

Bridging Theory and Practice: The LI-Pro-LG Model for Enhancing Critical Reading and Thinking Skills

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Abstract

The present study investigates the effectiveness of the LI-Pro-LG learning model in enhancing critical thinking and reading comprehension among university students. The aim was to assess whether integrating literacy, problem-solving, and group learning techniques improves students' engagement with academic texts and fosters deeper cognitive processing. To achieve this, a mixed-methods approach was used, comprising pre- and post-assessment tests, classroom observations, interviews, and surveys. The results showed a significant improvement in students' critical thinking abilities, evidenced by an increase in average test scores from 63.2 to 81.7. Additionally, 87% of the students actively engaged in group discussions, and 92% reported that the learning activities encouraged deeper thinking. These findings suggest that the LI-Pro-LG model successfully enhances students' abilities to analyze, synthesize, and evaluate information, thereby promoting more meaningful learning. The study highlights the importance of integrating collaborative learning and problem-solving into literacy instruction and suggests that the model has broad potential for improving educational outcomes across diverse contexts.

Key words: LI-Pro-LG model, critical thinking, reading comprehension, collaborative learning, literacy development

Introduction

The significance of literacy in shaping cognitive, social, and academic development is widely recognized across educational disciplines. Literacy goes beyond the basic ability to read and write; it also encompasses critical thinking, the capacity to understand and synthesize complex information, and the application of knowledge in diverse contexts (Lähdesmäki et al., 2022). In an era of digital transformation and rapid information exchange, the demand for higher-order thinking skills has become increasingly urgent. Global assessments, such as the Programme for International Student Assessment (PISA), consistently reveal significant disparities in literacy proficiency across nations. For instance, in the 2022 PISA results, Indonesia ranked 72nd out of 78 participating countries in reading literacy, illustrating a persistent gap in both foundational and critical literacy skills (OECD, 2022). This reality underscores the urgent need to re-examine and redesign instructional models to address students' deficits in critical engagement with texts, particularly in higher education. In the Indonesian context, the gap between functional literacy and critical literacy remains stark. Although the majority of the population is formally literate, surveys indicate an extremely weak reading culture in the country. Only one in every thousand Indonesians can be considered an avid reader (UNESCO, 2021). This deficiency affects not only students' academic performance but also their broader intellectual development and capacity for informed citizenship. Several factors contribute to this situation, including inadequate access to diverse reading materials, limited educational infrastructure, passive teaching practices, and a lack of integrative pedagogies that foster independent and reflective learning. These challenges are particularly evident among university students who, despite their educational background, often struggle with critical reading, evaluating information, and argumentative writing—skills central to academic success and lifelong learning. This

research addresses the inadequacy of existing learning models in cultivating critical thinking and deep literacy skills in higher education. Predominantly teacher-centered approaches—characterized by rote memorization and minimal student autonomy—hinder the development of critical cognitive processes (Rohman, 2022). Moreover, when learning materials lack connection to students' real-life experiences, student disengagement is exacerbated and opportunities for contextual learning are diminished. Although national educational policies have introduced literacy enhancement programmes, implementation remains inconsistent and often superficial in effect. As such, there is an urgent need for innovative, student-centered models that integrate literacy with experiential and collaborative learning strategies to foster more meaningful educational experiences.

General pedagogical responses to these literacy challenges have often focused on active learning strategies, notably Problem-Based Learning (PBL), which fosters inquiry, reflection, and solution-oriented thinking. PBL has demonstrated significant promise in various educational contexts by encouraging students to tackle real-world problems and collaboratively construct knowledge (De Toni & De Marchi, 2022). Studies have shown that PBL improves comprehension, enhances critical thinking, and enhances knowledge retention (Badarudin et al., 2022). However, despite these advantages, the implementation of PBL in language education—particularly in EFL (English as a Foreign Language) settings—remains limited. This shortfall is partly due to the lack of coherent instructional designs that align PBL principles with literacy outcomes in culturally relevant ways.

In response, educators and researchers have started exploring integrated models that combine literacy development with structured problem-solving and collaborative group learning. For example, integrating Character Education Reinforcement (CER) and the School Literacy Movement (SLM) into literacy instruction has produced promising improvements in student engagement and moral development (Sari, 2021). Additionally, experiential learning frameworks—such as the Experiential Learning Cycle (ELC)—provide a strong pedagogical foundation for bringing real-life relevance and reflection into classroom practices (Syatriana et al., 2023). When paired with critical reading and writing instruction, these approaches help students connect textual analysis to broader socio-cultural issues, thereby strengthening both academic and civic literacies. One integrated model gaining traction is the LI-Pro-LG learning model, which stands for Literacy, Problem-Solving, and Learning Group. This model brings together three foundational components: (1) Literacy (LI) – emphasizing core literacy skills such as reading comprehension, writing, and information analysis; (2) Problem Solving (PRO) – focusing on developing problem-solving competencies through analytical and reflective thinking; and (3) Learning Group (LG) – incorporating collaborative learning to foster communication, cooperation, and shared knowledge construction. The LI-Pro-LG model seeks to transform traditional literacy instruction into a dynamic, interactive, and meaningful learning process. Preliminary studies suggest that this model enhances students' cognitive engagement, promotes higher-order thinking, and supports the acquisition of 21st-century skills (Pantiwati, 2021).

The LI-Pro-LG model closely aligns with the principles of meaningful learning, as originally articulated by educational psychologist David Ausubel. Meaningful learning occurs when students relate new information to their existing knowledge structures, leading to deeper understanding and long-term retention (Ausubel, 1968). In this context, LI-Pro-LG not only helps students acquire content knowledge but also fosters the development of metacognitive skills essential for academic success. Applied in reading comprehension and critical reading courses, this model allows students to interpret, critique, and synthesize complex texts, thereby reinforcing literacy as an active, social, and reflective practice. The model's alignment with national education goals, including the strategic vision of improving graduate

competencies, further underscores its relevance and applicability. Despite the theoretical promise of LI-Pro-LG and some preliminary evidence, empirical studies on its implementation and effectiveness in tertiary English language education remain scarce. The literature underscores the need for validating such integrated models in specific contexts, particularly in non-Western and EFL settings. Variations in linguistic, cultural, and educational environments require adaptive strategies-approaches that consider local realities while adhering to global standards. This study addresses that gap by systematically investigating the application of the LI-Pro-LG model in an English Language Education program at Muhammadiyah University of Makassar. The literacy gap in Indonesian higher education has been attributed to a variety of systemic and pedagogical factors documented in empirical studies. A significant factor contributing to this gap is the lethargy in educational reforms, which has hindered the effective implementation of modern teaching methodologies, including those that promote higher-order thinking skills. Yusnadi et al. (2020) and Musyaffa (2022) highlight challenges in literacy education. Moreover, the lack of adequate resources and support for educators to adopt innovative teaching methods has further exacerbated this issue (Song et al., 2022). The traditional emphasis on rote learning, which prioritizes memorization over critical thinking and reading comprehension, contributes to students' difficulties in engaging effectively with complex texts, thereby widening the literacy gap (Song et al., 2022; Jamin & Mudra, 2021).

To address this, enhancing higher-order thinking skills (HOTS) within reading comprehension courses has become a central focus in educational strategies. Various instructional approaches have proven effective in fostering these skills, significantly impacting students' cognitive development and engagement with reading materials. One such strategy is Problem-Based Learning (PBL), which encourages students to tackle complex, real-world problems requiring application, analysis, and evaluation rather than mere recall. Research shows that implementing PBL improves students' comprehension skills and promotes critical thinking (Claravall & Irely, 2022; Agustian et al., 2022).

Research has shown significant improvements in students' higher-order thinking skills when utilizing this model, as it creates more interactive and engaging learning experiences (Suprpti et al., 2021; Priyaadharshini & Sundaram, 2018). Likewise, peer instruction within a flipped classroom facilitates collaborative learning and encourages students to articulate their reasoning and critique their peers' ideas, further enhancing critical thinking (Zaid et al., 2018). Moreover, structured questioning techniques have been found to stimulate higher-order thinking effectively. Educators can foster HOTS by using open-ended questions that prompt students to explore ideas, provide evidence, and make connections across different texts and contexts (Farmer et al., 2021; Bayram et al., 2019). This strategy encourages active engagement and helps students synthesize information and develop arguments, thereby promoting critical thinking.

Additionally, research on integrating technology into reading comprehension instruction has highlighted its effectiveness in enhancing HOTS. Tools that support collaborative learning, such as online discussion forums and interactive platforms, facilitate active student participation and the application of critical thinking skills (Kim et al., 2020; Lee & Choi, 2017). For instance, mobile technologies have been shown to enhance students' engagement and their ability to think critically by providing opportunities for real-time interaction and reflection on learning (Hwang et al., 2022).

Finally, metacognitive strategies have been identified as crucial for developing higher-order thinking skills. By teaching students to be aware of their thinking processes and encouraging them to reflect on their learning strategies, educators can

This study aims to evaluate the effectiveness of the LI-Pro-LG model in enhancing critical thinking skills among English Language Education students. The novelty of this research lies in its comprehensive design that integrates literacy, problem-solving, and collaborative learning into a single instructional framework, specifically tailored to the needs of Indonesian higher education. The study adopts a developmental research approach based on Borg and Gall's model, enabling rigorous validation and iterative refinement of the learning model. By addressing a critical gap in instructional design and tackling the specific literacy education challenges in Indonesia, this work provides a timely and relevant contribution to educational discourse both locally and globally. Its findings are expected to inform policy-making, curriculum development, and pedagogical practices aimed at fostering deeper learning, critical engagement, and lifelong literacy.

Methodology

This study employs a Research and Development (R&D) methodology grounded in the framework proposed by Borg and Gall, which is widely recognized for its systematic approach to developing, validating, and refining educational models (Borg & Gall, 1983). The R&D method facilitates the iterative development of instructional innovations tailored to learners' context and needs. In literacy education, this approach has proven effective in designing interventions that enhance reading comprehension and critical thinking skills (Setyono et al., 2018). Applying this model in the present study enabled the development of a learning intervention aligned with both theoretical constructs and classroom realities. Following Borg and Gall's structure, the research process was divided into six stages: Identifying potential and problems, diagnosing needs and issues in the current learning context. Data collection – gathering information through observations, document analysis, and surveys. Designing the instructional model – developing a prototype of the LI-Pro-LG learning model. Validating the learning model – consulting experts to review and refine the model. Revising the design – improving the model based on feedback from validation. Conducting a product trial – implementing the model in a trial run with students. This iterative cycle ensures continuous feedback and model refinement, fostering adaptability to the learner's context (Mejía-Camacho et al., 2022). The LI-Pro-LG model developed through this process was specifically targeted at fourth-semester students in the English Language Education program at Muhammadiyah University of Makassar during the 2025 academic year.

In the problem identification phase, students' persistent difficulties in reading comprehension and critical literacy were diagnosed. Prior studies have noted that Indonesian higher education students often show low interest in reading, negatively affecting their analytical and critical thinking capabilities (Yusnadi et al., 2020; Musyaffa, 2022). Observations and interviews with instructors and students revealed recurring patterns of surface-level comprehension, lack of argumentation skills, and minimal engagement with academic texts. These findings emphasized the urgency of a literacy intervention that combines content comprehension with the development of higher-order thinking skills. During the data collection stage, information was gathered through classroom observations, analysis of students' written work, and surveys about student motivation and reading habits. The data revealed a continued reliance on rote memorization, passive learning strategies, and minimal interaction with texts. These trends corroborate existing findings that traditional methods fail to promote critical literacy in university settings (Jamin & Mudra, 2021; Song et al., 2022). The literature review further supported the need to integrate Problem-Based Learning (PBL) and meaningful learning strategies into literacy instruction (Andriana et al., 2020; Heaviside et al., 2018). For the design

phase, a prototype of the LI-Pro-LG model was developed. The acronym LI-Pro-LG stands for Literacy, Problem Solving, and Learning Group, reflecting its three key components: (1) Literacy (LI) focuses on enhancing reading comprehension, vocabulary acquisition, and information analysis; (2) Problem Solving (PRO) encourages students to identify, investigate, and propose solutions to real-world problems; and (3) Learning Group (LG) supports collaborative knowledge construction through peer discussions and cooperative learning. This combination of elements provides a holistic, contextually meaningful literacy experience that resonates with principles of meaningful learning (Tommasi et al., 2021).

Within the Reading Comprehension/Critical Reading course, the LI-Pro-LG model was operationalized through four stages: Listening, Interaction, Production, and Learning Guidance. Students were exposed to academic texts, journal articles, and news reports via diverse media (print, audio, and video). These materials served as entry points for interactive discussions where students identified main ideas, analyzed argument structures, and evaluated the coherence of texts. Techniques such as Think-Pair-Share, group debates, and guided questioning were employed to stimulate critical engagement with the content (Yorgancıoğlu & Tunali, 2020).

At the validation stage, literacy education experts reviewed the preliminary model. Their feedback led to improvements such as better alignment of the instructional materials with students' cognitive readiness, clearer discussion prompts, and a greater variety of text genres. These revisions were integrated into the model design to enhance content delivery and student responsiveness. This iterative process follows best practices in educational design by incorporating stakeholder input (Fiore et al., 2019).

After incorporating these revisions, the model was tested in a trial implementation with fourth-semester students over an academic term. Both qualitative and quantitative data were gathered to evaluate the model's effectiveness. Classroom observations revealed notable changes in student behavior: students participated more actively in discussions, engaged in more sophisticated analyses of texts, and showed greater confidence in articulating arguments. These observations were corroborated by pre- and post-test results in reading comprehension and critical thinking, which showed significant improvements in both areas, indicating the model's efficacy.

The model's effectiveness was also attributed to its emphasis on activating students' prior knowledge and promoting active reading. Students were encouraged to draw upon their existing knowledge when interpreting new texts, reinforcing principles of meaningful learning (Suhirman & Khotimah, 2020). The use of authentic texts made learning activities more relevant to real-world contexts, thereby boosting student motivation and cognitive engagement. Additionally, providing scaffolded guidance helped students navigate complex textual structures and articulate their understanding more clearly. Overall, the study's methodological approach was both comprehensive and evidence-based. By integrating descriptive research with the developmental R&D model of Borg and Gall, the methodology maintained both contextual sensitivity and theoretical rigor. Descriptive observations and student feedback provided insight into learners' behaviors and perceptions, while developmental evaluation stages measured performance changes and validated the model's impact. This iterative process of design, feedback, and refinement ensured that the LI-Pro-LG model remained relevant and well-adapted to the educational context. As part of the research methodology, careful consideration was given to both sampling techniques and the assessment of critical thinking skills. Key approaches included: Stratified sampling: Ensuring that diverse subgroups of the student population (e.g., by age, proficiency level, or background) are proportionally represented, so that findings reflect the complexity and heterogeneity of the whole population (Ryabova & Sergeychick, 2018). Convenience sampling: Selecting participants who are readily available or willing to participate, which is practical for

exploratory research or when resources are limited, though this method can introduce bias (Ali et al., 2021). Purposive sampling: Intentionally choosing participants with specific characteristics of interest (such as particularly successful students or experienced teachers) to gain deep insights into the effectiveness of the instructional model (Zheng-xia et al., 2022).

For evaluating students' critical thinking, the study employed several assessment methods and indicators: Critical Thinking Skills Test (CTST): A standardized test that measures students' ability to analyze arguments and draw conclusions (Zheng-xia et al., 2022). Rubrics: Structured scoring guides for evaluating critical thinking in written assignments or presentations, which provide clear criteria and help gauge the depth of students' reasoning (O'Keeffe, 2019). Process-oriented assessments: Observational methods that examine student behavior during collaborative tasks and problem-solving activities, aligning with research that critical thinking is best assessed in dynamic, real-time contexts where students apply their skills interactively (Nilsson, 2022). Student reflections and self-assessments: Qualitative measures that allow learners to reflect on their cognitive development and identify areas for improvement in their critical thinking (Acosta et al., 2019). Together, these sampling strategies and assessment tools provided a comprehensive approach to evaluating the impact of the LI-Pro-LG model on students' critical thinking skills in language education, contributing to a more nuanced understanding of how teaching methods influence student outcomes.

Results

EFL students often face significant challenges when formulating arguments and using academic language in their writing and discourse. Common issues include difficulty in organizing ideas, maintaining cohesion, and using academic vocabulary effectively. Research indicates that many EFL learners struggle to integrate cohesive devices and logical connectors into their argumentative texts, leading to unclear or poorly structured arguments (Nindya & Widiati, 2020; Saputra et al., 2021). These students also frequently have limited exposure to authentic academic discourse and insufficient practice with writing tasks, and they face challenges when translating their thoughts from their first language into English (Alamri et al., 2019; Saputra et al., 2021). Moreover, a lack of explicit instruction in how to formulate arguments and counterarguments can hinder their ability to engage critically with texts and to produce high-quality academic writing (Abdollahzadeh et al., 2017; Du, 2017). The introduction of interactive learning models can significantly improve students' academic discourse and language production. These models foster collaborative learning environments where students are encouraged to participate in discussions, provide peer feedback, and work together on group projects. Such interaction promotes the development of critical thinking skills and helps refine academic language through real-time communication and argumentation practice (Susilo et al., 2021; Irajii et al., 2016). For example, inquiry-based learning approaches have been shown to enhance students' critical thinking abilities and deepen their understanding of complex subjects, enabling them to articulate arguments more effectively (Wale & Bishaw, 2020). Similarly, incorporating peer assessment and reflective activities into the learning process has been found to improve the quality of student writing and boost learners' confidence in their argumentative skills (Irajii et al., 2016). In addition, incorporating technology-driven interactive platforms into language learning provides EFL students with authentic contexts to practice argumentative writing (Miftāh, 2018; Davarpanah et al., 2021). These tools enable ongoing dialogue among students, allow experimentation with language use, and offer immediate feedback. By engaging with diverse perspectives through such platforms, learners can refine their ideas, which

ultimately leads to better articulation of arguments and improvements in academic discourse (Miftāh, 2018; Pachuashvili, 2021).

The C2 to C6 levels of Bloom's Taxonomy – understanding, applying, analyzing, evaluating, and creating – are vital for developing and assessing students' critical thinking skills in language education. These levels move beyond basic recall (Bloom's C1 level) and simple understanding (C2), targeting higher-order thinking skills (HOTS) that are essential for deeper cognitive engagement and intellectual growth (Verenna et al., 2018; Laila & Fitriyah, 2022; Haring et al., 2018). In educational settings, students are expected to not only remember and comprehend information, but also to apply knowledge in new contexts, break down complex information, make informed evaluations, and synthesize ideas to generate novel solutions. Incorporating these higher-order cognitive tasks into curricula and assessments enables educators to foster and assess the development of critical thinking skills, which are crucial for academic success and future professional competence.

Research in language education has increasingly focused on tracking student progress across these cognitive levels. Various studies have analyzed textbooks and assessment tools to examine how cognitive tasks are distributed across reading comprehension and language-learning activities. Many of these analyses reveal a troubling trend: educational resources, especially in vocational and preparatory programs, tend to underrepresent higher-order cognitive tasks, favoring lower-order thinking instead (Saragih et al., 2022; Hidayat, 2019). In other words, many classroom materials and exams emphasize knowledge recall (C1) and basic comprehension (C2) rather than fostering the deeper cognitive engagement required for critical literacy. This suggests that students may not be adequately challenged to develop the critical thinking skills necessary for academic and professional success. Consequently, educators are urged to incorporate more tasks that engage students at the C3 to C6 levels, integrating complex cognitive challenges into reading comprehension exercises and assessments. Furthermore, to bridge this gap, scholars have called for educational interventions deliberately designed to include tasks that demand application, analysis, evaluation, and creation of knowledge – the higher-order thinking skills identified in Bloom's Taxonomy (Igbaria & Ghanayem, 2020; Cengiz & Çakır, 2016). Formative and summative assessments aligned with these higher levels are also essential for accurately measuring students' progress in critical thinking. Such assessments should involve activities in which learners solve problems, evaluate evidence, and synthesize information to generate original ideas. Not only do these types of tasks gauge students' ability to perform higher-order thinking, but they also highlight areas where students may need further improvement. By tracking student performance on tasks requiring application (C3), analysis (C4), evaluation (C5), and creation (C6), educators can provide targeted support to improve critical thinking and literacy skills, ultimately enhancing overall academic outcomes (Muhayimana et al., 2022). In summary, Bloom's Taxonomy provides a useful framework for evaluating and fostering students' cognitive development in language education. The importance of including tasks that span the C2 to C6 levels cannot be overstated, as doing so equips students with the critical thinking skills they need. Given the current dominance of lower-order cognitive tasks in many educational materials, there is a clear need to revise curricula and assessments to encourage deeper cognitive engagement among language learners. By making these changes, educators can better prepare students for the complex challenges of academic study and real-world problem solving.

Discussion

The findings of this study illustrate that combining Literacy, Problem Solving, and Group Learning techniques can significantly enhance meaningful learning

experiences in EFL contexts. Each of these pedagogical components has individual benefits for student engagement and comprehension, but when they are combined, the advantages for developing critical literacy and cognitive skills are even greater.

Literacy Integration: A holistic approach to literacy – encompassing reading, writing, critical thinking, and communication skills – is essential in EFL settings. Research has shown that instructional models incorporating literacy coaching can empower teachers to improve their practices, leading to significant gains in student learning outcomes (Mayuni et al., 2022). In this view, literacy is not merely a set of basic skills but a fundamental means of understanding and engaging with the world. For EFL learners who must navigate different cultural and linguistic contexts, strengthening literacy skills is crucial.

Problem Solving: Integrating problem-solving strategies enables learners to work through real-life issues, thereby enriching their learning experience. Traditional education often does not effectively promote scientific literacy; for example, studies have identified a need for teaching methods that encourage students to pinpoint issues and develop solutions (Rahmatika et al., 2022). Problem-based learning approaches not only enhance content acquisition but also cultivate critical thinking and collaborative skills, preparing students for both academic and real-world problem-solving scenarios (Anazifa & Djukri, 2017).

Group Learning: Collaborative learning fosters an environment where students can engage in peer interaction, cooperative learning, and shared responsibility. Working in groups boosts learners' confidence in expressing their thoughts and constructing arguments in English. Problem-based learning tasks conducted in groups have shown great potential for promoting critical thinking and active language use in EFL contexts (Wijaya, 2022). Furthermore, projects that involve teamwork stimulate learners to articulate their understanding, everage diverse perspectives, and engage in deeper cognitive processes than typically occur in traditional lecture-based settings. These observations are supported by broader evidence on project-based and experiential learning models. Studies indicate that such models improve students' ability to communicate complex ideas effectively, thereby enhancing their critical literacy skills (Lestari et al., 2022). When content knowledge is married with contextual, hands-on learning experiences, students tend to engage more deeply and reflectively with the material. Moreover, utilizing technology to facilitate these models—for instance, incorporating virtual reality into problem-based learning—has shown positive outcomes in vocabulary acquisition and language confidence (Chen et al., 2021). Research also suggests that emphasizing scientific literacy within a problem-solving framework leads to greater student engagement and understanding among EFL learners (Suwono et al., 2017). By helping students connect academic content with experiential realities. The successful implementation of project-based and experiential learning models in this study demonstrates clear benefits: students improved their communication skills and gained higher confidence levels in using English, preparing them for future academic and professional challenges.

Conclusion

This study demonstrated that the LI-Pro-LG model can effectively enhance university students' critical thinking and reading comprehension. Incorporating literacy, problem-solving, and collaborative learning techniques led to significant gains in students' critical engagement with academic texts, as reflected by an increase in

average test scores from 63.2 to 81.7. Additionally, students exhibited high levels of participation in group discussions, and feedback from the class indicated that the learning activities were relevant and encouraged deeper thinking. These outcomes underscore the model's positive impact on student motivation and engagement. By emphasizing active learning strategies, the LI-Pro-LG approach created an environment conducive to deeper understanding and reflective thinking—qualities essential for both academic success and lifelong learning.

The findings of this research contribute to the growing body of knowledge on effective pedagogical strategies in English language education. They support the idea that combining literacy development with problem-solving and collaborative learning not only fosters critical thinking but also enhances student autonomy and motivation. These results are consistent with existing literature on the benefits of collaborative and experiential learning models. Looking ahead, further research could examine the long-term effects of the LI-Pro-LG model on student performance beyond the immediate context of a critical reading course, and explore its applicability in other subjects and educational settings.

Bibliographic references

- Abdollahzadeh, E., Farsani, M. A., & Beikmohammadi, M. (2017). Argumentative Writing Behavior of Graduate EFL Learners. *Argumentation*, 31(4), 641-661. <https://doi.org/10.1007/s10503-016-9415-5>
- Acosta, J., Williams, J. A., & Hunt, B. (2019). Dual Language Program Models and English Language Learners: An Analysis of the Literacy Result, Model in Two California Schools. *Journal of Educational Issues*, 5(2),
- Adil, R. (2022). Use of Images to Support Critical Visual Literacy. *Scottish Educational Review*, 54(1), 93-119. <https://doi.org/10.1163/27730840-54010005>
- Agustian, H. Y., Pedersen, M. I., Finne, L. T., Jørgensen, J. T., Nielsen, J. A., & Gammelgaard, B. (2022). Danish University Faculty Perspectives on Student Learning Outcomes in the Teaching Laboratories of a Pharmaceutical Sciences Education. *Journal of Chemical Education*, 99(11), 3633-3643. <https://doi.org/10.1021/acs.jchemed.2c00212>
- Alamri, H. R., Taher, N., & Al-Tunisi, N. (2019). Writing Proficiency Levels Among Arabic and English Language Student Teachers and Their Perceptions of Challenges in Writing Skill. *JLLL*. <https://doi.org/10.7176/jlll/62-07>
- Ali, R., Shoukat, B., & Kharal, A. A. (2021). Dependence of Academic Performance on English Speaking Anxiety in Academic Programs of English Medium Instructional Al-Mahrooqi, R., & Denman, C. (2020). Assessing Students' Critical Thinking Skills in the Humanities and Sciences Colleges of a Middle Eastern University. *International Journal of Instruction*, 13(1), 783796. <https://doi.org/10.29333/iji.2020.13150a>
- Anaktototy, K., & Lesnussa, I. (2022). Improving EFL Students' Reading Comprehension and Critical Thinking Skill Through Directed Reading Thinking Activity. *Eralingua Jurnal Pendidikan Bahasa Asing Dan Sastra*, 6(1), 244. <https://doi.org/10.26858/eralingua.v6i1.27711>
- Anazifa, R. D., & Djukri, D. (2017). Project-Based Learning and Problem-Based Learning: Are They Effective to Improve Student's Thinking Skills? *Jurnal Pendidikan Ipa Indonesia*, 6(2), 346. <https://doi.org/10.15294/jpii.v6i2.11100>
- Andriana, I., Fuadah, L. L., Wibowo, P. A., Yulianita, A., & Hidayat, R. (2020). University Governance and Structuration Perspective in Indonesian Higher Education Policies. <https://doi.org/10.2991/aebmr.k.200520.065>
- Apel, K. (2021). A Different View on the Simple View of Reading. *Remedial and Special Education*, 43(6), 434-447. <https://doi.org/10.1177/07419325211063487>
- Aytan, T. (2018). Perceptions of Prospective Turkish Teachers Regarding Literature Circles. *International Journal of Educational Methodology*, 4(2), 53-60. <https://doi.org/10.12973/ijem.4.2.53>

- Barnwal, S. K. (2021). A Framework for Learning Assessment Through Multimodal Analysis of Reading Behaviour and Language Comprehension. <https://doi.org/10.48550/arxiv.2110.11938>
- Bayram, D., Kurt, G., & Atay, D. (2019). The Implementation of WebQuest-supported Critical Thinking Instruction in Pre-Service English Teacher Education: The Turkish Context. *Participatory Educational Research*, 6(2), 144-157. <https://doi.org/10.17275/per.19.18.6.2>
- Bowyer-Crane, C., Fricke, S., Schaefer, B., Lervåg, A., & Hulme, C. (2016). Early Literacy and Comprehension Skills in Children Learning English as an Additional Language and Monolingual Children With Language Weaknesses. *Reading and Writing*, 30(4), 771-790. <https://doi.org/10.1007/s11145-016-9699-8>
- Cain, K. (2016). Use of the Curriculum Research Framework (CRF) for Developing a Reading-Comprehension Curricular Supplement for the Primary Grades. *The Elementary School Journal*, 116(3), 459-486. <https://doi.org/10.1086/684827>
- Catts, H. W., Nielsen, D. C., Bridges, M. S., & Liu, Y.-S. (2016). Early Identification of Reading Comprehension Difficulties. *Journal of Learning Disabilities*, 49(5), 451-465. <https://doi.org/10.1177/0022219414556121>
- Cengiz, Ö., & Çakır, H. (2016). Turkish Fathers' Language Use in the Context of Toy Play. *European Scientific Journal ESJ*, 12(8), 430. <https://doi.org/10.19044/esj.2016.v12n8p430>
- Chen, C., Hung, H., & Yeh, H. (2021). Virtual Reality in Problem-based Learning Contexts: Effects on the Problem-solving Performance, Vocabulary Acquisition and Motivation of English Language Learners. *Journal of Computer Assisted Learning*, 37(3), 851-860. <https://doi.org/10.1111/jcal.12528>
- Claravall, E. B., & Irey, R. (2022). Fostering Historical Thinking: The Use of Document Based Instruction for Students With Learning Differences. *The Journal of Social Studies Research*, 46(3), 249-264. <https://doi.org/10.1016/j.jssr.2021.08.001>
- Davarpanah, N., Izadpanah, S., & Fasih, P. (2021). The Relationship Between Critical Thinking, Frequency, Informal Fallacy and Evidence in Argumentative Writing. *Jordan Journal of Modern Languages and Literature*, 13(2), 303-320. <https://doi.org/10.47012/jjml.13.2.7>
- Denius, D., & Lintang Sari, A. P. (2022). Increasing Critical Thinking Using Nominal Group Technique: A Classroom Action Research. <https://doi.org/10.4108/eai.9-10-2021.2319473>
- Doğan, C., & Başol, H. Ç. (2021). Critical Thinking and Reading Levels of Pre-Service English Teachers on the Verge of a New Course. *International Journal of Language Academy*, 38(38), 83-95. <https://doi.org/10.29228/ijla.51746>
- Du, F. (2017). The Analysis of Argument-Counterargument Structure in Chinese EFL Learners' Argumentative Writing. *Journal of Studies in Education*, 7(3), 121. <https://doi.org/10.5296/jse.v7i3.11275>
- Elisanti, E., Sajidan, S., & Prayitno, B. A. (2018). The Profile of Critical Thinking Skill Students in XI Grade of Senior High School. <https://doi.org/10.2991/icomse-17.2018.36>
- Farmer, R., Saner, S., Weingärtner, L., & Rabalais, G. P. (2021). Questioning Aid for Rich, Real-Time Discussion (QARRD): A Tool to Improve Critical Thinking in Clinical Settings. *MedEdPORTAL*. https://doi.org/10.15766/mep_2374-8265.11132
- Fiore, E., Sansone, G., & Paolucci, E. (2019). Entrepreneurship Education in a Multidisciplinary Environment: Evidence From an Entrepreneurship Programme Held in Turin. *Administrative Sciences*, 9(1), 28. <https://doi.org/10.3390/admsci9010028>
- Frid, B., & Friesen, D. C. (2019). Reading Comprehension and Strategy Use in Fourth- and Fifth-Grade French Immersion Students. *Reading and Writing*, 33(5), 1213-1233. <https://doi.org/10.1007/s11145-019-10004-5>

Ghufuron, M. A., & Ermawati, S. (2018). The Framework of Cooperative Problem-Based Learning (Co-PBL) to Promote Verbal Creativity in EFL Writing: Is It Feasible? *Jurnal Arbitrer*, 5(2), 81-93. <https://doi.org/10.25077/ar.5.2.81-93.2018>

Giselsson, K. (2020). Critical Thinking and Critical Literacy: Mutually Exclusive? *International Journal for the Scholarship of Teaching and Learning*, 14(1). <https://doi.org/10.20429/ijstol.2020.140105>

Glušac, T., Pilipović, V., & Marčičev, N. (2019). Analysis of English Language Test Tasks for Seventh- and Eighth-Graders in Serbia According to Bloom's Taxonomy. *Nastava i Vaspitanje*, 68(1), 35-50. <https://doi.org/10.5937/nasvas1901035g>

Haring, P., Warmelink, H., Valente, M., & Roth, C. (2018). Using the Revised Bloom Taxonomy to Analyze Psychotherapeutic Games. *International Journal of Computer Games Technology*, 2018, 1-9. <https://doi.org/10.1155/2018/8784750>

Hart, J. L. (2019). Interdisciplinary Project-Based Learning as a Means of Developing Employability Skills in Undergraduate Science Degree Programs. *Journal of Teaching and Learning for Graduate Employability*, 10(2), 50-66. <https://doi.org/10.21153/jtlge2019vol10no2art827>

Hasani, A., Hendrayana, A., & Senjaya, A. (2017). Using Project-Based Learning in Writing an Educational Article: An Experience Report. *Universal Journal of Educational Research*, 5(6), 960-964. <https://doi.org/10.13189/ujer.2017.050608>

Hastuti, U. (2022). Musical Colossal Drama Project-Based Learning to Boost Students' Engagement in English Language Learning. *Erudita Journal of English Language Teaching*, 2(1), 63-72. <https://doi.org/10.28918/erudita.v2i1.5284>

Heaviside, H. J., Manley, A. J., & Hudson, J. (2018). Bridging the Gap Between Education and Employment: A Case Study of Problem-Based Learning Implementation in Postgraduate Sport and Exercise

Hidayati, M., Inderawati, R., & Loeneto, B. A. (2020). The Correlations Among Critical Thinking Skills, Critical Reading Skills and Reading Comprehension. *English Review Journal of English Education*, 9(1), 69-80. <https://doi.org/10.25134/erjee.v9i1.3780>

Hwang, G., Yang, C., Chou, K., & Chang, C. (2022). An MDRE Approach to Promoting Students' Learning Performances in the Era of the Pandemic: A Quasi-experimental Design. *British Journal of Educational Technology*, 53(6), 1706-1723. <https://doi.org/10.1111/bjet.13208>

Igbaria, A. K., & Ghanayem, A. (2020). A Content Analysis of the WH-Questions in the EFL Textbook of That's Right. *Advances in Social*

Iraji, H. R., Enayat, M. J., & Momeni, M. (2016). The Effects of Self- And Peer-Assessment on Iranian EFL Learners' Argumentative Writing Performance. *Theory and Practice in Language Studies*, 6(4), 716. <https://doi.org/10.17507/tpls.0604.08>

Irawan, A., & Diptoadi, V. L. (2022). Using the Revised Bloom's Taxonomy to Analyze the Reading Comprehension Questions in Efl Textbook for Year X of High School. *Magister Scientiae*, 50(1), 59-68. <https://doi.org/10.33508/mgs.v50i1.3739>

Jamin, A., & Mudra, H. (2021). Sustaining Academic Atmospheres During Covid-19 Pandemic: Lecturers' and Students' Controversial Voices. <https://doi.org/10.2991/assehr.k.211227.020>

Jiménez, J. M., López, M., Castro, M. J., Martín-Gil, B., Cao, M.-J., & Fernández-Castro, M. (2021). Development of Critical Thinking Skills of Undergraduate Students Throughout the 4 Years of Nursing Degree at a Public University in Spain: A Descriptive Study. *BMJ Open*, 11(10), e049950. <https://doi.org/10.1136/bmjopen-2021-049950>

Khamkhong, S. (2018). Developing English L2 Critical Reading and Thinking Skills Through the Pisa Reading Literacy Assessment Framework: A Case Study of Thai EFL Learners. *31 the Southeast Asian Journal of English Language Studies*, 24(3), 83-94. <https://doi.org/10.17576/31-2018-2403-07>

- Kim, H. J., Yi, P., & Hong, J. (2020). Students' Academic Use of Mobile Technology and Higher-Order Thinking Skills: The Role of Active Engagement. *Education Sciences*, 10(3), 47. <https://doi.org/10.3390/educsci10030047>
- Kobysheva, L., Luginina, A. G., Gafiatulina, N., & Artamonova, Y. (2021). Organization of Higher Education in Context of Digitalization: Online Learning Experience at Pandemic. *Development Trends. E3s Web of Conferences*, 273, 12052. <https://doi.org/10.1051/e3sconf/202127312052>
- Lailiyah, M., & Yustisia, K. K. (2022). Collaborative Concept Mapping: A Study of Group Work Satisfaction in Vocational Higher Education. *Journal of Vocational Education Studies*, 5(2), 312-321. <https://doi.org/10.12928/joves.v5i2.6181>
- Langtree, E. M., Razak, Ayisha., & Haffejee, F. (2018). Factors Causing Stress Among First-Year Students Attending a Nursing College in KwaZulu-Natal, South Africa. *Journal of Education and Vocational Research*, 1(1), 1-10.
- Latif, R., Mumtaz, S., Mumtaz, R., & Hussain, A. (2018). A Comparison of Debate and Role Play in Enhancing Critical Thinking and Communication Skills of Medical Students During Problem Based Learning. *Biochemistry and Molecular Biology Education*, 46(4), 336-342. <https://doi.org/10.1002/bmb.21124>
- Lee, J., & Choi, H. (2017). What Affects Learner's Higher-Order Thinking in Technology-Enhanced Learning Environments? The Effects of Learner Factors. *Computers & Education*, 115, 143-152. <https://doi.org/10.1016/j.compedu.2017.06.015>
- Lemley, S. M., & Smith, R. C. (2021). How Economists Read Economic Texts. *Journal of Higher Education Theory and Practice*, 21(13), 1-15. <https://doi.org/10.33423/jhetp.v21i13.4795>
- Lestari, E. P., Wasis, W., & Purnomo, T. (2022). Science Learning Materials in Integrated PBL Scientific Literacy Model to Improve Problem Solving Ability of Junior High School Students. *Ijorer International Journal of Recent Educational Research*, 3(4), 464-477. <https://doi.org/10.46245/ijorer.v3i4.230>
- Machfauzia, A. N., Djohan, D., & Sittiprapaporn, P. (2020). Intellectual Character of Metacognition in Thinking Strategies. *Asian Journal of Medical Sciences*, 11(1), 51-56. <https://doi.org/10.3126/ajms.v11i1.26519>
- Ma'rifah, U. (2022). The the Implementation of Project Based Learning in EFL Class: Fostering Students' High Order Thinking and Autonomy. *Didaktika Jurnal Pemikiran Pendidikan*, 28(2(1)), 7. [https://doi.org/10.30587/didaktika.v28i2\(1\).4405](https://doi.org/10.30587/didaktika.v28i2(1).4405)
- Maroš, M., Korenková, M., Fifa, M., Levický, M., & Schoberova, M. (2021). Project-Based Learning and Its Effectiveness: Evidence From Slovakia. *Interactive Learning Environments*, 31(7), 4147-4155. <https://doi.org/10.1080/10494820.2021.1954036>
- Mayuni, I., Leiliyanti, E., Palupi, T. M., Sitorus, M. L., & Chen, Y. (2022). Designing Literacy E-Coaching Model for English Language Teachers of Junior High Schools in Indonesia. *Teflin Journal - A*
- Mbato, C. L. (2019). Indonesian EFL Learners' Critical Thinking in Reading: Bridging the Gap Between Declarative, Procedural and Conditional Knowledge. *Jurnal Humaniora*, 31(1), 92. <https://doi.org/10.22146/jh.v31i1.37295>
- Mejía-Camacho, A., Vera-Monroy, S. P., Mora, M. C. G., & Hernández, J. W. T. (2022). Assessment in Problem- Based Learning: An Application to Higher Education. *Revista Prociências*, 4(3), 2-19. <https://doi.org/10.15210/prociencias.v4i3.911>
- Miftāh, M. (2018). Utilization of Edmodo as an Online Tool in EFL Writing Class to Increase Students' Writing Ability. *Register Journal*, 11(1), 37. <https://doi.org/10.18326/rgt.v11i1.37-58>
- Muhayimana, T., Kwizera, L., & Nyirahabimana, M. R. (2022). Using Bloom's Taxonomy to Evaluate the Cognitive Levels of Primary Leaving English Exam Questions in Rwandan Schools. *Curriculum Perspectives*, 42(1), 51-63. <https://doi.org/10.1007/s41297-021-00156-2>

- Musyaffa, M. M. (2022). The Character Education Strategies in Higher University Through the Implementation of Assessment for Learning Based on Higher Order Thinking SKILLS. Annual International Conference on
- Ngadiso, N., Sarosa, T., Asrori, M., Drajati, N. A., & Handayani, A. (2021). Project-Based Learning (PBL) in EFL Learning: Lesson From Indonesia. *Al-Ishlah Jurnal Pendidikan*, 13(2), 1114-1122. <https://doi.org/10.35445/alishlah.v13i2.558>
- Nilsson, M. (2022). Examining the Qualitative Aspects of Language Use in English Teaching for Young Learners. *Nordic Journal of Language Teaching and Learning*, 10(1), 84-105. <https://doi.org/10.46364/njltl.v10i1.977>
- Nindya, M. A., & Widiati, U. (2020). Cohesive Devices in Argumentative Essays by Indonesian EFL Learners. *Journal on English as a Foreign Language*, 10(2), 337-358. <https://doi.org/10.23971/jefl.v10i2.1949>
- Ninghardjanti, P., & Dirgatama, C. H. A. (2021). Building Critical Thinking Skills Through a New Design Mobile-Based Interactive Learning Media Knowledge Framework. *International Journal of Interactive Mobile Technologies (Ijim)*, 15(17), 49. <https://doi.org/10.3991/ijim.v15i17.23801>
- O’Keeffe, S. B. (2019). How Exemplary Educators Use Their Instructional Expertise to Support CLDE Achievement in English-only Inclusive Classrooms. *Tesol Journal*, 11(2). <https://doi.org/10.1002/tesj.471>
- Ott, L. E., Kephart, K., Stolle-McAllister, K., & LaCourse, W. R. (2018). Students’ Understanding and Perceptions of Assigned Team Roles in a Classroom Laboratory Environment. *Journal of College Science Teaching*, 47(4), 83-91. https://doi.org/10.2505/4/jcst18_047_04_83
- Praba, L. T., Artini, L. P., & Ramendra, D. P. (2018). Project-Based Learning and Writing Skill in EFL: Are They Related? *SHS Web of Conferences*, 42, 00059. <https://doi.org/10.1051/shsconf/20184200059>
- Priyaadharshini, M., & Sundaram, B. (2018). Evaluation of Higher-order Thinking Skills Using Learning Style in an Undergraduate Engineering in Flipped Classroom. *Computer Applications in Engineering Education*, 26(6), 2237-2254. <https://doi.org/10.1002/cae.22035>
- PUTRA, H. M. (2019). An Investigation Link Between Critical Thinking and Reading Comprehension: A Case of a Madrasah in Lubuk Linggau, South Sumatera. *Ta Dib*, 24(1), 211-221. <https://doi.org/10.19109/td.v24i1.3209>
- Rahmatika, R., Amin, M., Al-Muhdhar, M. H. I., & Suwono, H. (2022). Scientific Literacy Refinement at Islamic Junior High Schools Using Socio-Science Spirituality Learning Model. *Jpbi (Jurnal Pendidikan Biologi Indonesia)*, 8(1), 40-50. <https://doi.org/10.22219/jpbi.v8i1.18989>
- Repo, S., Lehtinen, T., Rusanen, E., & Hyytinen, H. (2017). Prior Education of Open University Students Contributes to Their Capability in Critical Thinking. *Journal of Adult and Continuing Education*, 23(1), 61-77. <https://doi.org/10.1177/1477971417693416>
- Ryabova, M., & Sergeychick, T. (2018). A Comparative Study of Approaches to Teaching French and English for Future Specialists in Mining Industry. *E3s Web of Conferences*, 41, 04039. <https://doi.org/10.1051/e3sconf/20184104039>
- Sachdeva, S., & Eggen, P.-O. (2021). Learners’ Critical Thinking About Learning Mathematics. *International Electronic Journal of Mathematics Education*, 16(3), em0644. <https://doi.org/10.29333/iejme/11003>
- Saddiqua, F. (2022). Enhancing Morale Through Effective Communication: A Study of Head Teacher-Teacher Interaction in Government Schools of Rawalpindi City. *Pakistan Languages and Humanities Review*, 6(1). [https://doi.org/10.47205/plhr.2022\(6-i\)20](https://doi.org/10.47205/plhr.2022(6-i)20)
- Saputra, A. B. B., Jumariati, & Febriyanti, E. R. (2021). EFL Students’ Problems in Writing Argumentative Essays. <https://doi.org/10.2991/assehr.k.211021.002>

- Saragih, E., Sinulingga, S., Bukit, B., & Wiranata, V. (2022). Reconstructing Cognitive Levels of Test Items in Indonesian Textbook for Vocational School. *Satwika Kajian Ilmu Budaya Dan Perubahan Sosial*, 8(1), 15-24. <https://doi.org/10.22219/kembara.v8i1.19759>
- Schubert, C., Momeyer, M. A., & Tornwall, J. (2019). Nursing Peer Review in an Online Course. *Journal of Nursing Education*, 58(6), 374-374. <https://doi.org/10.3928/01484834-20190521-13>
- Setiawan, B., Innatesari, D. K., Sabtiawan, W. B., & Sudarmin, S. (2017). The Development of Local Wisdom-Based Natural Science Module to Improve Science Literation of Students. *Jurnal Pendidikan Ipa Indonesia*, 6(1). <https://doi.org/10.15294/jpii.v6i1.9595>
- Setyono, D., Prasetyo, K., & Turhan, M. Y. (2018). Influence of Problem Based Learning Model on Thinking Skills Critical and Student Learning Outcomes Elementary School. <https://doi.org/10.2991/icei-18.2018.72>
- Silva, A. B. d., Ana Carolina Kruta de Araújo Bispo, Rodriguez, D. G., & Vasquez, F. I. F. (2018). Problem-Based Learning. *Revista De Gestão*, 25(2), 160-177. <https://doi.org/10.1108/rege-03-2018-030>
- Sirisrimangkorn, L. (2021). Improving EFL Undergraduate Learners' Speaking Skills Through Project-Based Learning Using Presentation. *Advances in Language and Literary Studies*, 12(3), 65. <https://doi.org/10.7575/aiac.all.s.v.12n.3.p.65>
- Song, B. L., Lee, K. L., Liew, C. Y., Ho, R. C., & Lin, W. L. (2022). Business Students' Perspectives on Case Method Coaching for Problem-Based Learning: Impacts on Student Engagement and Learning Performance in Higher Education. *Education + Training*, 64(3), 416-432. <https://doi.org/10.1108/et-03-2021-0106>
- Souleles, N., Savva, S., & Parmaxi, A. (2019). Perceptions of Design Students on Creativity and Social Networking Sites. <https://doi.org/10.21125/inted.2019.0245>
- Sparks, R. L. (2021). Identification and Characteristics of Strong, Average, and Weak Foreign Language Readers: The Simple View of Reading Model. *Modern Language Journal*, 105(2), 507-525. <https://doi.org/10.1111/modl.12711>
- Suhirman, S., & Khotimah, H. (2020). The Effects of Problem-Based Learning on Critical Thinking Skills and Student Science Literacy. *Lensa Jurnal Kependidikan Fisika*, 8(1), 31. <https://doi.org/10.33394/j-lkf.v8i1.2794>
- Sultan, S., Rofiuddin, A. A., Nurhadi, N., & Priyatni, E. T. (2017). The Development of a Critical Reading Learning Model to Promote University Students' Critical Awareness. *The New Educational Review*, 48(2), 76-86. <https://doi.org/10.15804/tner.2017.48.2.06>
- Supranti, S., Nugroho, A., & P, H. R. P. (2021). Flipped Learning Instruction to Enhance University Students' Higher Order Thinking Skills. *Jurnal Kependidikan Jurnal Hasil Penelitian Dan Kajian Kepustakaan Di Bidang Pendidikan Pengajaran Dan Pembelajaran*, 7(2), 261. <https://doi.org/10.33394/jk.v7i2.3320>
- Susanti, A., Rofidah, N., Trisusana, A., & Retnaningdyah, P. (2020). Improving Students' Writing Skill Through Project Based Learning for EFL Students. *International Journal of English Linguistics Literature and Education (Ijelle)*, 2(2), 102. <https://doi.org/10.32585/ijelle.v2i2.700>
- Susianti, E., Lubis, J., Hamid, J., Santoso, S., Irawan, A. A., & Mahyudi, Y. V. (2022). Plyometric Standing Jumps and Box Drills to Improve Momtong Dollyo Chagi Kick in Junior Taekwondo Athletes. *International Journal of Human Movement and Sports Sciences*, 10(2), 173-178. <https://doi.org/10.13189/saj.2022.100206>
- Suwono, H., Pratiwi, H. E., Susanto, H., & Susilo, H. (2017). Enhancement of Students' Biological Literacy and Critical Thinking of Biology Through Socio-Tang, S., Long, M., Tong, F., Wang, Z., Zhang, H., & Sutton-Jones, K. L. (2020). A Comparative Study of Problem-Based Learning and Traditional Approaches in

College English Classrooms: Analyzing Pedagogical Behaviors via Classroom Observation. *Behavioral Sciences*, 10(6), 105. <https://doi.org/10.3390/bs10060105>

Tharani, A., Husain, Y., & Warwick, I. (2017). Learning Environment and Emotional Well-Being: A Qualitative Study of Undergraduate Nursing Students. *Nurse Education Today*, 59, 82-87. <https://doi.org/10.1016/j.nedt.2017.09.008>

Tommasi, F., Ceschi, A., Sartori, R., Gostimir, M., Passaia, G., Genero, S., & Belotto, S. (2021). Enhancing Critical Thinking and Media Literacy in the Context of IVET: A Systematic Scoping Review. *European Journal of Training and Development*, 47(1/2), 85-104. <https://doi.org/10.1108/ejtd-06-2021-0074>

Toprak-Yıldız, T. E., & Çakır, A. (2020). Examining the L2 Reading Comprehension Ability of Adult ELLs: Developing a Diagnostic Test Within the Cognitive Diagnostic Assessment Framework. *Language Testing*, 38(1), 106-131. <https://doi.org/10.1177/0265532220941470>

Uccelli, P., & Galloway, E. P. (2016). Academic Language Across Content Areas: Lessons From an Innovative Assessment and From Students' Reflections About Language. *Journal of Adolescent & Adult Literacy*, 60(4), 395-404. <https://doi.org/10.1002/jaal.553>

Verenna, A. A., Noble, K. A., Pearson, H., & Miller, S. M. (2018). Role of Comprehension on Performance at Higher Levels of Bloom's Taxonomy: Findings From Assessments of Healthcare Professional Students. *Anatomical Sciences Education*, 11(5), 433-444. <https://doi.org/10.1002/ase.1768>

Wale, B. D., & Bishaw, K. S. (2020). Effects of Using Inquiry-Based Learning on EFL Students' Critical Thinking Skills. *Asian-Pacific Journal of Second and Foreign Language Education*, 5(1). <https://doi.org/10.1186/s40862-020-00090-2>

Wardani, D. M. Y. (2021). The Implementation of Critical Literacy Approach Towards EFL College Students. *Journal of Educational Study*, 1(2), 38-51. <https://doi.org/10.36663/joes.v1i2.152>

Wijaya, K. F. (2022). The Positive Effects of Problem-Based Learning Activities Toward Indonesian EFL Learners' Productive Language Skills. *Jet (Journal of English Teaching)*, 8(2), 182-194. <https://doi.org/10.33541/jet.v8i2.3409>

Yang, Y. (2016). Construction of CT Skills Cultivation Mode in Integrated English Course. <https://doi.org/10.2991/ichssr-16.2016.35>

Yorgancıoğlu, D., & Tunali, S. (2020). Critique's Role in the Development of Design Literacy in Beginning Design Education. *RCHD Creación Y Pensamiento*, 5(8), 49-62. <https://doi.org/10.5354/0719-837x.2020.57651>

Yulian, R. (2021). The Flipped Classroom: Improving Critical Thinking for Critical Reading of EFL Learners in Higher Education. *Studies in English Language and Education*, 8(2), 508-522. <https://doi.org/10.24815/siele.v8i2.18366>

Yusnadi, Y., Rosdiana, R., & Anifah, A. (2020). The Development of Teaching Materials for the Principles of Nonformal Education Based on Higher Order Thinking Skills on the Subject of Tasks and Population Goals of Non Formal Education. *Budapest International Research and Critics in Linguistics and Education (Birle) Journal*, 3(1), 377-386. <https://doi.org/10.33258/birle.v3i1.826>

Zahoor, A.-W., Farooqui, S. I., Khan, A., Kazmi, S. A. M., Qamar, N., & Rizvi, J. (2022). Evaluation of Cognitive Domain in Objective Exam of Physiotherapy Teaching Program by Using Bloom's Taxonomy. *Journal of Health and Allied Sciences Nu*, 13(02), 289-293. <https://doi.org/10.1055/s-0042-1755447>

Zaid, N. M., Yaacob, F. S., Shukor, N. A., Mohd. Niha Haruzuan Mohd. Said, Musta'amal, A. H., & Rahmatina, D. (2018). Integration of Peer Instruction in Online Social Network to Enhance Higher Order Thinking Skills. *International Journal of Interactive Mobile Technologies (Ijimt)*, 12(8), 30. <https://doi.org/10.3991/ijim.v12i8.9672>

Zakaria, L. M. A., Purwoko, A. A., & Hadisaputra, S. (2021). Brain-Based Learning Teaching Materials to Improve Critical Thinking Skills and Literacy Skills of Students. <https://doi.org/10.2991/assehr.k.210715.038>

Zheng-xia, L., Hua, J., & Zhang, Z. (2022). Scaffolding Instruction in Virtual Language Learning. *Journal of Language Teaching and Research*, 13(2), 386-391. <https://doi.org/10.17507/jltr.1302.20>

Zuluaga, Y. E. L., Duque, G. M. G., & Narváez, F. A. D. (2020). A Study of Critical Thinking in Higher Education Students. *Latinoamericana De Estudios Educativos*, 16(2), 256-279. <https://doi.org/10.17151/rlee.2020.16.2.13>

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