

Exploring Problem-Based Learning Within Genre-Based Approach to Teaching Multimodal Reading in an EFL Classroom

Raynesa Noor Emiliasari
Universitas Majalengka
raynesanoor@unma.ac.id

Nabila Fikriatul Faedah
Universitas Majalengka
nabilaffaedah@gmail.com

Abstract

Reading instruction in English as a Foreign Language (EFL) classroom has increasingly involved multimodal texts that combine verbal and visual elements, posing new challenges for learners' meaning-making processes. While Problem-Based Learning (PBL) and the Genre-Based Approach (GBA) have been widely discussed as effective pedagogical frameworks, limited research has examined how PBL can be systematically integrated within a genre-based reading pedagogy to support students' engagement with multimodal texts. This study aimed to explore the integration of PBL within GBA in teaching multimodal reading in an EFL classroom and to examine how such integration facilitated students' engagement with multimodal texts. Employing a qualitative descriptive research design, the study was conducted in an undergraduate EFL reading class at an Indonesian university. Data were collected through classroom observations, students' multimodal reading tasks, and written reflections, and were analyzed thematically. The findings revealed that PBL was embedded across the stages of the GBA, functioning as a pedagogical logic rather than a separate instructional strategy. Problem-based activities encouraged students to approach multimodal reading as an inquiry-driven process, leading to increased participation, collaboration, and attention to visual-verbal relationships. The integration also supported learner autonomy, although challenges related to time management and language proficiency were identified. Overall, the study suggests that combining PBL with GBA provides a structured yet inquiry-oriented framework that supports EFL students' engagement with multimodal reading tasks.

Keywords: genre based approach; multimodal reading; problem-based learning; student engagement

INTRODUCTION

Reading has long been regarded as a fundamental skill in English as a Foreign Language (EFL) learning because it supports learners' language development, academic literacy, and access to knowledge. In recent years, however, the nature of reading has changed significantly as learners are increasingly exposed to texts that combine written language with images, layout, symbols, and other semiotic resources. This shift has led scholars to reconceptualize

reading as a multimodal meaning-making process rather than a purely linguistic activity (Serafini, 2014; Chia & Chan, 2017). While multimodal texts offer rich potential for learning, they also introduce new challenges for EFL learners, particularly in interpreting relationships between visual and verbal elements and integrating multiple modes of meaning simultaneously (Abraham & Farías, 2017; Danielsson & Selander, 2016). Empirical studies in EFL contexts indicate that students often experience difficulties in

comprehending multimodal texts effectively, despite showing increased interest and engagement (Fitriani et al., 2024; Baharani & Ghafournia, 2015). These findings suggest that multimodal texts require more systematic instructional support in EFL reading classrooms.

Despite these changing reading demands, reading instruction in many EFL classrooms, particularly in Indonesia, remains largely traditional. Previous studies report that reading lessons often emphasize vocabulary explanation, translation, and answering comprehension questions, with limited opportunities for students to engage in strategic, critical, and meaning-oriented reading processes (Yudi & Widiati, 2014; Budiharso, 2014). Although various reading strategies have been introduced, their implementation is frequently fragmented and procedural rather than embedded within a coherent pedagogical framework (Utami & Rahmat, 2019; Par, 2020). Classroom interaction is also commonly dominated by teacher-led questioning, which restricts students' opportunities to negotiate meaning and develop independent interpretations of texts (Sunggingwati, 2013; Ikaningrum et al., 2020). As a result, many Indonesian EFL learners continue to face persistent difficulties in reading comprehension, especially when dealing with abstract ideas, implicit meanings, and culturally embedded messages (Masduqi, 2014; Nanda & Azmy, 2020). These conditions highlight the need for instructional approaches that can systematically scaffold students' reading processes while encouraging active engagement with texts.

One pedagogical approach that has been widely discussed for promoting active learning is Problem-Based Learning (PBL). PBL is a learner-centered approach that organizes learning around meaningful

problems, encouraging learners to construct knowledge through inquiry, collaboration, and reflection (Savery, 2006; Maudsley, 1999). Rather than focusing on the transmission of content, PBL emphasizes problem solving as the core of the learning process, allowing students to develop both subject knowledge and broader skills such as reasoning and communication (Fogarty, 1997; Edens, 2000). In language education, PBL has been reported to provide opportunities for authentic language use, as learners use language as a tool for inquiry and meaning-making (Mathews-Aydinli, 2007; Lu et al., 2014). However, research also suggests that PBL requires careful scaffolding and clear instructional structure, particularly in EFL contexts, to prevent learners from being overwhelmed by complex tasks (Hmelo-Silver et al., 2007; Moallem et al., 2019). This indicates that PBL is most effective when integrated within a structured pedagogical framework rather than implemented as an isolated method.

The Genre-Based Approach (GBA) offers a structured framework that can support such integration. Grounded in systemic functional linguistics, GBA emphasizes explicit teaching of genre, purpose, and staged meaning-making processes to help learners understand how texts function in social contexts (Rose, 2009; Derewianka, 2003). In reading instruction, GBA guides students through a sequence of pedagogical stages, including building knowledge of the field, modeling and deconstructing texts, joint construction, and independent construction. Numerous studies have shown that this staged pedagogy supports EFL learners' reading comprehension by providing clear guidance and gradual scaffolding (Daniarti et al., 2020; Yuliana et al., 2025; Zhou, 2021). In the Indonesian context, GBA has been widely implemented and reported to help students engage more systematically with

texts, particularly in educational settings where learners often struggle with unfamiliar discourse patterns (Astuti et al., 2022). More recent research has extended GBA to digital and multimodal reading contexts, demonstrating its potential to support learners in interpreting visual-verbal relationships in contemporary texts (Morris, 2016; Nugraha et al., 2021).

From a multimodal literacy perspective, reading is understood as a social and semiotic practice that involves interpreting meaning across multiple modes, including language, images, and visual design (Kress, 2010; Serafini, 2014). Although multimodal texts provide various affordances for engagement and learning, studies indicate that EFL learners often focus on surface features or individual modes without fully understanding how different semiotic resources work together to construct meaning (Walsh, 2006; Pellicer-Sánchez, 2022). This condition highlights the importance of explicit instructional support that guides students' meaning-making processes across modes. Previous research has shown that integrating Genre-Based Pedagogy with linguistic and visual analytical frameworks can effectively support EFL students' critical reading of multimodal texts (Emiliasari et al., 2022). However, such studies have primarily emphasized analytical frameworks and instructional stages, with limited attention to how inquiry-oriented learning strategies can be embedded within genre-based reading instruction.

Although previous research has examined PBL, GBA, and multimodal reading separately, these strands of inquiry have rarely been integrated in a systematic way, particularly in EFL reading classrooms. Studies on PBL have largely focused on general language skills or learner engagement, while research on GBA has

often emphasized verbal texts rather than multimodal texts. At the same time, studies on multimodal reading frequently report students' difficulties without sufficiently addressing how classroom pedagogy can support their engagement through structured yet inquiry-oriented instruction. In the Indonesian EFL context, limited attention has been given to how PBL can be embedded within the staged pedagogy of the GBA to support students' engagement with multimodal reading tasks. Responding to this gap, the present study explores the integration of PBL within a GBA to teaching multimodal reading in an EFL classroom. Specifically, this study aims to examine how problem-based activities are embedded across the stages of genre-based reading instruction and how such integration facilitates students' engagement with multimodal texts.

METHODOLOGY

This study adopted a qualitative descriptive research design to explore how PBL was integrated within a GBA in teaching multimodal reading in an EFL classroom. A qualitative approach was considered appropriate because the study aimed to examine instructional processes, classroom practices, and students' engagement during learning activities rather than to measure causal effects or learning outcomes. Qualitative descriptive research allows researchers to capture naturally occurring phenomena and provide rich accounts of educational practices in real classroom contexts (Creswell, 2014; Merriam & Tisdell, 2016).

The research was conducted in an undergraduate EFL reading class at a university in Indonesia. The class was selected purposively because genre-based reading instruction and the use of multimodal texts were part of the regular course syllabus.

The participants consisted of one intact class of EFL students enrolled in the reading course. All students participated in the learning activities and data collection, and they were treated as a single group, as the focus of the study was on instructional implementation rather than comparison between groups. This approach is consistent with classroom-based qualitative research that emphasizes context-specific understanding over generalization (Duff, 2014).

Data were collected through classroom observations, students' multimodal reading tasks, and short written reflections. Classroom observations were conducted during regular teaching sessions to document how problem-based activities were embedded across the stages of the GBA, including Building Knowledge of the Field (BKoF), Modelling of Texts (MoT), Joint Construction (JC), and Independent Construction (IC). Observation notes focused on learning activities, teacher guidance, and student participation. Students' multimodal reading tasks were collected as documentary data to capture their engagement with multimodal texts in response to problem-based prompts. In addition, students' written reflections were used to provide insight into their perceptions and learning experiences. The use of multiple data sources enabled a more comprehensive understanding of the instructional process and students' engagement (Miles et al., 2014).

All learning activities were carried out as part of regular classroom instruction to ensure authenticity. Problem-based tasks were designed around genre-specific reading challenges commonly found in multimodal texts. Students worked individually or collaboratively depending on the instructional stage. As the participants were EFL learners, the use of dictionaries and

learning resources was allowed to support meaning-making rather than to test language proficiency, which is consistent with qualitative studies focusing on learning processes (Richards, 2015).

Data analysis was conducted using thematic analysis. Observation notes, students' tasks, and reflections were examined iteratively to identify recurring patterns related to the integration of Problem-Based Learning, students' engagement with multimodal texts, and the role of genre-based scaffolding in reading instruction. Thematic analysis was chosen because it provides a flexible yet systematic way to analyse qualitative data and identify meaningful patterns across data sets (Braun & Clarke, 2006). To enhance the credibility of the findings, data from different sources were compared and interpreted collectively, allowing for triangulation and a more robust interpretation of the results (Miles et al., 2014).

RESULT AND DISCUSSION

Integration of PBL within GBA Reading Instruction

The findings indicate that PBL was systematically integrated into the stages of the GBA rather than implemented as a separate instructional strategy. Classroom observations showed that problem-based activities were embedded across all stages of genre-based reading instruction, shaping both the design of learning activities and students' interaction with multimodal texts.

At the beginning of the lessons, the lecturer introduced multimodal texts through open-ended and ill-structured problems closely related to the lesson topics. Instead of providing direct explanations, students were encouraged to identify key issues, explore relevant information, and collaboratively construct interpretations in English. These problems did not lead to a single correct

answer; rather, they invited students to analyse visual and verbal elements, consider genre purpose, and negotiate meaning. This practice reflects the core principles of PBL, which is grounded in the use of authentic and complex problems as a starting point for inquiry and learning, where such problems function as a stimulus for students' cognitive engagement, knowledge construction, and guided learning processes (Smith et al., 2020; Hmelo-Silver & DeSimone, 2013; Loyens et al., 2015; Thomassen & Stentoft, 2020).

Within the *Building Knowledge of the Field* stage, problem prompts were used to activate students' background knowledge and guide initial exploration of multimodal texts. Observation notes revealed that the lecturer frequently posed guiding questions such as "*What information can you get from the image before reading the text?*" and "*What kind of text do you think this is and why?*". These questions encouraged students to predict meanings, identify text purposes, and anticipate reading challenges related to visual elements and layout. As a result, students approached reading as an exploratory and inquiry-driven process rather than a task of decoding written language.

During the *Modelling of the Text* stage, problem-based activities focused on how meanings were constructed across visual and verbal modes. Students were guided to examine the functions of images, captions, and layout in relation to the written text, and to explain how these elements supported or extended the overall message. These activities were reinforced by explicit genre instruction, including discussion of text purpose and schematic structure. The combination of problem-solving tasks and genre-based scaffolding allowed students to engage analytically with multimodal texts while remaining supported by clear instructional guidance.

The *Joint Construction* stage was characterized by collaborative problem-solving activities. Classroom observations indicated increased student interaction, with learners discussing interpretations in small groups and negotiating meaning based on both visual and verbal evidence. Students frequently referred back to images and text segments to justify their interpretations. In the *Independent Construction* stage, students were able to apply similar problem-solving strategies independently when engaging with new multimodal texts. They identified reading problems, analyzed visual-verbal relationships, and explained their interpretations with minimal teacher intervention.

Throughout these stages, the lecturer's role shifted from being a primary source of knowledge to a facilitator who guided inquiry, monitored group discussions, and redirected attention to learning objectives when necessary. Observation notes showed that the lecturer often used probing questions rather than immediate explanations, supporting students as they navigated reading challenges. This facilitative role is consistent with previous findings that effective implementation of PBL requires lecturers to support learner autonomy while simultaneously maintaining pedagogical focus and instructional guidance, ensuring that inquiry activities remain aligned with learning objectives (Hamsah & Sidik, 2021; Sari et al., 2022; Ahmad et al., 2021; Malik & Malik, 2018; Ni'mah et al., 2024).

Overall, the integration of PBL within the GBA was not additive but structural. Problem-solving functioned as a pedagogical logic embedded across genre-based stages, enabling students to engage with multimodal texts through inquiry while benefiting from systematic scaffolding. As a form of inquiry-

based learning, this finding aligns with previous research emphasizing that inquiry-based learning is most effective when supported by explicit instructional structure, particularly in EFL contexts (Hmelo-Silver et al., 2007; Rose, 2009; de Jong et al., 2023; Sam, 2024; Hwang et al., 2015).

Students' engagement with multimodal texts through problem-based reading instruction

The findings show that students were more engaged when multimodal reading was taught through problem-based activities within the GBA. Classroom observations indicated that students participated more actively during reading sessions, especially when tasks were presented as problems to be discussed and explored together. Students were more involved in group discussions, asked more questions, and used English more frequently to express ideas.

During these activities, students did not focus only on written text. They also paid attention to images, layout, and other visual elements. In group discussions, students often referred to pictures to explain their understanding and to support their interpretations of the text. This indicates a shift from earlier reading practices that mainly emphasized vocabulary and sentence meaning. Students began to see multimodal texts as a combination of visual and verbal elements that work together to create meaning.

The classroom observations were further supported by students' written reflections. Many students reported feeling more motivated and less anxious when working in groups. They explained that discussing problems with peers allowed them to share ideas more freely and practice English without fear of making mistakes. This pattern was particularly evident when students were asked to interpret and discuss the meaning of

multimodal texts. Rather than working individually, students could compare their interpretations, ask questions, and clarify unfamiliar expressions with their peers. The group setting therefore appeared to provide a less threatening environment in which students could experiment with their understanding before sharing their ideas with the whole class. One student reflected, *"it is comfortable to discuss the assignment with my friends because I am not afraid if my answer is wrong. We can share our ideas and help each other understand the text"*. (Students 3, Written Reflection)

Another student similarly described the role of group discussion in building confidence: *"when I work in a group, I can speak English more because my friends also try to speak. If I make a mistake, they help me and I am not too nervous."* (Student 7, Written Reflection). These reflections indicate that group work provided students with both cognitive and emotional support during the reading activities. Rather than having to formulate and present an interpretation independently, students could first test their ideas within the group and receive feedback from their peers. This process appeared to make participation less intimidating and encouraged students to take greater risks in using English.

The findings also suggest that students' increased motivation was closely related to the collaborative nature of the task. Group members were able to divide their attention among different aspects of the multimodal text, discuss possible meanings, and negotiate their interpretations before reaching a shared understanding. In this way, collaboration helped students see reading as an interactive process rather than an individual activity in which they were expected to identify a single correct answer. The classroom observations and students'

reflections therefore point to the importance of peer interaction in creating a supportive learning environment for multimodal reading. Group work functioned not only as a way of organizing classroom activities but also as a space where students could develop confidence, exchange interpretations, and practice communicating their ideas in English.

This finding is in line with Ali (2019), Wijaya, (2021), Lin (2017), as well as Cosgun and Atay (2021), who argue that PBL encourages active participation by placing language use in meaningful and collaborative situations.

Students also showed greater responsibility for their own learning. Observation notes revealed that students gradually took more initiative in identifying reading problems, finding information, and discussing interpretations without relying heavily on the lecturer. This supports Paragae's (2023) view that student-centered learning approaches help learners become more autonomous, particularly when students are actively involved in directing their own learning (Pan, 2024; Tang, 2017; Darmayanti, 2022). Within the genre-based framework, this autonomy developed step by step, supported by clear instructional stages.

However, not all students showed the same level of engagement. Students with lower English proficiency were less confident in expressing their ideas, especially during whole-class discussions. Although group work helped them participate, their contributions were often limited. This reflects a common situation in EFL classrooms, where language limitations can affect students' participation. Even so, continued exposure to problem-based tasks and genre-based scaffolding helped increase students' confidence over time.

In general, the findings suggest that problem-based within genre-based reading instruction supported more active and meaningful engagement with multimodal texts. By treating reading as a problem-solving activity supported by clear guidance, students became more involved in interpreting multimodal meaning.

Pedagogical implications and challenges from integrating PBL within GBA

The integration of PBL within the GBA revealed several pedagogical implications as well as practical challenges. From the lecturer's perspective, one major challenge was designing appropriate problem scenarios. The problems needed to be open-ended and meaningful, but also suitable for students' language levels and aligned with genre-based learning objectives. Preparing such tasks required careful planning and additional time.

Time management was another challenge. Classroom observations and lecturer reflections showed that problem-based activities often required longer discussion time. This sometimes made it difficult to complete all planned activities within one lesson. This finding is similar to Phung's (2020) study, which reported that limited class time is a common issue in implementing PBL.

Students' language proficiency also affected the implementation of PBL. Students with lower confidence in English found it difficult to express their ideas during problem-solving discussions. Although peer support helped them stay involved, their participation was often limited to simple responses. This finding supports Ali's (2019) argument that PBL requires active language use, which can be challenging for learners who are still developing their English skills. These

difficulties show the importance of providing clear linguistic and instructional support.

Despite these challenges, the findings highlight the strengths of combining PBL with the GBA. The clear stages of GBA helped students understand what to do at each step of the reading process. When problem-based activities were placed within this structure, students were able to explore multimodal texts more confidently and systematically. This supports the idea that inquiry-based learning works best when supported by clear instructional guidance, especially in EFL contexts (Hmelo-Silver et al., 2007; Rose, 2009; de Jong et al., 2023; Sam, 2024; Hwang et al., 2015).

The findings also suggest that students' difficulties with multimodal texts are not only related to language ability but also to limited experience with analytical reading. By combining problem-solving activities with genre-based scaffolding, students were gradually guided to understand how visual and verbal elements work together. This approach supports the development of multimodal literacy in a structured and accessible way.

In summary, integrating PBL within the GBA offers a practical and balanced model for teaching multimodal reading in EFL classrooms. Although challenges related to time, task design, and language proficiency remain, these can be addressed through careful planning and sustained scaffolding. This integration provides a promising approach for helping students engage with complex multimodal texts in meaningful ways.

CONCLUSION

This study concludes that integrating Problem-Based Learning within a Genre-Based Approach provides a structured and

effective framework for teaching multimodal reading in an EFL classroom. Rather than functioning as an additional instructional technique, Problem-Based Learning operated as a pedagogical logic embedded across the genre-based stages, guiding students' engagement with multimodal texts through inquiry while being supported by systematic scaffolding. The findings demonstrate that problem-based activities encouraged students to engage more actively with multimodal texts by positioning reading as a process of exploration and meaning-making. Students became more attentive to the interaction between visual and verbal elements and participated more actively in collaborative discussions. The integration of PBL within GBA also supported student-centered learning practices, which contributed to the development of learner autonomy, particularly through increased responsibility, initiative, and participation in reading tasks.

At the same time, the study highlights that effective implementation of PBL requires careful instructional planning. Challenges related to time management, task design, and students' language proficiency indicate that inquiry-oriented learning must be accompanied by clear pedagogical structure and guidance. The Genre-Based Approach played a crucial role in addressing these challenges by providing explicit stages that supported students' gradual development in multimodal reading.

Overall, this study suggests that combining PBL with a GBA offers a balanced pedagogical model that integrates inquiry, collaboration, and structured instruction. This integration is particularly relevant for EFL contexts where students need both opportunities for active engagement and explicit guidance to navigate complex multimodal texts. Future research may explore the application of this integrated

approach in different educational levels or examine its impact on specific aspects of students' multimodal literacy development.

DISCLOSURE STATEMENT

Portions of this manuscript were assisted by an artificial intelligence tool (ChatGPT, OpenAI) during the drafting and language-editing stages. The tool was used to support wording refinement, coherence, and clarity of academic expression. All ideas, interpretations, data analysis, and final revisions were conducted, reviewed, and validated by the authors, who take full responsibility for the content of the manuscript.

REFERENCES

- Abraham, P., & Fariás, M. (2017). Reading with eyes wide open: Reflections on the impact of multimodal texts in second language reading. *Íkala, revista de lenguaje y cultura*, 22(1), Universidad de Antioquia, Colombia. <https://doi.org/10.17533/UDEA.IKALA.V22N01A04>
- Ahmad, N., Abu Seman, N. A., Selimin, M. A., Halip, J. A., & Wan Ahmad, W. N. K. (2021). Lecturer's perception on the implementation of problem-based learning (PBL) approach in teaching and learning. *International Journal of Education, Psychology and Counselling*, 6(42), 492–507. <https://doi.org/10.35631/ijepc.642040>
- Ali, S. (2019). Problem-based learning: A student-centered approach. *English Language Teaching*, 12(5), 73-78. <https://doi.org/10.5539/ELT.V12N5P73>
- Astuti, S., Afrianni, L., & Cahyani, I. F. (2022). A Library research: The implementation of genre based approach in Indonesian vocational high schools. *Journal of Language and Education*, 1(2), 39-42. <https://doi.org/10.58738/joladu.v1i2.51>
- Baharani, B., & Ghafournia, N. (2015). The impact of multimodal texts on reading achievement: A study of Iranian secondary school learners. *International Journal of Applied Linguistics & English Literature*, 4(4), 192-169. <https://doi.org/10.7575/AIAC.IJALEL.V.4N.4P.161>
- Braun, V., & Clarke, V. (2006). Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3, 77-101. <https://doi.org/10.1191/1478088706qp0630a>
- Budiharso, T. (2014). Reading strategies in EFL classroom: A theoretical review. *CENDEKIA*, 8(2), 198–204. <https://doi.org/10.30957/CENDEKIA.V8I2.63>
- Cahyono, B. Y., & Widiati, U. (2006). The teaching of EFL reading in the Indonesian context: the state of the art. *TEFLIN Journal*, 17(1), 36–58. <https://doi.org/10.15639/teflinjournal.v17i1/37-60>
- Chia, A., & Chan, C. (2017). Re-defining 'reading' in the 21st century: Accessing multimodal texts. *Beyond words*, 5(2), 98-105. <https://doi.org/10.33508/bw.v5i2.1590>
- Cosgun, G., & Atay, D. (2021). Fostering EFL learners' engagement through problem-based learning. *International Journal of Curriculum and Instruction*, 13(3), 2360–2385.
- Creswell, J. W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). SAGE.
- Danielsson, K., & Selander, S. (2016). Reading multimodal texts for learning – a model for cultivating multimodal literacy. *Designs for Learning*, 8(1), 25–36. <https://doi.org/10.16993/dfl.72>

- Daniarti, Y., Taufiq, R., & Sunaryo, B. (2020). The implementation of teaching reading through genre-based approach for university students. *Journal of Physics: Conference Series*. Ser. 1477 042064. <https://doi.org/10.1088/1742-6596/1477/4/042064>
- Darmayanti, P. S. (2022). Empowering student-centered learning in English education: A closer look at Kurikulum Merdeka. *AL MIKRAJ: Jurnal Studi Islam dan Humaniora*, 4(1), 368–375. <https://doi.org/10.37680/almikraj.v4i1.3694>
- De Jong, T., Lazonder, A. W., Chinn, C. A., Fischer, F., & Gobert, J., Hmelo-Silver, C. E., Koedinger, K. R., Krajcik, J. S., Kyza, E. A., Linn, M. C., Pedaste, M., Scheiter, K., & Zacharia, Z. C. (2023). Let's talk evidence: The case for combining inquiry-based and direct instruction. *Educational Research Review*, 39. <https://doi.org/10.1016/j.edurev.2023.100536>
- Derewianka, B. (2003). Trends and Issues in Genre-Based Approaches. *RELC Journal*, 34(2), 133-154. <https://doi.org/10.1177/003368820303400202>
- Duff, P. A. (2014). Case study research on language learning and use. *Annual Review of Applied Linguistics*, 34, 233–255. <https://doi.org/10.1017/S0267190514000051>
- Edens, K. M. (2000). Preparing problem solvers for the 21st century through problem-based learning. *College Teaching*, 48(2), 55–60. <https://doi.org/10.1080/875675500009595813>
- Emiliasari, R. N., Emilia, E., & Hermawan, B. (2022). Integrating systemic functional linguistics and visual grammar in genre-based pedagogy to foster EFL students' critical reading of multimodal texts. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, Dan Pengajarannya*, 11(2), 626–639. <https://doi.org/10.22219/kembara.v11i2.41286>
- Fitriani, S. A., Kurniawati, N., & Amuddin, M. (2024). Students' responses to multimodal texts in learning reading course. *English Education: Jurnal Tadris Bahasa Inggris*, 17(01), 148–164. <https://doi.org/10.24042/ee-jtbi.v17i1.19459>
- Fogarty, R. (1997). *Problem-based learning and other curriculum models for the multiple intelligences classroom*. Hawker Brownlow. Melbourne, Vic.
- Hmelo-Silver, C. E., & DeSimone, C. (2013). Problem-based learning: An instructional model of collaborative learning. In C. E. Hmelo-Silver, C. A. Chinn, C. K. K. Chan, & A. M. O'Donnell (Eds.), *The international handbook of collaborative learning* (pp. 370–390). Routledge.
- Hmelo-Silver, C. E., Duncan, R. G., & Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning. *Educational Psychologist*, 42(2), 99–107. <https://doi.org/10.1080/00461520701263368>
- Hwang, G. J., Chiu, L. Y., & Chen, C. H. (2015). A contextual game-based learning approach to improving students' inquiry-based learning performance in social studies courses. *Computers & Education*, 81, 13–25. <https://doi.org/10.1016/j.compedu.2014.09.006>
- Ikaningrum, R., Suryaman, M., & Triastuti, A. (2020). A phenomenological study of EFL teachers' experiences in teaching critical reading. *International Journal of Innovative Research and*

- Scientific Studies*, 8(4), 1474–1484.
<https://doi.org/10.53894/ijirss.v8i4.8100>
- Lin, L. F. (2017). Integrating the problem-based learning approach into a web-based English reading course. *Journal of Educational Computing Research*, 56(1), 105–133. <https://doi.org/10.1177/0735633117705960>.
- Loyens, S. M. M., Kirschner, P. A., & Paas, F. (2015). Problem-based learning. In *Handbook of research on educational communications and technology* (pp. 1–12). Springer.
- Lu, J., Bridges, S. M., & Hmelo-Silver, C. E. (2014). Problem-based learning. In *Cambridge handbook of the learning sciences* (2nd ed.). Cambridge University Press.
- Maudsley, G. (1999). Do we all mean the same thing by problem-based learning? A review of the concepts and a formulation of the ground rules. *Academic Medicine*, 74(2). <https://doi.org/10.1097/00001888-199902000-00016>
- Masduqi, H. (2014). EFL reading in Indonesian universities: Perspectives and challenges in cultural contexts. *Journal of Teaching and Education*, 03(03), 385–397.
- Mathews-Aydinli, J. (2007). Problem-based learning and adult English language learners. *Center for Adult English Language Acquisition Brief*, 1–6.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th ed.). Jossey-Bass.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A methods sourcebook* (3rd ed.). SAGE.
- Morris, J. (2016). A genre-based approach to digital reading. *Pedagogy*, 16(1), 125–136. <https://doi.org/10.1215/15314200-3158685>
- Nanda, D. W., & Azmy, K. (2020). Poor reading comprehension issue in EFL classroom among Indonesian secondary school students: Scrutinizing the causes, impacts and possible solutions. *Englisia: Journal of Language, Education, and Humanities*, 8(1), 12–24. <https://doi.org/10.22373/ej.v8i1.6771>
- Ni'mah, A., Arianti, E. S., Suyanto, Hamdi, S., & Putera, P. (2024). Problem-based learning (PBL) methods within an independent curriculum: A literature review. *Sintaksis: Piblikasi Para Ahli Bahasa Dan Sastra Inggris*, 2(4), 165–174. <https://doi.org/10.61132/sintaksis.v2i4.859>
- Par, L. (2020). The relationship between reading strategies and reading achievement of EFL students. *International Journal of Instruction*, 13(2), 223–238. <https://doi.org/10.29333/iji.2020.13216a>
- Pan, F. (2024). Enhancing students' language learning autonomy: Student-centered approaches in the classroom. *Transactions on Social Science, Education and humanities Research*, 4. <https://doi.org/10.62051/v3988j29>
- Paragae, A. (2023). Innovative teaching strategies in teaching English as a foreign language. *English Teaching and Linguistics Journal*, 4(1), 01–09. <https://doi.org/10.30596/etlij.v4i1.12990>
- Pellicer-Sánchez, A. (2022). Multimodal reading and second language learning. *International Journal of Applied Linguistics*. <https://doi.org/10.1075/itl.21039.pel>
- Phung, B. T. K. (2020). Challenges in implementing the PBL model in EFL

- (English as a Foreign Language) classes. *Conference: 6th International Research Symposium on PBL*.
- Sam, R. Systematic review of inquiry-based learning: assessing impact and best practices in education. (2024). *F1000Research*, 13:1045
<https://doi.org/10.12688/f1000research.155367.1>
- Richards, J. C. (2015). *Key issues in language teaching*. Cambridge University Press.
- Rose, D. (2009). *Languages of schooling: Embedding literacy learning with genre-based pedagogy*. Continuum.
- Savery, J.R. (2006) Overview of Problem-Based Learning: Definitions and Distinctions. *Interdisciplinary Journal of Problem-Based Learning*, 1, 9-20.
<https://doi.org/10.7771/1541-5015.1002>
- Serafini, F. (2014). *Reading the visual: An introduction to teaching multimodal literacy*. Teachers College Press.
- Smith, K., Maynard, N., Berry, A., Stephenson, T., Spiteri, T., Corrigan, D., Mansfield, J., Ellerton, P., and Smith, T. (2022). Principles of Problem-Based Learning (PBL) in STEM education: using expert wisdom and research to frame educational practice. *Education Sciences*, 12(10), 728.
<https://doi.org/10.3390/educsci12100728>
- Sunggingwati, D., Nguyen, H. T. M., (2013). Teachers' questioning in reading lessons: A case study in Indonesia. *Electronic Journal of Foreign Language Teaching*, 10(1), 80–95.
- Tang, K. (2023). Student-centered approach in teaching and learning: What does it really mean? *Acta Pedagogica Asiana*, 2(2), 72-83.
<https://doi.org/10.53623/apga.v2i2.218>
- Thomassen, A. O., & Stentoft, D. (2020). Educating Students for a Complex Future-Why Integrating a Problem Analysis in Problem-Based Learning has Something to Offer. *The Interdisciplinary Journal of Problem-Based Learning*, 14(2).
<https://doi.org/10.14434/ijpbl.v14i2.28804>
- Utami, E., & Rahmat, R. (2023). Reading comprehension strategies in EFL classrooms: A cognitive and sociolinguistic approach in Indonesian schools. *Jurnal Tahuri*, 20(1), 40–58.
<https://doi.org/10.30598/tahurivol20issue1page40-58>.
- Walsh, M. (2006). Reading visual and multimodal texts: How is reading different? Australian Catholic University.
- Wijaya, K. (2021). Collaborative and problem-based learning in promoting Indonesian EFL learners' learning autonomy. *POLYGLOT: Jurnal Ilmiah*, 17(2), 191–211.
<https://doi.org/10.19166/pji.v17i2.3590>
- Yuliana, Y. G. S., Octaviani, I., & Rezeki, Y. S. (2025). The implementation of genre-based approach to improve students' reading comprehension of descriptive text. *ENGANG: J. Pendidikan, Bahasa, Sastra, Seni, dan Budaya*, 5(2), 619–632.
<https://doi.org/10.37304/enggang.v5i2.22277>.
- Zhou, Y. (2021). A scoping review of genre-based approach. *Frontiers in Sustainable Development*, 4(7), 109-117.
<https://doi.org/10.54691/w531w980>