language learning, ICT is a resource and tool for supporting students in their learning process. With the use of different English learning activities, ICT offers students a range of sources to obtain authentic content and improve their language abilities. This research aims to analyze the English as a Foreign Language (EFL) students' perspectives on the use of ICT-based learning in their learning activities and the contribution of ICT-based learning to the learning activities. This is a quantitative descriptive study. The Technology Acceptance Model (TAM), developed by Davis (1985) and improved version used in ELT classroom activities by Castro (2019) were incorporated in this study. 31 students from the English language Department of University Mataram were the sample of the study. The data were gathered using three instruments which are online questionnaire, interview, and documentation. The instruments used in this study to examine the perspectives of EFL students on ICT-based learning. The findings are analyzed using SPSS, and Spearman's Rho test. This is to determine how closely the two variables (ICT and Learning English} are related. The findings showed that the majority of the students have positive perspectives on ICT-based learning because it is relatively easy to use, and learning activities is significantly correlated with its usefulness. Given that the two variables in the data have a linear relationship and a positive correlation coefficient (0.665). Thus, it can be concluded that the better ICT quality improves, the better the quality of students' English learning.

Keywords: English as a Foreign Language (EFL), Students Perspectives, Information and Communication Technology (ICT), Technology Acceptance Model (TAM)

<https://ojs.unm.ac.id/eralingua>



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

INTRODUCTION

Over the years, education has played a significant role in the growth of knowledge through the teaching and learning process. Due to the need for effective methods and tactics to increase the quality of education, the teaching and learning process becomes more systematic throughout time, and technology improves the efficiency of the learning opportunity. Nowadays, teaching and learning activities have often been associated with the use of Information and Communication Technology (ICT). ICT has emerged as a resource and tool for supporting students in their learning process in the context of studying the English language (Wijaya, 2022). With the use of different English learning activities, ICT offers students a range of sources to obtain authentic content and improve their language abilities. Such resources and activities are now easily accessible because of the advancement of internet technology, which has been widely encouraged (Yusra, 2019).

According to Nguyen & Tri (2014), EFL students had to be prepared with digital literacy skills in this modern era of teaching and learning. The competence of the students to use digital technology, communication tools, and/or networks to access, integrate, manage, assess, and produce information to participate in society may be practiced. One of the examples is to help students improve their English-learning skills by communicating with people from all around the world using some reliable resources from the internet. To help students learn, especially EFL students in higher education, ICT in English language learning provides several benefits.

Moreover, ICT-based learning is a tool to assist students and provide information that can improve students' learning experiences in the context of English language learning for EFL students (Ningsih et al., 2021). The role of ICT-based learning in English language activities opens up new opportunities for promoting a modern way to learn. Additionally, the effectiveness of ICT-based learning may increase students' English language proficiency. Due to various apps and websites on the internet, students may study English whenever and wherever they want. Thus, it can be said that ICT-based learning is important to the student's comprehension of the English language.

This study is different from Hafifah & Sulisty (2020) focusing on the perspectives of students rather than teachers. Although the approach of examining the students' perspectives is similar to earlier research, however, there are some significant differences, especially the design and analysis of the study.

Furthermore, due to the COVID-19 pandemic, most nations have applied strict social distancing and a lockdown strategy. Many countries adapt to new situations in many areas including education. The learning activities are maintained remotely using ICT-based learning to manage the restriction in the education area. The learning activities using ICT-based learning were still uncommon until the Covid-19 outbreak hit Indonesia, many people—including educators, students, and parents, were taken by surprise when schools and universities were forced to implement it. According to Coman et al. (2020), technological problems seem to be one of the challenges in online learning, followed by the lack of technical skills of the individuals. The application of ICT-based learning in Indonesia is very challenging due to many factors including the low culture of independent learning that leads to

the perspective that the absence of direct contact between lecturers and students is less attractive.

Students who participated in distant learning experienced low learning motivation and more challenging interactions with lecturers and fellow students (Amir et al., 2020). Syahrial et al. (2021) claim that with the advancement of ICT in society, everyone has the opportunity to create and deliver convenient learning materials for a range of uses, including students. Therefore, it is very important to keep track of the progress of ICT-based learning that has taken place so far to see if English learning helps students achieve their goals in learning.

Computers/laptops, smartphones, and networks are some types of ICT-based learning that are necessary to facilitate students learning activities. However, according to the researcher's early observations of some lecturers and students in the English Department, not all of them have willing to use it. Some students who live in rural areas admit to having difficulties due to poor internet connections and not being used to the implementation of ICT-based learning. This statement is supported by a study by Dwilestari, (2021) which states that in these situations, it will clearly make a big difference in the field of education. One of the common challenges that students faced via online learning is poor internet connection. This will make it difficult for the students to follow the teaching and learning process as well as to view the lecture materials. This is in line with the findings by Diliyanti et al. (2020) where online materials help to improve their competence in learning English language.

Some lecturers that do not understand technology will find it difficult to provide explanations and information, therefore they will simply assign or give homework to their students. This makes it difficult for students to absorb information, then increases their stress due to the various tasks that must be done. In addition, the lack of understanding of new technical aspects of ICT-based learning, which may result from unclear instructions is another obstacle that they must face. Therefore, it is very important to keep track of the progress of ICT-based learning that has taken place so far to see if English learning helps EFL students achieve their goals in learning.

English language learning that was originally based on face-to-face in the classroom should be replaced through online learning with the help of ICT-based learning. The impact of the Covid-19 pandemic on the education area requires lecturers and students to be able to adapt quickly to existing changes. Therefore, it is very important to keep track of the progress of ICT-based learning that has taken place so far to see if English learning helps students achieve their goals in learning. Widya (2022) states that learning activities and technology implementations are most often seen from student perspectives because they have first-hand experience.

Therefore, this research aims to analyze the students' perspectives on the use of ICT-based learning in their learning activities and its contribution to the learning activities. The issue focuses on the perspectives and ICT-based learning practices of the students and investigates their practical use of ICT-based learning in their English language learning process. In this research, Technology Acceptance

Model (TAM) is used to measure the perspectives of EFL students on the usefulness of ICT-based learning based on their experiences in implementing the accessibility of English language learning materials in their learning activities.

RESEARCH METHOD

This is a quantitative descriptive study. The quantitative research design is used to look into population and phenomenon descriptions, changes over time, correlations between or among variables, and differences between groups. Quantitative research is used to investigate the correlations among variables. The descriptive study, in this case, attempts to provide a percentage analysis of how the use of ICT-based learning impacts their English learning activities. The data were obtained from 31 students via online questionnaire answers and interviews. The samples are in the 8th semester from English language Department. The data were gathered using an online questionnaire, an interview, and documentation by using Technology Acceptance Model (TAM), developed by [Davis \(1985\)](#) and improved version used in ELT classroom activities by [Castro \(2019\)](#) were incorporated in this study. The instruments used in this study were to examine the perspectives of EFL students on ICT-based learning. The online questionnaire consists of 17 items, divided into four factors. Those four factors are determining whether the technology is accepted by students or otherwise. The first is Perceived Ease of Use (PEOU), which is based on users' perceptions of a system's ability to reduce the burden and thinking effort. The second is Perceived Usefulness (PU), which refers to a person's perspective that implementing a particular system enhances one's ability to accomplish their work performance. The third factor is Actual Technology to Use (ATU), which refers to a person's actual direct use of technology in the context of their performance. The final category is Behavioral Intention to Use (BIU), which is concerned with how users want to use technology. The Statistical Package for Social Science (SPSS) was used to further examine the data. To determine how closely two variables, the writers applied Spearman's Rho. Then, describe how the use of ICT-based learning supports their English learning activities.

FINDINGS AND DISCUSSION

After collecting the data, the researcher analyzed the students' perspectives on the usefulness of ICT-based learning in their English learning activities. Most participants responded positively to the ICT-based learning, according to the overall data of mean scores and standard deviation for each item provided in [Table 1](#) below.

Table 1 Means and Standard Deviations of Each Item of the Questionnaire

	Item	Mean	Std. Dev.	N
Perceived Ease of Use				
1	I feel that using ICT based learning would be easy for me	3.9032	0.87005	31
2	I feel that it would be easy to become skillful at using ICT based learning	3.7097	0.73908	31
3	I would find ICT based learning to be flexible to interact with	3.9032	0.65089	31
4	Learning to operate ICT based learning would be easy for me	3.8065	0.70329	31
5	It would be easy for me to get ICT based learning to do what I want to do	3.9677	0.87498	31
6	I feel that my ability to determine ICT based learning ease of use is limited by my lack of experience	3.4839	0.81121	31
Usefulness				
7	Using ICT based learning in my English Language Teaching course would enable me to accomplish tasks more quickly	3.9355	0.92864	31
8	Using ICT based learning would improve my English Language Teaching course performance	3.9355	0.81386	31
9	Using ICT based learning in my English Language Teaching course would increase my productivity	3.8387	0.86011	31
10	Using ICT based learning would enhance my effectiveness in the English Language Teaching course	4.0645	0.77182	31
11	Using ICT based learning would make it easier to do my English Language Teaching course	4.0645	0.72735	31
12	I would find ICT based learning useful in my English Language Teaching course	4.0968	0.65089	31
Attitude toward Usage				
13	I believe it is a good idea to use an ICT based learning in the English Language Teaching course	4.0323	0.83602	31
14	I like the idea of using ICT based learning in the English Language Teaching course	4.1290	0.84624	31
15	Using ICT based learning in an English Language Teaching course is a positive idea	4.1935	0.87252	31
Behavioral Intention to Use				
16	I plan to use an ICT based learning in the future	4.0000	0.81650	31
17	If I have access to ICT based learning, I intend to use it	4.1613	0.89803	31
	Overall	3.9545	0.56313	31

According to the total mean score and standard deviation indicated in table 1, the findings showed that the overall mean score on the perspectives of ICT-based learning utilized in the student's English language learning activities was 3.95 (SD = 0.563). The result shows that the perspectives on the usefulness of ICT-based learning by the students were positive. The majority of students agreed on how easy it was to use ICT-based learning. Even though some students thought it was difficult to integrate ICT-based learning, the majority of students still consider doing so and intend to use it in the future.

After calculating the students' perspectives shown in their responses, the data were further analyzed. The correlations between ICT and learning English shown in Table 2 below. The information shows that ICT use in their learning process is received positively. Despite certain implementation challenges, students are generally optimistic about their capacity to successfully integrate ICT into their learning process.

Table 2 Correlations between ICT and Learning English

			ICT	Learning English
Spearman's rho	ICT	Correlation Coefficient	1.000	0.665**
		Sig. (2-tailed)	.	0.000
		N	31	31
	Learning English	Correlation Coefficient	0.665**	1.000
		Sig. (2-tailed)	0.000	.
		N	31	31

** . Correlation is significant at the 0.01 level (2-tailed).

The table above shows that there is a strong correlation between using ICT and learning English, with a correlation coefficient of 0.665**. An asterisk (**) shows a significant connection with a significance level of 0.01. Since the relationship between the two variables is linear and the correlation coefficient in the data above is positive (0.665), thus it can be interpreted that as ICT quality improves, so does the quality of their learning English. It is known the significance of Sig. (2-tailed) of 0.000, since the value of Sig. (2-tailed) 0.000 is smaller than 0.05, indicating that there is a significant (mean) correlation between the ICT variable and learning English.

Overall, the students' perspectives of the ICT in their learning process have a significant positive relationship. Since the relationship between the two variables is linear and the correlation coefficient in the data is positive (0.665). This is in line with Jamaluddin, Kadir, Abdullah, & Alias (2020), interpretation of correlation strength, their correlation was categorized as strong. It indicates that at a significantly high response, the correlation is found to be positive at a strong level of strength.

The other way to collect the data was through interviews. The data showed that the students are familiar with ICT, although it can be challenging in some ways. They also thought that ICT can help them in improving the effectiveness and productivity of their learning process. Understanding the students' perspectives will make it easier to gather the information because their perspectives affect their willingness to use the technology. Perspective is the point of view individuals use to manage and interpret their process experiences to give meaning to their surroundings. In addition, the students are aware that they need to be able to use digital technology to discover and create knowledge that has personal significance for them.

The four different categories are adapted from the Technology Acceptance Model (TAM) invented by Davis (1985) with some improvements for classroom activities in ELT according to Castro (2019), and the following figures will be used to show the data.

Perceived Ease of Use

The users' perspectives on how easy to use the target system are measured by Perceived Ease of Use (PEOU) (Davis, 1985). This study focuses on how many students believe that studying through ICT only requires a small amount of effort in terms of work and thinking. It suggests that the usage of ICT-based learning should simplify the learning process. The following table displays the students' responses.

Table 3. Students' Perceived Ease of Use (PEOU)

No	Students' Responses	Level of Response				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I feel that using ICT based learning would be easy for me	6 (19,35%)	18 (58%)	4 (12,9%)	1 (3,23%)	2 (6,45%)
2	I feel that it would be easy to become skillful at using ICT based learning	4 (12,9%)	17 (54,83%)	7 (22,58%)	2 6,45%	1 (3,23%)
3	I would find ICT based learning to be flexible to interact with	4 (12,9%)	19 (61,29%)	5 (16,12%)	2 6,45%	1 (3,23%)
4	Learning to operate ICT based learning would be easy for me	4 (12,9%)	18 (58%)	7 (22,58%)	1 3,23%	1 (3,23%)
5	It would be easy for me to get ICT based learning to do what I want to do	8 (25,8%)	16 (51,6%)	4 (12,9%)	2 6,45%	1 (3,23%)
6	I feel that my ability to determine ICT based	3 (9,7%)	14 (45,16%)	11 (35,48%)	2 6,45%	1 (3,23%)

	learning ease of use is limited by my lack of experience					
7	Mean	15,59%	54,84%	20.43%	5.38%	3,74%

From the table above, ICT-based learning tends to appear simple for students to apply in the ELT context. All in all, almost all EFL students agreed that the learning materials were easy to use. The technology applied in the learning process is also uncomplicated to operate. The findings reflect the EFL students' attitudes on the use of ICT-based learning equipment. Students typically avoid or have less interest in using any sort of changing equipment. Any application that requires effortless action is preferred. From the table 3 above, overall, students agreed (54.84%) and strongly agreed (15.59%) that ICT-based learning is easy to. Only 5.38% of students thought that ICT-based learning is difficult to apply. This is in line with [Davis \(1985\)](#) who expects the prospective target system to be effortless for technology users. In addition, the findings on the idea of ICT integration under MOEC Regulation No. 45 of 2015 reveal that ICT-based learning has influenced how certain users prepare the lesson materials. This is because some users have easy access to a variety of sources through the usage of the internet and websites. Further, the students believe that the application of ICT-based learning supports their learning activities

Perceived Usefulness

Perceived Usefulness (PU) is the subjective probability that users use a specific application system by enhancing their performance ([Davis, 1985](#)). Perceived usefulness (PU) in this study refers to how much ELT students believe that ICT-based learning improves their effectiveness. The following table describes the students' perceived usefulness.

Table 4. Students' Perceived Usefulness (PU)

No	Students' Responses	Level of Response				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	Using ICT based learning in my English Language Teaching course would enable me to accomplish tasks more quickly	9 (29%)	17 (54,83%)	4 (12,9%)	1 (3,23%)	0 (0%)
2	Using ICT based learning would improve my English Language Teaching course performance	7 (22,58%)	15 (48,39%)	7 (22,58%)	1 (3,23%)	1 (3,23%)
3	Using ICT based learning in my English Language Teaching course would	8 (25,80%)	13 (42%)	8 (25,80%)	1 (3,23%)	1 (3,23%)

	increase my productivity					
4	Using ICT based learning would enhance my effectiveness in the English Language Teaching course	9 (29%)	16 (51,61%)	4 (12,9%)	1 (3,23%)	1 (3,23%)
5	Using ICT based learning would make it easier to do my English Language Teaching course	7 (22,58%)	18 (58%)	4 (12,9%)	1 (3,23%)	1 (3,23%)
6	I would find ICT based learning useful in my English Language Teaching course	8 (25,80%)	17 (54,83%)	4 (12,9%)	1 (3,23%)	1 (3,23%)
7	Mean	25.81%	51.6 %	16.66 %	3.23%	2,69%

The writer can conclude from the above statistic that implementing ICT-based learning in the English Language Teaching activities can be beneficial to improving students' performance in their learning process. Nearly all the students agreed (51.6 %) and strongly agreed (25.81%) that applying ICT-based learning in their learning activities becomes useful for their performance from the entire items of students' perceived usefulness. This is in line with [Basri & Paramma \(2019\)](#), when a user thinks there is a chance of high-perceived usefulness, an application is highly recognized as being beneficial.

Perceived usefulness in this context refers to how much a student thinks using ICT-based learning would improve their learning performance. The figure clearly shows that almost all the students thought ICT-based learning helped them achieve their English Language Teaching course. Only 3.23% of students believed that ICT-based learning was not helpful to support the learning process out of six things that were shown to measure students' perceived usefulness.

Attitude Towards Usage

By participating in a particular action, Attitudes Towards Usage (ATU) express the user's evaluative feelings (positive or negative) ([Basri & Paramma, 2019](#)). The intention to apply a certain program or learning tool discovered by ATU. The student's attitude towards ICT-based learning can be seen in the following table.

Table 5. Students' Attitude Towards Usage (ATU)

No	Students' Responses	Level of Response				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I believe it is a good idea to use an ICT based learning in the English Language Teaching course	11 (35,48%)	17 (54,83%)	1 (3,23%)	2 (6,45%)	0 (0%)

2	I like the idea of using ICT based learning in the English Language Teaching course	10 (32,25%)	17 (54,83%)	3 (9,68%)	0 (0%)	1 (3,23%)
3	Using ICT based learning in an English Language Teaching course is a positive idea	9 (29,03)	16 (51,61%)	3 (9,68%)	1 (3,23%)	2 (6,45%)
Mean		32.26%	53.76%	7,53%	3.23 %	3,23%

The writer can conclude from the statistics that it is a good idea to implement ICT-based learning into their English learning activities. According to the comprehensive data on students' attitudes toward the use of ICT-based learning in the English language learning process, most students agreed (53.76%) and strongly agreed (32.26%) that learning English using ICT-based learning is a good concept, while only 3.23 % disagree. This is in line with [Basri & Paramma \(2019\)](#), the users' attitude on how the program is presented for the learning experience follows the suitability of the user's expectations. This attitude has been found in the data findings which influence future behavior and serve as an intentional catalyst for a certain action.

Behavioral Intention to Use

Behavioral Intention to Use (BIU) is defined as the actual use of a given program and therefore determines technology acceptance. The BIU is similar to a drive to apply alternatively, use the program. The following figure represents the students' intention to use ICT-based learning.

Table 6. Students' Behavioral Intention to Use (BIU)

No	Students' Responses	Level of Response				
		Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1	I plan to use an ICT based learning in the future	10 (32,25%)	18 (58,06%)	2 (6,45%)	1 (3,23%)	0 (0%)
2	If I have access to ICT based learning, I intend to use it	9 (29,03%)	15 (48,39%)	5 (16,12%)	1 (3,23%)	1 (3,23%)
Mean		30.65%	53.2%	11,29%	3.23%	3.25%

Based on the table, it can infer that ICT-based learning can be a feasible application to be recommended in supporting the learning classroom process in the future. From the comprehensive data on users' behavioral intention to use the program, almost all students agreed to plan to use ICT-based learning (53.2%) and

strongly agreed (30.65%), and only 3.23% of students do not have an idea about the plan to use ICT-based learning in the future. This is in line with Venezky & Davis (2002), that a user's perspectives on the usefulness and ease of use brought impact the user's intention to use (BIU) to the system. It has been identified that there are factors that guide future intentions. One's attitude towards the program will ultimately lead to a particular behavior. According to the model, the attitude towards the system affects a user's intention.

However, it can be seen that the student's perspectives on the usefulness of ICT-based learning can improve their effectiveness in their English language learning process. Even though some students found some challenges, it's interesting to note that the idea of ICT integration encourages them to become more self-actualized and confident in their ability to use ICT in their learning activities.

CONCLUSION

There is a significant positive relationship between students' perspectives and ICT-based learning in ELT classrooms. The majority of EFL students continue to think about integrating ICT-based learning even though some of them find it challenging, however, the students were keen to use technology in ELT classroom. There is a significant positive relationship between the usefulness of ICT-based learning contribution to the learning activities in ELT classrooms. Since there is a linear relationship between the two variables and a positive correlation to the data mentioned, it can be stated that as ICT quality improves, so does the quality of students' English learning. The contribution of ICT-based learning to students' learning activities is significantly correlated with its usefulness.

REFERENCES

- Amir, L. R., Tanti, I., Maharani, D. A., Wimardhani, Y. S., Julia, V., Sulijaya, B., & Puspitawati, R. (2020). Student perspective of classroom and distance learning during COVID-19 pandemic in the undergraduate dental study program Universitas Indonesia. *BMC medical education*, 20(1), 1-8. <https://doi.org/10.1186/s12909-020-02312-0>
- Basri, M., & Paramma, M. A. (2019). EFL students' perspective on the usefulness of ICT based learning in Indonesian higher education. *ELT Worldwide*, 6(2), 105-120. <https://doi.org/10.26858/eltww.v6i2.10515>
- Castro, M. C. S. A. (2019). The Impact of Information and Communication Technology on Pedagogy: Benefits, Issues, and Challenges. *Taman siswa International Journal in Education and Science (TIJES)*, 1(1). <https://doi.org/10.30738/tijes.v1i1.5444>
- Coman, C., Țîru, L. G., Meseșan-Schmitz, L., Stanciu, C., & Bularca, M. C. (2020). Online teaching and learning in higher education during the coronavirus pandemic: Students' perspective. *Sustainability*, 12(24), 10367. <https://doi.org/10.3390/su122410367>
- Davis, F. D. (1985). *A Technology Acceptance Model for Empirically Testing New End-user Information Systems: Theory and Results*. Massachusetts: Massachusetts Institute of Technology.

- Diliyanti, A. A., Mahyuni, M., & Amin, M. (2020). The use of online materials for independent development of English competency. In *1st Annual Conference on Education and Social Sciences* (ACCESS 2019) (pp. 209-211). <https://doi.org/10.2991/assehr.k.200827.052>
- Dwilestari, S. Z. (2021). The Students'self-Directed Learning In English Foreign Language Classes During The Covid-19 Pandemic. *JURNAL LISDAYA*, 17(2), 38-46. <https://doi.org/10.29303/lisdaya.v17i2.42>
- Hafifah, G. N. (2020). Teachers' Ict Literacy And Ict Integration In Elt In The Indonesian Higher Education Setting. *Turkish Online Journal of Distance Education*, 21(3), 186-198. <https://doi.org/10.17718/tojde.762050>
- Ningsih, A. W., Sihombing, P. S. R., & Silalahi, D. E. (2021). Students' Perception towards the Use of ICT in EFL Learning at Eleventh Grade SMA Negeri 1 Dolok Batu Nanggar. *Education and Human Development Journal*, 6(3), 24-36. <https://doi.org/10.33086/ehdj.v6i3.2477>
- Syahrial, S., Asrial, A., Kurniawan, D. A., & Damayanti, L. (2021). Comparison of Print Modules and E-Modules to the Tolerance Character of Students. *International Journal of Elementary Education*, 5(2), 298-307. <https://doi.org/10.23887/ijee.v5i2.34351>
- Tri, D. H., & Nguyen, N. H. T. (2014). An exploratory study of ICT use in English language learning among EFL university students. *Teaching English with Technology*, 14(4), 32-46.
- Venezky, R. L., & Davis, C. (2002). Quo vademus? The transformation of schooling in a networked world.
- Widya, A. I. (2022). *An Analysis of Students' Acceptance in Online Learning During Covid-19 Pandemic at Sixth Semester of English Language Education of FKIP UIR* (Doctoral dissertation, Universitas Islam Riau).
- Wijaya, K. F. (2022). Investigating Indonesian Efl Teachers'perceptions On the Integration Of Ict In English Language Learning. *ELTR Journal*, 6(2), 72-85. <https://doi.org/10.37147/eltr.v6i2.123>
- Yusra, K. (2019). Challenges and Opportunities in Using Local Online Materials for Education 3.0 Localized EFL Practices. *UNNES International Conference on English Language Teaching, Literature, and Translation (ELTLT 2018)* , (pp. 37-42). Atlantis Press. <https://doi.org/10.2991/elslt-18.2019.8>