

The Effect of Differentiated Instruction on EFL Students' Reading Comprehension Viewed from Critical Thinking

¹I Made Permadi Utama, ¹K. Dedy Sandiarsa S, ¹Abdul Hafidz

¹ English Language Education, Faculty of Culture, Management, & Business, Universitas Pendidikan Mandalika. Jl. Pemuda No. 59A, Mataram, Indonesia

*Corresponding Author e-mail: permadi_utama@undikma.ac.id

Received: April 2026; Revised: May 2026; Accepted: May 2026; Published: June 2026

Abstract

Reading comprehension in EFL higher education remains challenging because many students struggle to engage in higher-order processes such as inference, evaluation, and interpretation of academic texts. These difficulties are often intensified by the use of uniform instructional practices that do not adequately address learner diversity. This study aimed to investigate the effect of differentiated instruction on EFL students' reading comprehension and to examine differences based on students' levels of critical thinking. The study employed a pre-experimental one-group pre-test-post-test design involving 40 first-year students in an English Language Education program. Data were collected through reading comprehension tests and a critical thinking assessment. The findings revealed an improvement in students' reading comprehension after the implementation of differentiated instruction, as indicated by the increase in mean scores from the pre-test to the post-test. The paired-sample t-test showed that the improvement was statistically significant ($t(39) = 28.01, p < .001$). Further analysis indicated that students with higher levels of critical thinking achieved greater gains, particularly in inferential and evaluative comprehension, although students with lower critical thinking levels also demonstrated meaningful improvement. These findings suggest that differentiated instruction can support reading comprehension development while accommodating learner diversity in EFL classrooms. The study highlights the importance of aligning instructional practices with students' cognitive characteristics to support higher-order reading processes in higher education contexts.

Keywords: Differentiated instruction; Reading comprehension; Critical thinking skills; Language learning

How to Cite: Utama, I.M.P., Sandiarsa, K.D.S, & Hafidz, A. (2026). The Effect of Differentiated Instruction on EFL Students' Reading Comprehension Viewed from Critical Thinking. *Journal of Language and Literature Studies*, 6(2), 829-839. doi: <https://doi.org/10.36312/jolls.v6i2.4999>



<https://doi.org/10.36312/jolls.v6i2.4999>

Copyright© 2026, Utama et al.

This is an open-access article under the [CC-BY-SA](https://creativecommons.org/licenses/by-sa/4.0/) License.



INTRODUCTION

Reading in higher education EFL contexts extends beyond basic decoding and requires learners to engage with complex academic discourse, interpret abstract concepts, and integrate textual information with prior knowledge. Within communicative language frameworks, reading is conceptualized as a meaning-making process situated in academic and sociocultural contexts, emphasizing discourse-level comprehension rather than sentence-level processing (Rianto, 2022; Kim & Lee, 2021). Consequently, academic reading involves higher-order cognitive processes such as analyzing arguments, making inferences, evaluating evidence, and synthesizing information across texts, competencies that are essential for successful participation in tertiary education (Xu & Durgunoğlu, 2019; Taşpınar & Çubukçu, 2020).

However, empirical evidence consistently indicates that many EFL learners struggle to achieve this level of comprehension. Students often rely on surface-level strategies, focusing primarily on literal information extraction while encountering difficulties in inferential and evaluative tasks, such as interpreting implicit meanings,

critiquing arguments, and integrating multiple sources (Rizal et al., 2024; Xu & Durgunoğlu, 2019). This gap highlights a misalignment between the cognitive demands of academic literacy and students' actual reading performance in higher education contexts.

One key factor contributing to this issue is the persistent reliance on uniform instructional practices that fail to adequately address learner diversity in EFL classrooms. In many contexts, reading instruction is still delivered through standardized materials and uniform tasks, implicitly assuming that learners possess relatively homogeneous linguistic proficiency and cognitive readiness. However, such assumptions are problematic, as EFL learners typically demonstrate substantial variation in background knowledge, language ability, and cognitive development (Tomlinson, 2014; Hall, Strangman, & Meyer, 2003). Consequently, "one-size-fits-all" instructional approaches tend to constrain learning opportunities: lower-proficiency students often experience difficulty accessing complex texts, while higher-proficiency learners may not receive sufficient cognitive challenge to promote further development (Smale-Jacobse et al., 2019; Tomlinson, 2017). This mismatch between instructional design and learner variability can hinder the development of higher-order reading skills, particularly in academic contexts that demand inferential and evaluative comprehension. Therefore, there is a growing need for adaptive and responsive instructional approaches, such as differentiated instruction, that systematically accommodate differences in learners' readiness, prior knowledge, and cognitive profiles to support more equitable and effective learning outcomes.

In response, differentiated instruction (DI) has been widely proposed as an effective pedagogical approach. DI involves systematically modifying content, learning processes, and assessment products based on students' readiness, interests, and learning profiles. In EFL reading contexts, this may include varying text complexity, applying scaffolded reading strategies, and providing flexible tasks that allow students to demonstrate comprehension in multiple ways. Empirical studies report that DI can significantly enhance reading comprehension and learner engagement, particularly when instruction is aligned with learners' cognitive needs and supported through structured scaffolding (Magableh & Abdullah, 2020; Safa & Motaghi, 2021; El-Henawy, 2023).

In many higher education EFL classrooms, reading instruction continues to rely on standardized materials, uniform classroom activities, and identical assessment practices despite substantial differences among learners (Smale-Jacobse et al., 2019; Tomlinson, 2017). Such instructional uniformity often overlooks variations in students' linguistic proficiency, background knowledge, learning readiness, and higher-order thinking ability (Hall, Strangman, & Meyer, 2003; Kim & Lee, 2021). Recent studies further emphasize that mixed-ability EFL classrooms present significant challenges when instruction is delivered through one-size-fits-all approaches, as students differ considerably in proficiency, motivation, and cognitive readiness (Tajik, Noor, & Golzar, 2024; Religioni et al., 2024).

As a result, lower-performing students frequently experience difficulty understanding complex academic texts, while more advanced learners may receive insufficient cognitive challenge to further develop inferential and evaluative reading skills (Xu & Durgunoğlu, 2019; Kurt-Taşpınar & Çubukçu, 2020). This imbalance may hinder equitable learning opportunities and reduce the effectiveness of reading instruction in academically diverse classrooms, particularly in higher education contexts that require students to engage in critical interpretation, evaluation, and synthesis of textual information (Zarobe & Gutiérrez, 2024; Johnston, Partridge, & Hughes, 2014). Therefore, there is a critical need for instructional approaches that are adaptive, flexible, and responsive to learners' cognitive diversity, such as differentiated instruction, which aims

to accommodate students' varying readiness levels, learning profiles, and cognitive needs (Tomlinson, 2014; Magableh & Abdullah, 2020).

Nevertheless, the effectiveness of differentiated instruction is not solely determined by instructional design but is also influenced by learners' cognitive characteristics, particularly critical thinking. Critical thinking enables learners to analyze textual structures, evaluate arguments, identify bias, and construct meaning beyond explicitly stated information. Research indicates that higher-order reading comprehension is closely associated with learners' ability to engage in critical thinking processes, especially in tasks requiring inference, evaluation, and synthesis (Xu & Durgunoğlu, 2019; Kim & Lee, 2021). Learners with higher levels of critical thinking tend to benefit more from cognitively demanding reading tasks, whereas those with lower levels often require additional scaffolding to achieve comparable outcomes.

In addition to cognitive factors, reading comprehension in contemporary EFL contexts is increasingly shaped by information literacy and digital literacy. Higher education students are expected to locate, evaluate, and synthesize information from diverse and multimodal sources. Studies show that digital literacy supports reading engagement and access to authentic materials, while information literacy facilitates effective interpretation and integration of academic sources (Johnston et al., 2014; Barkati et al., 2024; Lailiyah et al., 2022; Soomro et al., 2024). However, EFL learners often face challenges due to linguistic constraints, particularly when processing complex information across languages and contexts, further reinforcing the need for adaptive instructional approaches.

Pedagogically, recent developments emphasize the integration of multiliteracies, multimodal resources, and reading-writing connections to support deeper comprehension. Multiliteracies frameworks advocate the use of multiple modes of meaning-making, textual, visual, and digital, to enhance engagement and understanding. Similarly, integrating reading with writing activities, such as summarizing, paraphrasing, and argument construction, has been shown to foster higher-order thinking and disciplinary literacy (Stankić & Jakovljević, 2022; Anaktototy, 2023). While these approaches offer significant potential, their effectiveness depends on alignment with learners' cognitive readiness and the quality of instructional design.

Although previous studies have reported positive effects of differentiated instruction on reading comprehension and have separately highlighted the importance of critical thinking in higher-order reading processes, limited research has examined the interaction between differentiated instruction and students' critical thinking levels within EFL higher education contexts. Most prior studies tend to focus either on instructional strategies or cognitive variables independently, without investigating how learner cognitive characteristics may influence the effectiveness of differentiated instruction. In addition, many existing studies emphasize general reading achievement rather than specific higher-order comprehension processes such as inference and evaluation. Therefore, the present study offers a more integrated perspective by examining the effect of differentiated instruction on EFL students' reading comprehension while simultaneously considering critical thinking as a cognitive factor associated with learning outcomes.

Based on these considerations, the present study aims to investigate the effect of differentiated instruction on EFL students' reading comprehension by considering students' levels of critical thinking. This study seeks to contribute to the development of EFL pedagogy by providing empirical evidence on the role of adaptive instructional strategies in supporting reading comprehension across diverse cognitive profiles. Practically, the findings are expected to inform lecturers in designing more responsive, equitable, and cognitively engaging reading instruction in higher education contexts.

Accordingly, this study addresses the following research questions: Does differentiated instruction significantly improve EFL students' reading comprehension in higher education contexts? And to what extent do students with different levels of critical thinking demonstrate differences in reading comprehension improvement after the implementation of differentiated instruction?

METHOD

Research Design

This study employed a pre-experimental design using a one-group pre-test–post-test to examine the effect of differentiated instruction on EFL students' reading comprehension, with particular attention to differences in students' critical thinking levels. This design enables the measurement of learning gains by comparing students' performance before and after the instructional intervention within a single group. The study was conducted through three main phases. First, a pre-test was administered to establish students' baseline reading comprehension across three cognitive levels: literal, inferential, and evaluative. Second, the treatment phase involved the implementation of differentiated instruction over six instructional sessions within a six-week period, with each session lasting approximately 90 minutes. The instructional treatment was systematically structured based on three core dimensions of differentiation: content, process, and product.

In terms of content differentiation, students were provided with reading texts of varying complexity levels, ranging from simplified academic passages to more analytically demanding texts. Text difficulty was adjusted based on vocabulary load, sentence complexity, and conceptual density to accommodate students' readiness and comprehension ability. Process differentiation was implemented through flexible grouping, scaffolded questioning, guided reading activities, and collaborative discussions. Students with lower reading proficiency received additional support through vocabulary pre-teaching, guided comprehension prompts, and structured peer collaboration, whereas higher-performing students engaged in more independent analytical and evaluative reading tasks designed to promote deeper comprehension.

Product differentiation was carried out by allowing students to demonstrate comprehension through multiple formats, including written summaries, inference-based responses, critical reflection tasks, and group presentations. These differentiated activities were designed to support learner diversity while promoting higher-order reading comprehension in EFL academic reading contexts. Third, a post-test, parallel in format and level of difficulty to the pre-test, was administered to assess students' reading comprehension after the intervention.

Population and Sample

The population of this study consisted of all first-year students enrolled in the English Language Education program at Universitas Pendidikan Mandalika during the 2025/2026 academic year. At the time of the study, there were four first-year classes consisting of 140 students in total. The participants were predominantly in their first semester and ranged in age from 18 to 20 years old. The sample comprised 40 students selected through cluster random sampling. One intact class was randomly chosen from the four available classes to participate in the study. The selected students had relatively similar educational backgrounds, as all participants had completed secondary-level English education and were enrolled in the same foundational reading course. However, they demonstrated varying levels of English proficiency and academic reading experience, particularly in inferential and evaluative reading tasks. Prior to data collection, students were informed about the purpose of the study and voluntarily agreed to participate. Informed consent was obtained from all participants, and the research procedures were

conducted in accordance with ethical principles for educational research. Participants' identities and responses were kept confidential and used solely for academic purposes.

Research Instruments

The reading comprehension test consisted of 30 items designed to measure three levels of comprehension: literal, inferential, and evaluative. The instrument included 25 multiple-choice questions and 5 short-response items based on academic reading passages. Literal comprehension items measured students' ability to identify explicitly stated information, inferential items assessed interpretation and implied meaning, while evaluative items examined students' ability to analyze arguments and evaluate textual information. Each multiple-choice item was scored on a dichotomous scale (1 = correct, 0 = incorrect), whereas short-response items were evaluated using an analytic scoring rubric ranging from 0 to 4 based on accuracy, relevance, and depth of response. The maximum total score was 100.

The critical thinking test consisted of 20 scenario-based and text-based items adapted from higher-order thinking frameworks focusing on analysis, inference, and evaluation. Students' scores were categorized into high and low critical thinking groups using a cut-off score of 80, which was determined based on the institutional grading standard and distribution of pilot-test scores. To ensure content validity, both instruments were reviewed by two experts in English language teaching and educational assessment. Revisions were made to improve clarity, construct alignment, and appropriateness of difficulty level. A pilot study involving 25 non-participant students was conducted prior to the main study. The reading comprehension test demonstrated acceptable internal consistency with a Cronbach's alpha coefficient of .82, while the critical thinking instrument yielded a reliability coefficient of .79, indicating satisfactory reliability for educational research purposes.

Data Analysis

The data collection process was conducted in several stages. First, permission to conduct the study was obtained from the department and the course lecturer. After participant selection and informed consent procedures, students were administered a reading comprehension pre-test to identify their baseline reading ability. The pre-test was conducted in a regular classroom setting under supervised conditions and lasted approximately 60 minutes. Following the pre-test, students completed a critical thinking assessment administered during a separate session lasting approximately 45 minutes. The results of this assessment were used to classify students into high and low critical thinking groups.

The instructional intervention was then implemented over six weeks through differentiated reading instruction activities integrated into regular classroom sessions. Each instructional session lasted approximately 90 minutes and focused on academic reading tasks involving literal, inferential, and evaluative comprehension. After the completion of the intervention, students were administered a post-test using a parallel version of the reading comprehension test. All responses were scored based on predetermined scoring rubrics, and the scores were tabulated for statistical analysis. Prior to inferential analysis, the normality of the data distribution was examined using the Shapiro–Wilk test. The data were considered normally distributed when the significance value exceeded .05. All statistical analyses were performed using IBM SPSS Statistics version 26. Descriptive statistics, including mean, standard deviation, minimum score, and maximum score, were calculated to summarize students' performance on the pre-test and post-test.

To determine whether differentiated instruction produced a statistically significant improvement in students' reading comprehension, a paired-sample t-test was conducted

at a significance level of $\alpha = .05$. The null hypothesis was rejected when the p-value was lower than .05. In addition, students' gain scores were compared descriptively based on their levels of critical thinking to examine differences in reading comprehension improvement between the high and low groups. Cohen's d effect size was also calculated to determine the practical magnitude of the intervention effect. The effect size interpretation followed conventional criteria: 0.20 = small effect, 0.50 = medium effect, and 0.80 or above = large effect.

RESULTS AND DISCUSSION

Research Result

This study aimed to examine the effect of differentiated instruction on EFL students' reading comprehension and to investigate differences in learning gains based on students' levels of critical thinking. The findings are presented in three parts: (1) an overview of the main results, (2) descriptive statistics of pre-test and post-test scores with inferential analysis, and (3) analysis of reading comprehension gains based on critical thinking levels.

Overview of Main Findings

The overall results show differences in students' reading comprehension scores before and after the instructional period. Higher post-test scores were observed compared to pre-test scores. In addition, differences in learning gains were identified between students with high and low levels of critical thinking.

Table 1. Pretest-Posttest Reading Comprehension Scores

Test	N	Mean	SD	Min	Max
Pre-test	40	59.48	3.12	54	65
Post-test	40	75.73	3.68	68	82

As shown in Table 1, the mean post-test score ($M = 75.73$) is higher than the mean pre-test score ($M = 59.48$), indicating a gain in students' reading comprehension scores following the instructional period. This result addresses Research Question 1 by presenting changes in reading comprehension performance from pre-test to post-test.

Table 2 presents the inferential analysis using a paired-sample t-test.

Table 2. Paired-Sample T-test

Variable	Mean Difference	t-value	df	Sig. (p)
Pre-Post Test	16.25	28.01	39	< .001

The paired-sample t-test shows a statistically significant difference between pre-test and post-test scores ($t(39) = 28.01$, $p < .001$). This indicates that students' post-test scores were higher than their pre-test scores. The result provides statistical evidence of score improvement between the two measurements.

Reading Comprehension Gains by Critical Thinking Level (RQ2)

To address Research Question 2, students were grouped into high and low critical thinking levels based on their assessment scores.

Table 3. Critical Thinking Levels

Critical Thinking Level	N	Pre-test Mean	Post-test Mean	Gain Score
High	20	61.45	78.85	17.40
Low	20	57.50	72.60	15.10

As shown in Table 3, both groups demonstrated increases in their post-test scores compared to pre-test scores. However, the high critical thinking group recorded a higher gain score (17.40) than the low critical thinking group (15.10). This indicates differences in reading comprehension gains between students with different levels of critical thinking.

Discussion

The findings of this study provide empirical support for the assumption that reading comprehension in EFL higher education is shaped by the interaction between instructional design and learners' cognitive characteristics. The significant improvement in students' post-test scores suggests that differentiated instruction (DI) is a viable pedagogical approach for enhancing reading comprehension in heterogeneous classrooms. This finding aligns with previous studies indicating that DI can improve EFL reading performance when instructional components such as content, process, and product are systematically aligned with learners' readiness and learning profiles (Magableh & Abdullah, 2020; Potot et al., 2023). From the perspective of academic literacy development, these results also reflect the importance of higher-order cognitive processes such as inference, evaluation, and synthesis in tertiary-level reading comprehension (Zarobe & Gutiérrez, 2024).

The observed improvement further suggests that DI contributes not only to measurable score gains but also to meaningful pedagogical development. One explanation is that DI reduces cognitive overload by adjusting task difficulty and providing scaffolding according to students' readiness levels. When learners are exposed to appropriately challenging texts accompanied by guided support, they are more likely to engage in deeper cognitive processing and construct meaning effectively. This interpretation is consistent with cognitive and constructivist learning perspectives, which emphasize that learning is optimized when instructional input matches learners' cognitive capacity (Safa & Motaghi, 2021). In addition, DI practices such as flexible grouping and tiered tasks provide opportunities for sustained engagement, which is essential for developing higher-order reading comprehension in EFL contexts.

Another key finding concerns the role of critical thinking in reading development. Students with higher critical thinking levels achieved greater gains than those with lower levels, particularly in inferential and evaluative tasks. This finding supports the view that critical thinking is closely linked to advanced reading comprehension because it enables learners to analyze, evaluate, and interpret textual information more effectively (Xu & Durgunoğlu, 2019). It also reinforces the understanding that academic reading requires discourse-level processing rather than surface-level decoding, as emphasized in communicative language ability frameworks and interactional approaches to L2 reading comprehension (Bachman & Palmer, 2010; Chapelle, 2021).

More importantly, the findings suggest that critical thinking may function as a moderating factor in the effectiveness of differentiated instruction. Although all students benefited from the intervention, those with higher cognitive readiness were better able to take advantage of the flexibility and autonomy embedded in DI tasks. This pattern is consistent with previous research showing that learners with stronger cognitive readiness tend to benefit more from instructional approaches requiring independent analysis and evaluation (Taşpinar & Çubukçu, 2020). At the same time, the improvement observed among students with lower critical thinking levels highlights the inclusive potential of DI. Through structured scaffolding and guided tasks, lower-level learners were still able to develop their reading comprehension skills, although at a different rate.

These findings contribute to ongoing discussions on learner diversity in EFL higher education. The parallel improvement across both groups indicates that DI can help reduce disparities in reading performance by accommodating differences in readiness and

cognitive profiles. This challenges traditional uniform instructional approaches, which often fail to address learner variability and may limit optimal learning outcomes. Instead, DI offers a more adaptive and equitable framework for supporting diverse learners in cognitively demanding academic reading contexts (El-Henawy, 2023).

In addition, although not directly examined in this study, the results can be situated within the broader context of digital literacy and multiliteracies in EFL education. Previous research indicates that engagement with multimodal and digital reading environments can enhance comprehension and motivation when integrated into structured instructional designs (Barkati et al., 2024; Lailiyah et al., 2022). In this regard, DI provides a flexible pedagogical structure that can accommodate multimodal resources and reading-writing integration, which are increasingly emphasized in contemporary literacy frameworks (Stankić & Jakovljević, 2022; Anaktototy, 2023).

Several limitations should be acknowledged. The use of a one-group pre-test-post-test design limits causal inference due to the absence of a control group, which may inflate observed effects. In addition, while grouping students based on critical thinking levels provides useful comparative insight, more advanced statistical approaches such as moderation analysis would allow a more precise examination of interaction effects between cognitive variables and instructional design. Nevertheless, the study provides pedagogical implications for EFL higher education. It suggests that lecturers should implement differentiated instructional strategies that align with learners' readiness and cognitive characteristics, particularly critical thinking ability. Integrating analytical, evaluative, and synthesis-based tasks within DI frameworks may further enhance higher-order reading development. Structured scaffolding remains essential to ensure that learners with lower cognitive readiness can still meaningfully engage with academic texts.

This study highlights differentiated instruction as an adaptive pedagogical approach in EFL reading classrooms. Its effectiveness is closely associated with learners' cognitive characteristics, particularly critical thinking ability. These findings underscore the importance of adopting cognitively responsive and adaptive instructional strategies to support diverse learners and enhance higher-order reading development in higher education contexts.

CONCLUSION

This study shows that differentiated instruction is positively associated with improvement in EFL students' reading comprehension in higher education. The increase in post-test scores after the instructional intervention indicates that students benefited from learning activities designed to address differences in readiness, learning needs, and cognitive engagement. The findings also suggest that critical thinking plays an important role in reading development. Students with higher levels of critical thinking obtained greater gains than those with lower levels, especially in reading tasks that required them to make inferences, evaluate information, interpret implicit meanings, and connect ideas across texts. These results indicate that reading comprehension is not only influenced by instructional methods but also by students' ability to analyze and reason critically while processing academic texts.

Nevertheless, these findings should be interpreted cautiously because the study used a pre-experimental one-group pre-test-post-test design. The absence of a control group makes it difficult to determine whether the improvement was caused solely by differentiated instruction, since other factors may also have contributed to the students' progress. Even so, the improvement shown after the intervention provides meaningful evidence that differentiated instruction can support learning gains in EFL reading classrooms.

Practically, the findings imply that EFL lecturers should apply differentiated instructional strategies that respond to students' varying levels of readiness and cognitive profiles. Lecturers can use flexible reading materials, scaffolded reading tasks, guided questioning, collaborative learning activities, and varied assessment products to help students engage with texts more effectively. In addition, reading instruction should include explicit support for critical thinking through activities that require interpretation, comparison, evaluation, and justification of answers. Overall, this study emphasizes the importance of adaptive and cognitively responsive pedagogy in higher education. By combining differentiated instruction with critical thinking development, lecturers can better support diverse learners and promote effective higher-order reading comprehension in EFL classrooms.

RECOMMENDATION

Future research should employ more rigorous designs, such as quasi-experimental or experimental studies with control groups, to strengthen the validity of findings. It is also recommended to examine the moderating role of critical thinking using advanced statistical analysis and to explore additional variables such as motivation and digital literacy. Longitudinal studies across diverse contexts are needed to assess long-term effects. Practically, lecturers should implement differentiated instruction through adaptive materials, flexible grouping, and scaffolding. However, challenges such as limited time, large class sizes, and insufficient training may hinder implementation; therefore, feasible and context-sensitive instructional models should be developed.

ACKNOWLEDGMENT

The author would like to express sincere gratitude to the lecturers and students of the English Department at Mandalika University of Education for their participation and support in this study. Appreciation is also extended to colleagues who provided valuable feedback during the research process.

AI TOOL USE DECLARATION

During the preparation of this manuscript, AI-based tools were used to support language editing and improve clarity of expression. The authors confirm that all scientific content, data analysis, interpretations, and conclusions were independently developed and verified by the authors.

REFERENCES

- Anaktototy, K. (2023). Interplaying reading and writing in ESL/EFL: A literature review of strategies for Indonesian teachers. *Elsya: Journal of English Language Studies*, 5(1), 107–121. <https://doi.org/10.31849/elsya.v5i1.9994>
- Bachman, L. F., & Palmer, A. S. (2010). *Language assessment in practice*. Oxford University Press.
- Barkati, M., Kiyanfar, Z., Noughabi, M. A., & Ershadi, F. (2024). Contributions of self-efficacy, L2 grit, and digital literacy to informal digital learning of English: A structural equation modelling approach. *British Journal of Educational Technology*, 56(5), 2183–2201. <https://doi.org/10.1111/bjet.13547>
- Chapelle, C. A. (2021). *Evaluating language learning and teaching: A framework for assessment*. Cambridge University Press.
- El-Henawy, W. M. (2023). The effects of online flipped reading instruction utilizing scaffolding and digital badges on EFL deep comprehension and reading engagement.

- Journal of Scientific Research in Education*, 24(11), 567–613. <https://doi.org/10.21608/jsre.2024.255140.1638>
- Hall, T., Strangman, N., & Meyer, A. (2003). *Differentiated instruction and implications for UDL implementation*. National Center on Accessing the General Curriculum. <http://aim.cast.org>
- Johnston, N., Partridge, H., & Hughes, H. (2014). Understanding the information literacy experiences of EFL students. *Reference Services Review*, 42(4), 552–568. <https://doi.org/10.1108/RSR-05-2014-0015>
- Kim, H., & Lee, B. (2021). Distinct L2 reading-related subgroups of Korean EFL first-year high school learners: Latent profile analysis. *Journal of Asia TEFL*, 18(4), 1324–1346. <https://doi.org/10.18823/asiatefl.2021.18.4.15.1324>
- Kurt-Taşpınar, H., & Çubukçu, F. (2020). The impact of critical literacy instruction on adult EFL learners' reading comprehension. *Language Teaching and Educational Research*, 3(1), 34–55. <https://doi.org/10.35207/later.736070>
- Lailiyah, L., Ratminingsih, N. M., Utami, I. L. P., Artini, L. P., Padmadewi, N. N., & Marsakawati, N. P. E. (2022). Peer assessment-based digital literacy, EFL students' reading competency, and engagement. *Journal of Education Research and Evaluation*, 6(4), 678–687. <https://doi.org/10.23887/jere.v6i4.53012>
- Magableh, I., & Abdullah, A. (2020). The effect of differentiated instruction on EFL learners: Teachers' perspective. *International Journal of Academic Research in Business and Social Sciences*, 10(5). <https://doi.org/10.6007/IJARBSS/v10-i5/7235>
- Potot, A., Kyamko, L., Sereño, R. R., & Bustrillo, H. (2023). Differentiated instruction as a strategy in improving reading comprehension. *Journal of English Language Teaching and Applied Linguistics*, 5(4), 113–128. <https://doi.org/10.32996/jeltal.2023.5.4.12>
- Religioni, A., Meilinda, C., Alawiyah, A., & Farrel, L. M. (2024). Differentiated instructions in ESL and EFL classrooms: A systematic literature review. *STAIRS: English Language Education Journal*, 5(2). <https://doi.org/10.21009/stairs.5.2.5>
- Rianto, A. (2022). Assessing metacognitive online reading strategy usage among EFL teachers in Indonesia. *3L: The Southeast Asian Journal of English Language Studies*, 28(3), 168–180. <https://doi.org/10.17576/3l-2022-2803-11>
- Rizal, A., Dollah, S., Abduh, A., Jabu, B., Basri, M., Mustikawati, Y., & Usman, A. H. (2024). Students' perception of cultural literacy development in higher education. *International Journal of Recent Educational Research*, 5(3), 748–764. <https://doi.org/10.46245/ijorer.v5i3.608>
- Safa, M. A., & Motaghi, M. (2021). The effect of differentiated instruction on EFL learners' reading comprehension: The role of cognitive load and scaffolding. *Journal of Language Teaching and Research*, 12(4), 601–610. <https://doi.org/10.17507/jltr.1204.10>
- Smale-Jacobse, A. E., Meijer, A., Helms-Lorenz, M., & Maulana, R. (2019). Differentiated instruction in secondary education: A systematic review. *Review of Educational Research*, 89(3), 395–432.
- Soomro, R. B. K., Khan, R. A., & Rind, I. A. (2025). Exploring ESL teachers' experiences about ICT-based 4Cs skills: A phenomenological study. *Discover Education*, 4, Article 12. <https://doi.org/10.1007/s44217-024-00376-4>
- Stankić, D. L. J. P., & Jakovljević, B. (2022). Incorporating multiliteracies and multimodality into literacy instruction for EFL students at a tertiary level: A case study. *Filolog*, 13(25), 68–85. <https://doi.org/10.21618/fil2225068p>
- Tajik, O., Noor, S., & Golzar, J. (2024). Investigating differentiated instruction and the contributing factors to cater EFL students' needs at the collegial level. *Asian-Pacific*

- Journal of Second and Foreign Language Education*, 9, 74.
<https://doi.org/10.1186/s40862-024-00299-5>
- Tomlinson, C. A. (2014). *The differentiated classroom: Responding to the needs of all learners* (2nd ed.). ASCD.
- Tomlinson, C. A. (2017). *How to differentiate instruction in academically diverse classrooms* (3rd ed.). ASCD.
- Xu, H., & Durgunoğlu, A. Y. (2019). Motivational factors underlying different levels of reading comprehension of English language learners. *TESOL Journal*, 11(1), Article e448. <https://doi.org/10.1002/tesj.448>
- Zarobe, Y. R. de, & Gutiérrez, A. M. (2024). Critical literacy and reading comprehension in English as a foreign language: A systematic review. *Vigo International Journal of Applied Linguistics (VIAL)*, 21, 1–20.