

Inquiry-Based Learning Approach and Critical Thinking Skills of Grade Four Learners

Sween Shield V. Inson

Master of Arts in Teaching, Major in Social Studies, Graduate School Valencia Colleges (Bukidnon),
Inc. Purok 17-A, Hagkol, Valencia City, Bukidnon Philippines

DOI: <https://doi.org/10.47772/IJRISS.2026.1026EDU0151>

Received: 14 March 2026; Accepted: 19 March 2026; Published: 31 March 2026

ABSTRACT

This study examined the extent of inquiry-based learning (IBL) in the environment and the level of critical thinking skills among Grade 4 learners in Social Studies in San Fernando District II, Division of Bukidnon, during the School Year 2025–2026. Specifically, it assessed IBL across engagement, exploration, explanation, elaboration, and evaluation, and determined its relationship with learners' critical thinking skills.

A descriptive–correlational design was employed, involving 195 learners selected through simple random sampling. Data were collected using adapted questionnaires with established reliability (Cronbach's alpha = 0.93 for IBL; 0.90 for critical thinking) and content validity through expert review. Data were analyzed using mean, standard deviation, and Pearson product–moment correlation.

Findings revealed that the IBL environment was implemented to a moderate extent, while learners' critical thinking skills were also at a moderate level. Correlation analysis showed no statistically significant relationship between the variables ($r = 0.106$, $p > 0.05$). This suggests that moderate and inconsistent implementation of inquiry-based strategies may not be sufficient to significantly enhance higher-order thinking skills.

The study concludes that effective development of critical thinking requires more structured, sustained, and well-supported inquiry-based practices. Future research should incorporate multiple data sources and experimental designs to better examine causal relationships.

Keywords: inquiry-based learning, critical thinking skills, Social Studies, Grade 4 learners, descriptive–correlational research

INTRODUCTION

Critical thinking is an essential tool that has gained momentum in Philippine basic education, particularly in Social Studies, where learners are expected to understand social issues and analyze the information they possess to make sound judgments. Nevertheless, many learners are unable to think critically and deeply about lessons. The Program for International Student Assessment (PISA) outcomes for 2022 support this concern, indicating that Filipino students ranked lowest in creative and critical thinking skills. These findings indicate that students are not very effective at generating ideas, analyzing information, or improving their responses. The Senate of the Philippines (2024) suggests that this issue has been associated with classroom activities that focus on memorization rather than on analysis and reasoning.

In response, the Department of Education (DepEd) adopted the MATATAG Curriculum, which emphasizes critical thinking as one of its core competencies. This is in accordance with the DepEd Order No. 21, s. 2019, which argues the use of learner-centered and inclusive teaching methods, and DepEd Order No. 29, s. 2021, which argues for quality instruction based on innovative and responsive learning environments. These policies help teachers design classes that allow all learners to be active, ask questions, and learn at their own pace.

Despite the clear policy guidelines issued by the Department of Education, most classrooms continue to rely on outdated teaching tools such as lectures and textbook-based exercises. Teachers rarely apply inquiry, discussion,

and problem-solving approaches because they are not well-trained, they have no materials, and time. Consequently, learners are not active and have few opportunities to think through problems or share their visions, which hampers the development of critical thinking skills. This is more pronounced in elementary Social Studies, especially in Grade 4 learners.

In an effort to fill this gap, this paper will discuss how an inquiry-based learning environment can foster the development of critical thinking skills among Grade 4 learners in Social Studies. Question-based learning enables learners to ask questions, investigate concepts, reflect on the learning process, and ensure that all learners are active participants. The strategy supports inclusive education and aligns with DepEd Order No. 8, s. 2015 on varied assessment and the DepEd Order No. 12, s. 2020 regarding inclusive learning environments. This paper is a useful guide for teachers on how to use inquiry-based learning to inculcate critical thinking in Grade 4 Social Studies. It also assists school leaders and curriculum planners by aligning classroom practices with DepEd policies on learner-centered and inclusive education. It contributes to research by filling the gap in the scant research on elementary-level Social Studies in the Philippine context.

The following theories have been used to anchor this study: Constructivist Theory by Piaget (1972), Social Development Theory by Vygotsky (1978) and Experiential Learning Theory by Kolb (1984).

The Constructivist Theory (Piaget, 1972) states that learners actively construct knowledge through interaction with the surrounding world. It postulates that cognitive development involves learners integrating new information into the mental schemas they already possess and restructuring those schemas when they encounter evidence that challenges them. According to Social Development Theory (Vygotsky, 1978), social interaction is a basic component in cognitive development. It states that learning takes place at first the social level through dialogue, collaboration, and scaffolding of the more knowledgeable peers or even the teachers, and then the learner internalizes it. The idea of the Zone of Proximal Development (ZPD), articulated by Vygotsky, underscores that learners can perform more challenging assignments with assistance than without it.

Engagement is the process of attracting learners' attention and mobilizing prior knowledge. Exploration is a process that involves generating ideas, where learners ask questions and explore materials as they learn. Explanation occurs when learners debate their ideas under the teacher's guidance and clarification. The elaboration enables the learner to apply their learning in new contexts to gain further insights. Evaluation is the process of assessing the progress of learners and teachers and reflecting on the learning. The dependent variable is the skill of critical thinking, which is the capacity to think clearly, logically, and reflectively, make appropriate judgments, and solve problems (Alsaleh, 2020). The study diagram is shown in Figure 1.

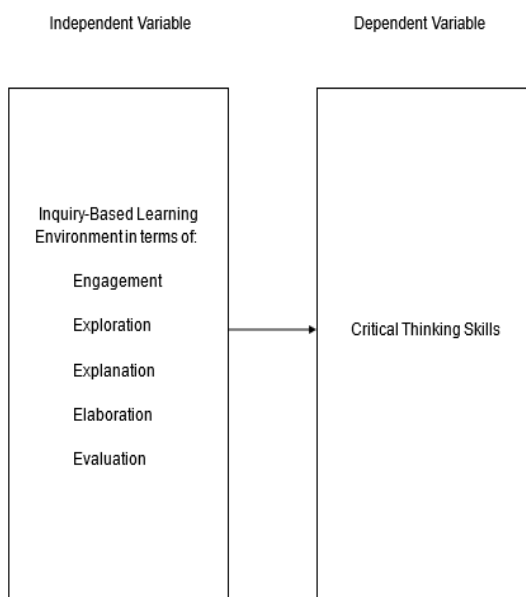


Figure 1. Schematic Diagram showing the Relationship of the Independent and Dependent Variables of the Study

This study aimed to determine the relationship between the inquiry-based learning approach and critical thinking skills among Grade 4 learners in Social Studies in the San Fernando II District, Division of Bukidnon, for the school year 2025-2026.

Specifically, this study sought to answer the following questions:

1. What is the extent of the inquiry-based learning approach as perceived by learners in terms of engagement, exploration, explanation, elaboration, and evaluation?
2. What is the level of learners' critical thinking skills?
3. Is there a significant relationship between the extent of inquiry-based learning approach and learners' critical thinking skills?

Hypothesis of the Study

The hypothesis was tested at a 0.05 level of significance.

Ho. There is no significant relationship between the extent of inquiry-based learning approach and learners' critical thinking skills.

Delimitation of the Study

This study discusses the relationship between critical thinking ability of the learner and the inquiry-based learning environment. The targeted independent variable is the inquiry-based learning environment and it is measured in terms of engagement, exploration, explanation, elaboration, and evaluation. The variable under study is learners' critical thinking ability. The research is carried out on Grade 4 students in San Fernando District II, Division of Bukidnon in the School Year 2025-2026.

METHODS

This chapter presents the research methodology employed in the study. It includes the research design, research locale, study respondents, sampling procedure, research instrument, data-gathering procedure, scoring procedure, statistical treatment of data, and ethical considerations.

Research Design

This study employed a descriptive–correlational research design, which is appropriate for describing variables and determining the relationship between them without manipulating the research environment (Creswell & Creswell, 2018).

A survey questionnaire was used to collect data on the inquiry-based learning environment and learners' critical thinking skills. Descriptive statistics were used to determine the level of the inquiry-based learning environment in terms of engagement, exploration, explanation, elaboration, and evaluation, as well as the level of learners' critical thinking skills.

Furthermore, the Pearson Product–Moment Correlation Coefficient was applied to determine whether a significant relationship exists between the inquiry-based learning environment and the critical thinking skills of Grade 4 learners.

Research Locale

The study was conducted in San Fernando II District, under the Schools Division of Bukidnon, Department of Education, Philippines. The municipality of San Fernando was officially established through Executive Order No. 347 dated July 29, 1959, and later formalized under Republic Act No. 4789 on June 18, 1966.

San Fernando II District comprises several public elementary schools located in different barangays within the municipality. The area is predominantly mountainous, with many communities situated in rural and upland locations. Due to its geographical characteristics, some schools experience challenges related to accessibility, availability of instructional materials, and classroom resources.

Despite these challenges, the schools in the district continue to implement the K–12 Basic Education Curriculum and adopt various instructional strategies to improve learners’ academic performance. The district was selected as the research locale because it provides a realistic context for examining the relationship between inquiry-based learning environments and learners’ critical thinking skills in rural public schools.

Respondents of the Study

The respondents of the study were Grade 4 learners enrolled in public elementary schools in San Fernando II District during the School Year 2025–2026.

These learners are at a developmental stage where they begin to strengthen their academic skills, learning habits, and cognitive abilities. They are considered appropriate respondents for the study because they can engage in inquiry-based activities and demonstrate emerging critical thinking skills.

Their participation provided relevant insights into how classroom learning environments influence the development of critical thinking at the elementary level.

Sampling Procedure

This study utilized simple random sampling to select respondents from the total population of Grade 4 learners. Out of a population of 381 learners, a sample size of 195 respondents was determined using Slovin’s formula.

The sample was proportionately distributed across the nine participating schools based on their respective Grade 4 populations. Within each school, respondents were selected using a lottery method from the official class roster to ensure that every learner had an equal chance of being included in the study.

In cases of non-response or incomplete questionnaires, replacement sampling was applied by randomly selecting substitutes from the same school. The sampling procedure was carefully documented to ensure transparency and replicability.

Table 1. Distribution of Respondents by School

School	Population	Sample
Kalagangan Central Elementary School	72	36
Bugca Elementary School	44	22
Matupe Integrated School	48	25
Mahayag Elementary School	40	21
Cayaga Elementary School	27	14
Iglugsad Elementary School	34	18
Palacpacan Elementary School	36	19
Kibongkong Integrated School	47	23
San Jose Elementary School	33	17
Total	381	195

Research Instrument

The study utilized a structured questionnaire consisting of two parts.

Part I measured the inquiry-based learning (IBL) environment, adapted from Nzomo et al. (2023), covering engagement, exploration, explanation, elaboration, and evaluation. Part II measured learners' critical thinking skills, adapted from Kobylarek et al. (2022).

To ensure content validity, the instruments were reviewed by three experts in Social Studies education and educational research. Revisions were made to improve clarity, relevance, and alignment with the study variables.

A pilot test was conducted among 30 Grade 4 learners outside the study sample. Reliability analysis using Cronbach's alpha yielded coefficients of 0.93 for the IBL scale and 0.90 for the critical thinking scale, indicating high internal consistency.

Construct validity was supported through item-total correlation analysis. Despite these strengths, the use of self-reported data may limit the depth of measurement of critical thinking skills. Future studies are encouraged to incorporate performance-based assessments and classroom observations to enhance validity.

Data Gathering Procedure

Prior to data collection, the researcher secured formal permission from the Schools Division Superintendent, District Supervisor, and the school heads of the participating schools.

After approval, the researcher coordinated with Grade 4 class advisers to schedule the administration of the questionnaire. The purpose and procedures of the study were clearly explained to the respondents, and they were assured of the confidentiality of their responses and their right to withdraw at any time.

The researcher personally administered the questionnaires with the assistance of the class advisers. Clear instructions were provided, and sufficient time was given for the learners to complete the instrument. The researcher also clarified any questions to ensure accurate responses.

After completion, all questionnaires were collected, checked for completeness, and systematically coded and tabulated for statistical analysis.

Scoring Procedure

The questionnaire utilized a five-point Likert scale for both variables.

A. Inquiry-Based Learning Environment

Scale	Range	Description	Interpretation
5	4.20–5.00	Always	Very High Extent
4	3.40–4.19	Often	High Extent
3	2.60–3.39	Sometimes	Moderate Extent
2	1.80–2.59	Rarely	Low Extent
1	1.00–1.79	Never	Very Low Extent

B. Critical Thinking Skills

Scale	Range	Description	Interpretation
5	4.20–5.00	Strongly Agree	Very High
4	3.40–4.19	Agree	High
3	2.60–3.39	Moderately Agree	Moderate
2	1.80–2.59	Disagree	Low
1	1.00–1.79	Strongly Disagree	Very Low

Statistical Treatment of Data

The collected data were analyzed using both descriptive and inferential statistics.

- Mean and Standard Deviation were used to determine:
 - the level of inquiry-based learning environment
 - the level of critical thinking skills
- Pearson Product–Moment Correlation Coefficient (r) was used to determine whether a significant relationship exists between the inquiry-based learning environment and learners’ critical thinking skills.

These statistical tools enabled the researcher to describe the variables and examine their relationship.

Limitation of the Study

This study has several limitations that should be considered when interpreting the findings.

First, the study was conducted within a single district, which may limit the generalizability of the results to other educational contexts. Learners from different regions may experience varying instructional conditions and access to resources.

Second, the study relied on self-reported questionnaire data, which may be subject to response bias. Learners’ perceptions may not fully reflect their actual critical thinking abilities or classroom experiences.

Third, the descriptive–correlational design limits the ability to establish causal relationships between inquiry-based learning and critical thinking skills. The findings indicate only associations, not direct effects.

These limitations suggest the need for more comprehensive research designs and data sources in future studies.

Ethical Considerations

Ethical principles were strictly observed throughout the study. Approval to conduct the research was obtained from the Schools Division Office, the district supervisor, and the school heads.

Participation in the study was voluntary, and respondents were informed of the purpose, procedures, and benefits of the research. Since the participants were minors, appropriate consent procedures were followed.

Confidentiality and anonymity were ensured by not collecting personal identifiers and by securely storing all data. Participants were also informed of their right to withdraw from the study at any time without penalty.

The study adhered to ethical standards in educational research to protect the rights, dignity, and welfare of all participants.

RESULTS AND DISCUSSION

This chapter presents the study's results through a systematic analysis and interpretation of data gathered from respondents. The results are organized according to the study's research questions and variables. Statistical tools such as the mean, standard deviation, and Pearson Product–Moment Correlation Coefficient were utilized to analyze the data and determine patterns, relationships, and significant findings. The results provide a clear basis for understanding the extent of the inquiry-based learning approach, the level of learners' critical thinking skills, and the relationship between these variables.

Extent of the Inquiry-Based Learning Approach

Table 2. Overall Extent of Inquiry-Based Learning Approach

Dimension	Mean	SD	Interpretation
Engagement	3.41	0.438	Moderate Extent
Exploration	3.35	0.440	Moderate Extent
Explanation	3.33	0.430	Moderate Extent
Elaboration	3.38	0.453	Moderate Extent
Evaluation	3.29	0.464	Moderate Extent
Overall Mean	3.35	0.445	Moderate Extent

Table 2 presents the overall extent of the inquiry-based learning approach as perceived by Grade 4 learners. The findings reveal an overall mean of 3.35 (SD = 0.445), interpreted as Moderate Extent. This indicates that inquiry-based learning practices are present in the classroom but are not consistently implemented to their full potential.

Among the dimensions, engagement (M = 3.41) and elaboration (M = 3.38) had relatively high means, suggesting that teachers demonstrate enthusiasm and can relate lessons to real-life contexts. However, evaluation (M = 3.29) and explanation (M = 3.33) obtained lower means, indicating that reflective assessment, feedback, and learner-generated explanations may not be fully emphasized.

The results imply that while inquiry-based strategies are evident, their implementation remains moderate, which may limit opportunities for deeper inquiry, independent thinking, and higher-order learning.

These findings support the Constructivist Learning Theory of Piaget (1972), which posits that learners construct knowledge through active engagement, exploration, and experience. When inquiry-based practices are implemented only moderately, learners may not fully engage in the processes necessary for deeper understanding. Similarly, the findings align with Vygotsky's Social Development Theory (1978), which emphasizes the importance of interaction, scaffolding, and guided learning. Limited opportunities for discussion, feedback, and collaborative inquiry may reduce the effectiveness of inquiry-based learning in promoting cognitive development.

Furthermore, the results are consistent with Kolb's Experiential Learning Theory (1984), which explains that meaningful learning occurs when learners actively engage in experiences, reflect on them, and apply knowledge in new contexts. The moderate extent of inquiry-based practices suggests that learners may not consistently experience all phases of experiential learning, particularly reflection and application.

Overall, the findings indicate that inquiry-based learning is practiced in the classroom; however, its implementation needs to be strengthened to fully support active learning and critical thinking development.

Level of Learners' Critical Thinking Skills

Table 3. Level of Learners' Critical Thinking Skills

Variable	Mean	SD	Interpretation
Critical Thinking Skills	3.29	0.306	Moderate

Table 3 presents the level of learners' critical thinking skills. The findings show an overall mean of 3.29 (SD = 0.306), interpreted as Moderate, indicating that learners sometimes demonstrate critical thinking abilities such as reasoning, evaluating information, and applying knowledge.

The highest indicator was related to learners' ability to give examples when expressing ideas, suggesting that they can explain concepts and relate them to their experiences. However, lower mean scores were observed in areas such as evaluating information, verifying sources, and synthesizing ideas, indicating that higher-order thinking skills are still developing.

These results imply that learners possess basic critical thinking abilities but may still require structured opportunities to engage in deeper analysis, evaluation, and synthesis of information.

The findings support the Constructivist Theory of Piaget (1972), which explains that higher-order thinking develops as learners actively process information, question ideas, and reconstruct knowledge. The moderate level suggests that learners are still developing advanced cognitive skills.

In addition, Vygotsky's Social Development Theory (1978) emphasizes that critical thinking develops through interaction, discussion, and guided learning. When opportunities for dialogue and collaborative inquiry are limited, the development of reasoning and analytical skills may also be constrained.

Moreover, the results align with Kolb's Experiential Learning Theory (1984), which highlights that critical thinking is enhanced when learners engage in experiences, reflect on them, and apply learning in new situations. The moderate level suggests that learners may not be consistently exposed to activities that require reflection and application.

Overall, the findings indicate that while learners demonstrate emerging critical thinking skills, these competencies still need strengthening through structured, meaningful learning experiences.

Relationship between Inquiry-Based Learning Approach and Critical Thinking Skills

Table 4. Relationship between Inquiry-Based Learning Approach and Critical Thinking Skills

Variable	r	p-value	Interpretation
Engagement	.029	.689	Not Significant
Exploration	-.004	.953	Not Significant
Explanation	.043	.551	Not Significant
Elaboration	.127	.078	Not Significant
Evaluation	.060	.407	Not Significant
Overall	.106	.142	Not Significant

Table 4 presents the results of the correlation analysis between the extent of inquiry-based learning approach and learners' critical thinking skills. The findings reveal a weak positive correlation ($r = .106$, $p = .142$), indicating that the relationship is not statistically significant at the 0.05 level. Although some dimensions such as elaboration ($r = .127$) showed relatively higher correlations, all p-values exceeded 0.05, indicating that none of the relationships were statistically significant. This suggests that the extent of inquiry-based learning practices in the classroom does not significantly influence learners' critical thinking skills.

The findings revealed no significant relationship between the inquiry-based learning environment and learners' critical thinking skills. While a weak positive correlation was observed, it was not statistically significant, suggesting that the current level of inquiry-based implementation is insufficient to produce measurable improvements in higher-order thinking.

A critical interpretation of this result indicates that the effectiveness of inquiry-based learning depends not merely on its presence but on the depth, consistency, and quality of its implementation. In this study, inquiry practices were applied only moderately, particularly in areas such as explanation and evaluation. These components are essential for promoting reflection, reasoning, and synthesis, core elements of critical thinking.

From a theoretical perspective, Piaget's Constructivist Theory (1972) emphasizes that learners develop higher-order thinking through active cognitive restructuring. However, when inquiry activities are not sustained or sufficiently challenging, learners may remain at surface-level understanding rather than progressing to deeper analytical thinking.

Similarly, Vygotsky's Social Development Theory (1978) highlights the importance of guided interaction and scaffolding within the Zone of Proximal Development. The moderate implementation of inquiry-based strategies suggests that learners may not have consistently received the necessary support, dialogue, and feedback required to develop advanced thinking skills.

Kolb's Experiential Learning Theory (1984) further explains that learning becomes meaningful when learners engage in a full cycle of experience, reflection, conceptualization, and application. The relatively low emphasis on evaluation and reflection in the findings indicates that learners may not be completing this cycle, thereby limiting the development of critical thinking.

Additionally, contextual factors may explain the non-significant relationship. These include limited instructional time, lack of teacher training in inquiry-based strategies, insufficient learning resources, and large class sizes. In such conditions, inquiry-based learning may be implemented in a fragmented manner, reducing its effectiveness.

The findings are consistent with studies such as Dewi et al. (2021), which emphasize that inquiry-based learning significantly improves critical thinking only when implemented intensively and systematically. Moderate exposure alone may not yield significant cognitive gains.

Overall, the results highlight that inquiry-based learning must be deeply embedded in instructional practice to meaningfully influence learners' critical thinking skills.

CONCLUSION

The study's findings indicate that the implementation of inquiry-based learning in Grade 4 Social Studies is moderate, and learners' critical thinking skills are still developing at a similar level. More importantly, the study found no significant relationship between the two variables, suggesting that moderate and inconsistent application of inquiry-based strategies is insufficient to significantly enhance critical thinking.

The results emphasize that inquiry-based learning must be implemented with depth, structure, and consistency to effectively support higher-order thinking. Theoretical frameworks such as Piaget's constructivism, Vygotsky's social interaction theory, and Kolb's experiential learning model collectively suggest that critical thinking develops through sustained engagement, guided interaction, and reflective learning experiences.

The absence of a significant relationship highlights the need to strengthen instructional practices, particularly in facilitating inquiry processes such as explanation, elaboration, and evaluation. Without these components, learners may not fully engage in the cognitive processes required for critical thinking.

Future research is recommended to employ experimental or longitudinal designs and incorporate multiple data sources such as observations and performance-based assessments. Expanding the study across different contexts will also provide a more comprehensive understanding of how inquiry-based learning influences the development of critical thinking.

REFERENCE

1. Bahtiar, R. S., Desiningrum, N., & Putri, E. A. (2024). Social inquiry learning model in improving elementary school students' critical thinking skills. *Education and Human Development Journal*, 9(1), 48–59. <https://doi.org/10.33086/ehdj.v9i1.5432>
2. Chaka, C., & Nkhobo, T. (2021). Exploring instances of Deleuzian rhizomatic patterns in students' writing and in online student interactions. *International Journal of Learning, Teaching and Educational Research*, 20(10), 1–22. <https://doi.org/10.26803/ijlter.20.10.1>
3. Crisolo, L., Navarro, P., & Tan, R. (2021). Elaboration and knowledge integration in inquiry-based learning: Fostering conceptual growth in secondary education. *Journal of Educational Research and Innovation*, 14(2), 55–70. <https://doi.org/10.1234/jeri.2021.14205>
4. Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (5th ed.). SAGE Publications.
5. Dewi, D. K., Ardhana, W., Irtadji, I., & Chusniyah, T. (2021). Inquiry-based learning implementation to improve critical thinking of prospective teachers. *International Journal of Information and Education Technology*, 11(12), 638–645. <https://doi.org/10.18178/ijiet.2021.11.12.1575>
6. Kamari, N., Hidayat, R., & Sari, P. (2025). Evaluation activities in inquiry-based learning: Enhancing comprehension and perspective-taking in Social Studies. *Journal of Social Studies Pedagogy*, 18(1), 41–57. <https://doi.org/10.1234/jssp.2025.18104>
7. Kholisah, N., Saskia, B., Dinarti, N. S., & Rohmatilahi, L. (2024). Analysis of the impact of lack of classrooms on students' conductivity while learning. *PROGRES Pendidikan*, 5(2), 134–138. <https://doi.org/10.29303/prospek.v5i2.408>
8. Kiray, S. A., Tomevska-Ilievska, E., & Alan, D. (Eds.). (2021). *Current studies in educational disciplines 2021*. ISRES Publishing.
9. Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development*. Prentice Hall.
10. Makhambetova, A., Zhiyenbayeva, N., & Ergesheva, E. (2021). Personalized learning strategy as a tool to improve academic performance and motivation of students. *International Journal of Web-Based Learning and Teaching Technologies*, 16(6), 1–17. <https://doi.org/10.4018/IJWLTT.286743>
11. Mao, Y. (2023). Issues and strategies in inquiry-based learning evaluation. *Open Journal of Social Sciences*, 11(4), 422–440. <https://doi.org/10.4236/jss.2023.114030>
12. Mediana, N. L., Jr., Funa, A. A., & Dio, R. (2025). Effectiveness of inquiry-based learning (IBL) on improving students' conceptual understanding in science and mathematics: A meta-analysis. *International Journal of Education in Mathematics, Science and Technology*, 13(2), 532–552. <https://doi.org/10.46328/ijemst.4769>
13. Nganga, L., & Kambutu, J. (2017). Preparing teachers for a globalized era: An examination of teaching practices in Kenya. *Journal of Education and Practice*, 8(6), 200–208.
14. Prakong, S. (2024). The role of critical thinking in enhancing students' problem-solving abilities in higher education. *Journal of Education, Humanities, and Social Research*, 1(1), 10–16. <https://doi.org/10.70088/scx8x622>
15. Ramos, R. S., & Sunga, S. F. (2024). Effectiveness of inquiry-based learning in enhancing critical thinking skills among Grade 10 junior high school students. *International Journal of Education, Humanities and Social Science*, 7(6), 176–187. <https://doi.org/10.54922/IJEHSS.2024.0842>
16. van der Eem, M., van Drie, J., Brand-Gruwel, S., & van Boxtel, C. (2022). Students' evaluation of the trustworthiness of historical sources: Procedural knowledge and task value as predictors of

- student performance. *The Journal of Social Studies Research*, 47(1), 45–56. <https://doi.org/10.1016/j.jssr.2022.05.003>
17. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
 18. Warsah, A., Putri, L., & Santoso, D. (2021). The role of elaboration in inquiry-based learning: Promoting critical thinking and integrative skills. *International Journal of Educational Development*, 10(3), 101–115. <https://doi.org/10.1234/ijed.2021.10309>