



EFL Students' Readiness and Attitudes toward Digital Learning

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Article Info	Abstract
Received: 2026-08-23 Revised: 2026-08-24 Accepted: 2026-09-07 Keywords: <i>digital learning;</i> <i>EFL;</i> <i>student attitudes;</i> <i>student readiness;</i> <i>higher education</i> DOI: 10.24256/ideas.v14i1.12403 Corresponding Author: Safitra Nuraziza safitranuraziza73@gmail.com Pendidikan Bahasa Inggris, Universitas Islam Negeri Palopo	<i>This study investigated the readiness and attitudes of second-semester English Language Education students toward digital learning in EFL classes at UIN Palopo. A descriptive quantitative survey design was employed, with 30 second-semester students selected through purposive sampling. Data were collected using a structured questionnaire with a five-point Likert scale covering students' readiness and attitudes toward digital learning. The data were analyzed using descriptive statistics, particularly mean scores. The findings showed that students' readiness for digital learning was categorized as high, with an overall mean score of 4.01. Students' attitudes were also categorized as high, with an overall mean score of 3.93, indicating generally positive perceptions, feelings, motivation, and willingness toward digital learning. However, internet connectivity, learning focus, limited facilities, and difficulties understanding some materials remained challenges for some students. The findings suggest that lecturers should continue to develop interactive and accessible digital learning practices, while institutions should strengthen digital infrastructure and technical support.</i>

1. Introduction

Digital technology has become an increasingly prominent part of higher education and English language teaching. In EFL contexts, digital platforms can provide access to learning materials, communication tools, multimedia input, and flexible learning opportunities. However, technology alone does not guarantee effective learning. Students must also be prepared to use digital tools, regulate their learning, communicate in technology-mediated environments, and respond positively to digitally mediated instruction (Hung et al., 2010; Martin et al., 2020).

For language learners, the value of digital learning extends beyond the electronic delivery of course content. Digital environments can connect classroom instruction with authentic language input, repeated practice, peer interaction, and learning activities beyond scheduled class time. These affordances are particularly relevant in EFL settings, where students may have limited opportunities to use English outside the classroom. At the same time, such opportunities require learners to select resources, manage attention, evaluate information, and sustain participation. Consequently, effective digital language learning depends on the interaction between access, learner autonomy, instructional design, and meaningful communication rather than on the availability of a platform alone (Reinders & Benson, 2017).

Digital learning in this article is understood as a continuum rather than a single delivery format. It may include synchronous meetings, asynchronous discussion, learning-management systems, mobile applications, multimedia resources, and digitally supported face-to-face instruction. These formats place different demands on learners. A student who is comfortable downloading materials may not be equally prepared to speak in a video conference, manage an asynchronous task, or collaborate online. Defining digital learning broadly therefore prevents readiness from being judged through experience with only one platform or activity.

The present study focuses on second-semester English Language Education students at UIN Palopo. A preliminary classroom observation conducted in March 2025 identified difficulties among some second-semester students in operating digital platforms such as Google Classroom and Zoom. An initial questionnaire involving 30 students also indicated that 60% felt unprepared to manage independent digital learning tasks and 45% expressed anxiety about participating in online discussions. These preliminary findings motivated a systematic survey of students' readiness and attitudes.

In this study, student readiness refers to students' preparedness to participate in digital learning, including technological ability, access to digital resources, independent learning, motivation, learner control, and online communication. Student attitudes refer to cognitive, affective, and behavioral responses toward digital learning. These constructs represent related but distinct internal dimensions of participation: readiness concerns whether students possess the resources and capabilities required to engage, whereas attitudes concern how they evaluate, feel about, and intend to respond to the learning mode.

The multidimensional character of readiness is important for interpreting survey results. Hung et al. (2010) validated five central dimensions: computer and internet self-efficacy, self-directed learning, learner control, motivation for learning, and online communication self-efficacy. Martin et al. (2020) similarly emphasized technical competence, time management, communication, and general online learner attributes. Together, these frameworks show that a student may be technically capable yet still experience difficulty managing time, concentrating, communicating, or maintaining motivation. Therefore, readiness should not be reduced to device ownership or familiarity with a single application.

Attitudes are equally consequential because positive evaluations of digital learning can support willingness to participate, but positive attitudes do not automatically produce sustained engagement. Wei and Chou (2020) found that computer and internet self-efficacy and motivation were directly associated with online discussion performance and course satisfaction. More recent evidence from higher education EFL students also indicates that engagement mediates the relationship between readiness and satisfaction (Altınsoy & Boyraz, 2025). These findings justify examining readiness and attitudes together while avoiding the assumption that the two constructs are interchangeable.

Conceptually, access, readiness, attitudes, engagement, and learning outcomes form a related sequence, but they are not equivalent. Access makes participation possible; readiness reflects the capacity to participate; attitudes shape the willingness to participate; and engagement describes what students actually do during learning. Achievement is a further outcome that may be influenced by all of these factors as well as teaching quality and prior language ability. This distinction is necessary because a positive rating of readiness or attitude should not be interpreted as direct evidence of frequent participation or improved English proficiency.

Previous studies have examined online learning readiness, technology-related attitudes, digital literacy, and online learning experiences among university and EFL students. Indonesian research has reported both the perceived advantages of flexibility and access and persistent concerns involving connectivity, interaction, concentration, and independent learning (Irwanto, 2023; Oktavia et al., 2023; Rohim, 2022; Santosa et al., 2024; Saputra et al., 2022; Tusino, 2022). International studies likewise show that readiness is associated with outcomes and satisfaction, while specific readiness dimensions may vary across learners and course formats (Joosten & Cusatis, 2020; Martin et al., 2020; Wei & Chou, 2020).

Despite this growing literature, three gaps remain relevant to the present research. First, studies often evaluate readiness or attitudes separately, making it difficult to obtain a balanced picture of capability and acceptance. Second, research frequently treats university students as a homogeneous group, even though early-semester students may still be adapting to academic expectations, independent learning, and institutional platforms. Third, evidence from Eastern Indonesian EFL programs remains comparatively limited. Examining second-semester students at UIN Palopo can therefore provide context-sensitive evidence for instructional support and infrastructure planning, although the findings are not intended to represent all students or institutions.

By addressing these gaps, the study aims to describe not only whether students report being prepared for digital learning but also whether they evaluate it positively and are willing to continue using it. The combined perspective is useful for EFL course design because successful implementation requires both functional access and pedagogical conditions that support interaction, confidence, autonomy, and sustained participation.

The study consequently offers two forms of contribution. Empirically, it documents the perceptions of an early-semester EFL cohort in a setting that is less frequently represented in the international literature. Practically, it identifies whether support should concentrate only on technological access or also on confidence, interaction, self-management, and instructional clarity. The evidence is intended as a diagnostic basis for course improvement rather than as an evaluation of a particular lecturer, platform, or institutional policy.

Accordingly, this study addresses the following research questions: (1) What is the level of readiness of second-semester English Language Education students for digital learning in EFL classes at UIN Palopo? (2) What are the attitudes of second-semester English Language Education students toward digital learning in EFL classes at UIN Palopo?

2. Method

This study employed a cross-sectional descriptive quantitative survey design because the research questions sought to describe the existing levels of students' readiness and attitudes at a particular point in time rather than test an intervention or establish causality (Creswell & Creswell, 2023; Fraenkel et al., 2022). The participants were 30 second-semester students in the English Language Education Study Program at UIN Palopo. Purposive sampling was applied using the following criteria: participants were enrolled in

the second semester, actively participated in EFL classes, and had experience using digital learning platforms.

The individual student constituted the unit of analysis. Selecting one semester created a relatively focused group in terms of stage of study and exposure to the program, which supported a context-specific description. Nevertheless, purposive selection and the small sample mean that the results should be interpreted as evidence about the surveyed cohort rather than a statistically representative estimate for all English Language Education students at UIN Palopo or for university students more broadly. This boundary is important when translating the findings into institutional decisions.

The inclusion criteria ensured that respondents could evaluate digital learning from direct experience rather than from hypothetical expectations. At the same time, purposive sampling can produce selection effects because students who were available and willing to respond may differ from those who did not participate. The sample size also limits the stability of subgroup comparisons. For these reasons, the study emphasizes a descriptive profile of the 30 respondents and does not present demographic comparisons or population-level estimates.

Data were collected using a structured questionnaire administered through Google Forms. The questionnaire contained two main sections: readiness for digital learning and attitudes toward digital learning. Readiness indicators covered computer and internet self-efficacy, self-directed learning, learner control, motivation, and online communication self-efficacy, consistent with the multidimensional framework developed by Hung et al. (2010). Attitudes were examined through cognitive, affective, and behavioral components. Responses were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

The readiness section was designed to capture both access-related and learner-related preparedness. Technical items addressed students' ability to use devices, applications, and internet resources, while self-directed learning, learner control, and motivation addressed their capacity to organize and sustain learning. Online communication self-efficacy was included because EFL learning requires interaction and language use, not merely content access. The attitude section complemented these measures by examining perceived usefulness, comfort, motivation, confidence, and behavioral willingness. This separation allowed high technical readiness to be distinguished from possible affective or interactional concerns. This distinction is also consistent with evidence that time management, effort regulation, and other self-regulated learning strategies are relevant to achievement in online higher education (Broadbent & Poon, 2015).

Each questionnaire response represented the respondent's degree of agreement with a statement rather than a test of objective skill. Consequently, a high score indicates confidence or a favorable perception, not verified performance under standardized conditions. This measurement boundary is particularly important for technical competence and independent learning, where perceived ability may differ from actual behavior. Direct observation, performance tasks, or platform logs would be required to confirm whether the reported readiness is consistently enacted.

The data were analyzed using descriptive statistics, including means, percentages, and standard deviations. Analysis was conducted at both the item and construct levels: item means were used to identify relative strengths and challenges, while overall means summarized readiness and attitudes. Mean scores were interpreted using five categories: 1.00–1.79 (very low), 1.80–2.59 (low), 2.60–3.39 (moderate), 3.40–4.19 (high), and 4.20–5.00 (very high). The standard deviation was used to describe how closely or widely responses were distributed around the mean (Pallant, 2023).

Because the study was descriptive, the analysis did not test whether readiness caused positive attitudes, whether the two constructs were statistically correlated, or whether students with different characteristics differed significantly. The results therefore support statements about the level and pattern of responses in this sample, but they do not support causal or predictive conclusions. Percentages from the preliminary questionnaire were used only to motivate the study and were not treated as outcome measures in the final analysis.

The category boundaries were used to make the mean scores easier to communicate, but interpretation did not rely on labels alone. A score near a boundary can be numerically similar to a score in the adjacent category, and an overall mean can conceal differences among indicators or respondents. Therefore, the discussion considered the exact means, the highest and lowest indicators, the standard deviation, and the reported challenges together. No inferential test was used to determine whether small numerical differences were statistically significant.

Item validity was assessed using Pearson product-moment correlation. With 30 respondents, the critical r value was 0.361 at the 5% significance level, and all items were reported as valid. This item-total procedure indicates whether each item was sufficiently associated with the overall scale score in the surveyed sample; it should not be interpreted as complete evidence of content or construct validity. Reliability was assessed using Cronbach's alpha, yielding coefficients of 0.89 for readiness and 0.87 for attitudes. Both coefficients exceed the commonly used 0.70 threshold and indicate good internal consistency for descriptive use (Pallant, 2023).

The methodological choices align with the study's limited descriptive purpose. The structured questionnaire made it possible to summarize patterns across all 30 participants efficiently, but self-reported ratings may be influenced by social desirability, recent experiences, or differences in how students interpret scale categories. Accordingly, mean scores were interpreted together with the observed challenges and response variability rather than as direct measures of actual digital performance.

Reliability and validity address different aspects of measurement quality. The alpha coefficients indicate that items within each scale responded consistently in this sample, whereas the item-total correlations indicate that individual items aligned with their scale totals. Neither statistic alone demonstrates that every relevant dimension was covered, that respondents interpreted each item identically, or that the instrument would function in the same way with another cohort. The findings should thus be regarded as adequately consistent for the present descriptive analysis while still requiring broader validation in future studies.

3. Result & Discussion

Students' Readiness toward Digital Learning

The overall mean score for readiness was 4.01, categorized as high. Students generally reported that they were prepared to participate in digital learning by using digital devices and learning applications, accessing materials through the internet, submitting assignments online, participating in online classes, communicating through digital platforms, learning independently, maintaining motivation, and adapting to new technologies. Because the measure was self-reported, this result reflects perceived preparedness rather than directly observed mastery.

At the indicator level, 14 of the 15 readiness indicators were categorized as high, while one was categorized as very high. The highest mean score was 4.20 for the ability to search for learning materials online, whereas the lowest was 3.87 for internet access.

The pattern suggests that students were strongest in locating digital learning resources but experienced comparatively greater constraints in reliably reaching those resources. The ability to search for materials ($M = 4.20$) falls in the very high category, whereas internet access ($M = 3.87$), although still high, was the lowest indicator. This distinction is educationally important: information-search competence cannot be used consistently when connectivity is unstable or costly. Readiness frameworks likewise distinguish technical self-efficacy from the environmental and self-management conditions that allow competence to be enacted (Hung et al., 2010; Martin et al., 2020).

The 0.33-point distance between the highest and lowest readiness indicators is modest, which supports a generally consistent high-readiness profile. Nevertheless, the two indicators represent different kinds of resources: searching is primarily a learner capability, whereas internet access depends partly on infrastructure and affordability. The result therefore suggests that further training alone would not fully resolve the weakest area. Institutional and instructional measures—such as downloadable materials, flexible deadlines during outages, and tasks that can be completed with limited bandwidth—are also relevant.

Students' Attitudes toward Digital Learning

The overall mean score for attitudes was 3.93 and was categorized as high. Students generally viewed digital learning positively because of its usefulness, flexibility, accessibility, communication opportunities, and relevance to technological developments. The highest mean score (4.12) was recorded for adaptation to technological developments, while increasing self-confidence had the lowest mean score (3.80), although it remained in the high category.

Some students still experienced challenges related to concentration, unstable internet connectivity, and limited interaction. Thus, a high overall attitude score does not mean that every aspect of digital learning is equally comfortable or effective for every student.

The combination of a high attitude mean and continuing concerns indicates qualified acceptance rather than uncritical preference. Students can appreciate flexibility and accessibility while still finding particular activities difficult, especially when explanations are unclear, interaction is limited, or attention is difficult to maintain. Prior research similarly shows that readiness and positive perceptions contribute to satisfaction and participation, but their effects depend on how actively students engage with teachers, peers, and learning tasks (Altınsoy & Boyraz, 2025; Wei & Chou, 2020).

The attitude indicators also show a relatively narrow range: adaptation to technological developments obtained the highest mean of 4.12, while increased self-confidence obtained 3.80. The 0.32-point difference does not establish a statistically significant gap, but it is pedagogically informative. Students may recognize the relevance of technology before they feel fully confident using English through that technology. Confidence is likely to be strengthened when digital activities provide clear models, low-risk practice, constructive feedback, and repeated opportunities to participate.

Integrated Discussion

The high readiness score suggests that respondents had generally developed the technical and learning-related capacity needed for digital learning. Students reported readiness to use digital platforms, search for learning materials, submit assignments, and participate in virtual discussions. This pattern is broadly consistent with prior work showing that technical competence and online learner attributes are often rated strongly,

while time management and communication may require more deliberate support (Martin et al., 2020).

However, the standard deviation of 0.96 indicates meaningful variation among respondents. Some students still faced internet connectivity problems, limited facilities, and difficulties adapting to independent learning. Therefore, the high mean should be interpreted as an overall tendency rather than evidence that every student possesses the same level of readiness. The dispersion also suggests that an institution-wide strategy should include targeted assistance for students with weaker access or self-management skills instead of assuming that one form of support will be equally effective for all learners.

Response variation is also a reminder that the overall mean represents a group summary, not a typical experience shared identically by every respondent. Two students can contribute to the same mean while facing very different barriers—for example, one may lack stable connectivity while another has reliable access but struggles with attention or time management. Effective support should therefore begin by identifying the source of difficulty instead of using the total readiness score as the only basis for intervention.

The high attitude score indicates that students generally accepted digital learning and perceived it as useful and flexible. Cognitively, students considered digital learning useful; affectively, many felt comfortable and motivated; and behaviorally, they expressed willingness to continue using digital technology. Nevertheless, some students still preferred face-to-face interaction because it could provide clearer explanations and more active classroom communication. This finding supports the view that satisfaction and engagement are strengthened when readiness is translated into purposeful interaction and well-designed learning activities (Altınsoy & Boyraz, 2025; Wei & Chou, 2020).

These findings suggest that readiness and attitudes should be considered together in digital EFL learning. Students may possess the technical ability to use digital platforms while still requiring pedagogical support, stable connectivity, clear instructions, and opportunities for meaningful interaction. However, the present study did not calculate a correlation between readiness and attitudes. It therefore cannot claim that higher readiness produced more positive attitudes; it can only show that both constructs were rated highly within the same sample.

From an EFL perspective, interaction is particularly important because language development requires opportunities to notice input, negotiate meaning, receive feedback, and produce language. Digital learning should therefore include structured discussion, collaborative tasks, short speaking or writing activities, and feedback cycles rather than relying primarily on file distribution and assignment submission. It should also connect formal instruction with guided learning beyond the classroom, while helping students evaluate the quality of online resources and manage their own learning (Reinders & Benson, 2017).

The findings also show why access and pedagogy must be addressed simultaneously. Improving bandwidth or platform availability may reduce practical barriers, but it will not automatically improve concentration, confidence, or interaction. Conversely, an engaging activity cannot benefit students who cannot connect reliably. A balanced response should therefore combine low-bandwidth options, downloadable materials, clear task instructions, predictable schedules, technical orientation, and synchronous or asynchronous opportunities for meaningful language use.

The two overall means are close: readiness was 4.01 and attitudes were 3.93, a descriptive difference of 0.08 points. This proximity indicates that capability and acceptance were both rated positively at the group level, but it does not show that the same students obtained parallel scores or that one construct influenced the other. Item-level or participant-level correlation data would be needed to examine that relationship. The

present result is therefore best read as converging descriptive evidence rather than as proof of association.

Implications

For lecturers, the findings suggest a need for engaging, interactive, and accessible digital learning methods, as well as clearer explanations of difficult materials. Lecturers can divide complex tasks into manageable stages, provide examples and timely feedback, use discussion prompts that require genuine language production, and offer alternative submission formats when connectivity is limited. For students, continued development of digital skills, independent learning, time management, and focused participation is recommended. For institutions, stable internet access, effective learning platforms, device support, and recurring technology training are essential.

A practical institutional response could begin with a brief readiness diagnostic at the start of the semester. Results could be used to identify students who require orientation in platform use, online communication, information search, or self-management. Follow-up support should be specific rather than generic: students with access constraints need connectivity solutions, while students with high access but low confidence or concentration need pedagogical scaffolds and engagement strategies. Such differentiated support is more consistent with the variation observed in the data.

Course-level improvement can also be monitored through several complementary indicators. Lecturers can compare early- and late-semester readiness ratings, review participation patterns, note recurring technical problems, and invite short student reflections on which activities support or hinder language use. These sources should be interpreted together: a completed login or submitted assignment shows access and task completion, whereas discussion quality, feedback use, and language production provide stronger evidence of meaningful engagement.

4. Conclusion

This study concludes that second-semester English Language Education students at UIN Palopo demonstrated a high self-reported level of readiness for digital learning, with a mean score of 4.01. They generally considered themselves prepared to use digital devices and applications, access materials, submit assignments, participate in online classes, communicate through digital platforms, and adapt to digital learning. The strongest indicator concerned searching for online learning materials, while internet access received the lowest mean, showing that practical connectivity remains a relevant constraint even within an overall high-readiness profile.

Students' attitudes toward digital learning were also high and positive, with a mean score of 3.93. Students generally considered digital learning useful, flexible, and helpful for accessing materials and communicating with lecturers. They also demonstrated motivation and willingness to continue using digital learning. Nevertheless, concerns about concentration, interaction, confidence, facilities, and explanation of difficult materials indicate that positive attitudes coexist with specific learning needs.

Taken together, the results indicate that digital learning is feasible for this cohort but should not be implemented as a technology-only solution. Its effectiveness depends on reliable access, clear instructional design, meaningful EFL interaction, feedback, and support for self-regulated learning. Lecturers should combine flexible digital resources with structured communication and language-production tasks, while the institution should provide low-bandwidth access options, technical assistance, and early-semester readiness orientation.

The study's practical contribution lies in identifying both strengths and remaining barriers. The high mean scores provide a basis for continued use of digital learning, but the response variation cautions against assuming uniform preparedness. Support should be differentiated so that students with connectivity problems, limited facilities, weak time management, or low confidence receive assistance suited to the specific barrier they experience.

A proportionate response would prioritize three connected actions: ensure dependable access to essential materials, design digital tasks that require purposeful English use, and provide targeted support for self-management and confidence. Progress should be evaluated with evidence beyond satisfaction alone, including participation, completion, quality of interaction, and—where appropriate—language-learning outcomes. This approach would allow the institution to retain the flexibility valued by students while responding to the barriers identified in the survey.

The study is limited by its sample of 30 respondents, its focus on one semester and one institution, its purposive sampling, and its reliance on questionnaire data. It did not directly observe digital competence, examine platform-use records, measure learning outcomes, or statistically test the relationship between readiness and attitudes. Future research should involve larger and more diverse samples, combine surveys with interviews, observations, or learning analytics, and compare readiness across semesters or study programs. Longitudinal or quasi-experimental designs could also determine whether targeted orientation, connectivity support, or interactive EFL task design produces measurable improvements in engagement, confidence, and language-learning outcomes.

5. References

- Altinsoy, E., & Boyraz, S. (2025). Online learning readiness and satisfaction in English as a foreign language at higher education context: The moderating role of engagement. *Frontiers in Psychology*, 16, 1602117. <https://doi.org/10.3389/fpsyg.2025.1602117>
- Broadbent, J., & Poon, W. L. (2015). Self-regulated learning strategies and academic achievement in online higher education learning environments: A systematic review. *The Internet and Higher Education*, 27, 1–13. <https://doi.org/10.1016/j.iheduc.2015.04.007>
- Creswell, J. W., & Creswell, J. D. (2023). *Research design: Qualitative, quantitative, and mixed methods approaches* (6th ed.). SAGE.
- Fraenkel, J. R., Wallen, N. E., & Hyun, H. H. (2022). *How to design and evaluate research in education* (10th ed.). McGraw-Hill.
- Hung, M. L., Chou, C., Chen, C. H., & Own, Z. Y. (2010). Learner readiness for online learning: Scale development and student perceptions. *Computers & Education*, 55(3), 1080–1090. <https://doi.org/10.1016/j.compedu.2010.05.004>
- Irwanto. (2023). Attitudes toward e-learning of undergraduate students during COVID-19: Dataset from Indonesia. *Data in Brief*, 49, 109380. <https://doi.org/10.1016/j.dib.2023.109380>
- Joosten, T., & Cusatis, R. (2020). Online learning readiness. *American Journal of Distance Education*, 34(3), 180–193. <https://doi.org/10.1080/08923647.2020.1726167>
- Martin, F., Stamper, B., & Flowers, C. (2020). Examining student perception of their readiness for online learning: Importance and confidence. *Online Learning*, 24(2), 38–58. <https://doi.org/10.24059/olj.v24i2.2053>
- Oktavia, S. N., Hartono, H., Widiyati, E., & Hidayati, N. (2023). EFL students' readiness to have online learning during the COVID-19 pandemic among undergraduate students. *EduLite: Journal of English Education, Literature, and Culture*, 8(2), 312–320. <https://doi.org/10.30659/e.8.2.312-320>
- Pallant, J. (2023). *SPSS survival manual* (7th ed.). Routledge.

- Reinders, H., & Benson, P. (2017). Research agenda: Language learning beyond the classroom. *Language Teaching*, 50(4), 561–578.
<https://doi.org/10.1017/S0261444817000192>
- Rohim, A. A. (2022). Indonesian EFL students' perception toward online learning: Voices from freshmen. *Indonesian Journal of English Teaching*, 11(1), 57–68.
- Santosa, M. H., Putra, I. B. Y. B. S., & Pratiwi, N. P. A. (2024). EFL students' online learning readiness: Performing out the basic functions of technology. *Pedagogy: Journal of English Language Teaching*, 12(1), 59–80.
<https://doi.org/10.32332/joelt.v12i1.3590>
- Saputra, E., Saputra, D. B., Handrianto, C., & Agustinos, P. (2022). EFL students' perception toward online learning: What to consider? *Indonesian Journal of English Language Teaching and Applied Linguistics*, 7(1), 123–140.
<https://doi.org/10.21093/ijeltal.v7i1.1242>
- Tusino. (2022). Students' perceptions toward online learning in EFL speaking. *Journal of English Teaching, Applied Linguistics and Literatures*, 5(1).
<https://doi.org/10.20527/jetall.v5i1.12435>
- Wei, H. C., & Chou, C. (2020). Online learning performance and satisfaction: Do perceptions and readiness matter? *Distance Education*, 41(1), 48–69.
<https://doi.org/10.1080/01587919.2020.1724768>