

Utilization of Self-Regulated Learning Strategies and Critical Thinking Dispositions among Learners in Grade 6

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ABSTRACT

This study aimed to determine the extent of self-regulated learning (SRL) strategy use and its relationship to the critical thinking disposition of Grade 6 learners. Specifically, it examined learners' SRL practices in establishing self-study strategies, managing structured learning environments, exercising time management, and setting learning goals. Additionally, it assessed the level of critical thinking disposition and analyzed the significant relationships between SRL strategies and critical thinking. The study employed a descriptive-correlational design and was conducted in the San Fernando II District, Division of Bukidnon, Philippines, involving 225 Grade 6 learners selected through random sampling. Data were collected using an adapted instrument from Prudente and Acar (2021), which yielded a Cronbach's alpha of 0.952. Weighted mean and standard deviation were used to determine the extent of SRL utilization and the level of critical-thinking disposition. At the same time, Pearson product-moment correlation analysis was used to assess the relationships among variables.

Findings revealed that learners' utilization of SRL strategies in all dimensions was very high, indicating strong autonomy and disciplined learning behaviors. The level of critical thinking disposition was also very high, reflecting learners' curiosity, persistence, problem-solving, and reflective thinking. Correlational analysis demonstrated significant relationships between all SRL dimensions and critical thinking disposition, suggesting that learners who actively regulate their learning are more likely to develop higher-order cognitive skills.

Based on these findings, it is recommended that learners continue to strengthen SRL practices with parental support, that school administrators provide programs and resources that promote SRL, and that future researchers investigate additional factors influencing SRL and critical thinking, including subject-specific effects and broader academic outcomes. These measures aim to enhance learners' independent learning habits, cognitive growth, and capacity for critical thinking.

Keywords: Establishing Self-Study Strategies, Managing Structured Learning, Environment, Exercising Time Management, Setting learning goals

INTRODUCTION

One persistent concern among Grade 6 learners is the limited development of critical-thinking dispositions necessary for meaningful engagement with social and historical concepts. Many learners demonstrate reliance on memorization rather than higher-order thinking skills such as analysis, evaluation of evidence, and consideration of multiple perspectives. This limitation restricts their ability to make informed decisions and critically examine societal issues (Witarsa & Muhammad, 2023).

Self-regulated learning (SRL) strategies play a vital role in addressing this challenge by promoting learner autonomy, goal setting, self-monitoring, and reflective thinking. By regulating cognitive, motivational, and

behavioral processes, learners become more active participants in their own learning. These processes are closely associated with the development of critical thinking dispositions, as learners are encouraged to question assumptions, analyze information, and consider alternative viewpoints (Michalsky, 2024).

However, in many elementary classrooms, particularly in rural contexts such as San Fernando District II, Bukidnon, instructional practices remain largely teacher-centered. This limits learners' opportunities to engage in inquiry-based and reflective learning experiences. Additionally, factors such as limited instructional resources, socioeconomic constraints, and inconsistent parental support further hinder the development of critical thinking dispositions.

Although previous studies have explored self-regulated learning and critical thinking in secondary and higher education, there remains a lack of localized research focusing on Grade 6 learners, particularly in rural Philippine settings. Existing literature often fails to account for contextual factors such as teaching practices, learning environments, and community influences that shape learners' cognitive development.

This study aims to address this gap by examining the relationship between self-regulated learning strategies and critical thinking dispositions among Grade 6 learners in San Fernando District II, Bukidnon. By understanding how learners regulate their learning and how this relates to their thinking dispositions, the study provides insights that may inform instructional practices and educational interventions.

This study is anchored on self-regulated learning and critical thinking forms, namely the Self-Regulated Learning Model by Zimmerman (1989), Constructivist Learning Theory (Piaget, 1976; Vygotsky, 1978), and the Theory of Critical Thinking by Ennis (1985, 1996), which can give a solid foundation to understand the interaction between the self-regulation and critical thinking dispositions.

As Zimmerman (1989) stressed, self-regulated learning (SRL) is not an act but a process that involves three cycles: forethought, performance, and self-reflection. During the forethought stage, learners will engage in planning, goal-setting, and activating motivational beliefs to equip them for learning tasks. The Constructivist Learning Theory of Piaget (1976) and Vygotsky (1978) is also based on this study. Constructivism holds that knowledge is not received but is constructed by learners in their environments and within social contexts, where they interact with it (Piaget, 1976; Vygotsky, 1978).

The self-regulated learning (SRL) strategies are the independent variable in this study, referring to the conscious, goal-oriented behaviors of learners that control their cognition, behavior, and motivation to achieve academic success. In particular, SRL is characterized by four dimensions: establishing self-study strategies (the application of techniques to facilitate comprehension: summarizing, note-taking, or elaborating); managing a structured learning environment (organizing physical and psychological space that facilitates learning); the ability to practice time management (determining schedules of study, prioritizing, reducing procrastination); and learning goals (defining specific, measurable goals that help to focus and motivate learning) (Coscos et al., 2022).

Furthermore, the dependent variable is critical thinking disposition, which refers to the consistent desire or readiness of learners to think reflectively, analytically, and critically, as well as to make decisions whenever confronted with a problem, an argument, or a decision. It extends beyond critical thinking skills and focuses on a habitual mindset of questioning assumptions, seeking the truth, and applying logical reasoning in various situations (Prabhakar et al., 2023).

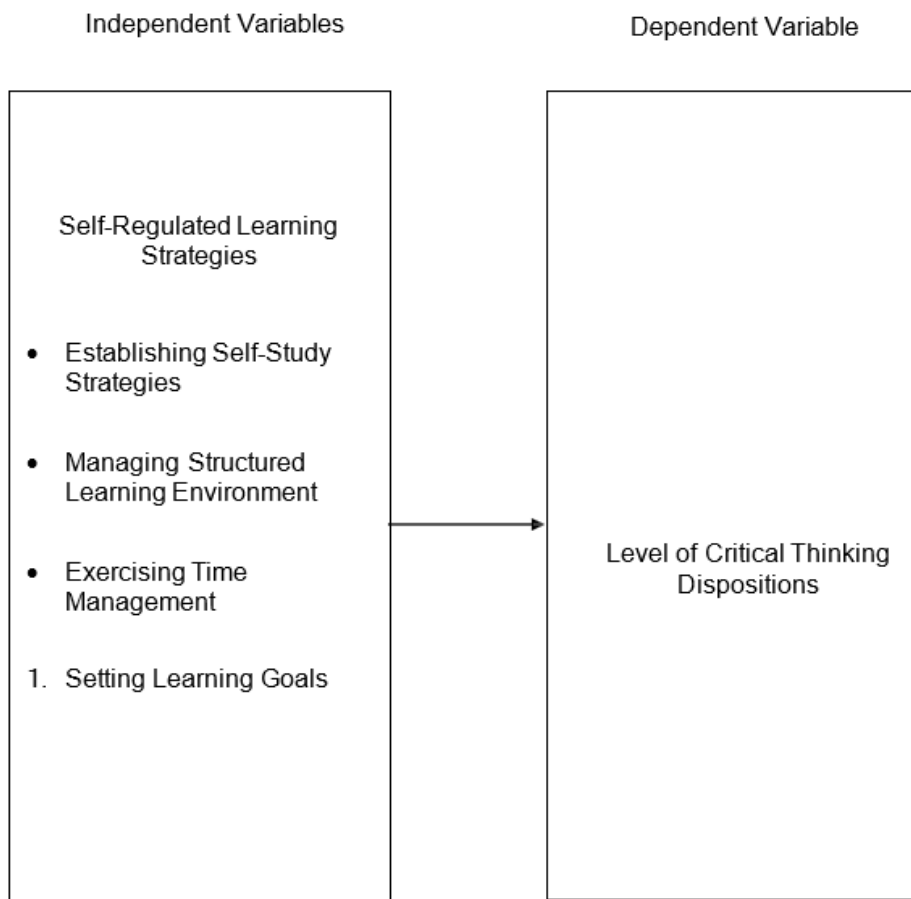


Figure 1. Schematic Diagram showing the Relationship of the Independent and Dependent Variables of the Study

This study aims to find out the relationship between self-regulated learning strategies and critical thinking dispositions among Grade 6 learners in District II of San Fernando, Bukidnon, during the 2025-2026 school year.

Specifically, this study seeks to answer the following questions:

1. What is the extent of utilization of self-regulated learning strategies in terms of establishing self-study strategies, managing a structured learning environment, exercising time management, and setting learning goals?
2. What is the level of critical thinking disposition among Grade 6 learners?
3. Is there a significant relationship between the extent of learners' utilization of self-regulated learning strategies and their level of critical thinking disposition?

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 learners' use of self-regulated learning strategies and their level of critical-thinking disposition.

METHODS

Research Design

This study employed a descriptive–correlational research design to examine the relationship between learners' self-regulated learning strategies and their critical thinking dispositions. Descriptive–correlational research is a quantitative approach used to determine the association between variables without manipulating them in a natural setting (Creswell & Creswell, 2020).

In this study, the design was appropriate because it enabled the researcher to determine whether learners who actively apply self-regulated learning strategies also demonstrate stronger critical-thinking dispositions, such as analytical reasoning, open-mindedness, and reflective thinking. Data were collected using survey questionnaires and analyzed using descriptive and inferential statistical methods.

Research Locale

The study was conducted in San Fernando District II, Division of Bukidnon, Philippines. The municipality of San Fernando is located in the southeastern part of Bukidnon and is characterized by mountainous terrain and rural communities. The district includes several public elementary schools that serve learners from geographically isolated areas, including Indigenous communities such as the Tigwahanon and Matigsalug.

The selected schools included Kalagangan Central Elementary School, Namnam Integrated School, Kibongkong Integrated School, and Mahayag Elementary School. These schools represent the public elementary schools within the district where the respondents were enrolled.

Respondents of the Study

The respondents of the study were Grade 6 learners enrolled in public elementary schools in San Fernando District II, Division of Bukidnon. A total of 225 Grade 6 learners participated in the study. Grade 6 learners were selected because they are at a developmental stage where they begin to develop independent learning behaviors such as planning, monitoring, and evaluating their own learning, which are essential components of self-regulated learning and critical thinking development.

Sampling Procedure

The study employed total enumeration sampling, in which all Grade 6 learners in the selected schools were included as respondents. Using total enumeration enabled the researcher to collect data from the entire population of interest, thereby providing a comprehensive representation of learners in the district and minimizing sampling bias.

Research Instrument

Two survey instruments were used in the study.

The first instrument measured self-regulated learning strategies, adapted from the scale developed by Prudente and Acar (2021). The instrument assessed four dimensions of self-regulated learning: Developing self-study strategies, managing a structured learning environment, Time management, and setting learning goals

The second instrument measured critical thinking disposition, adapted from the instrument developed by Demircioglu and Kilmen (2014). This instrument assessed learners' dispositions toward critical thinking, including analytical reasoning, open-mindedness, and reflective thinking.

Both instruments used a five-point Likert scale ranging from 1 (Never/Strongly Disagree) to 5 (Always/Strongly Agree). To ensure reliability, a pilot test was conducted among 30 learners who were not part of the study sample. The reliability of the instruments was determined using Cronbach's alpha, where a coefficient of 0.70 or higher was considered acceptable for internal consistency.

Data Gathering Procedure

Prior to data collection, permission to conduct the study was obtained from the Schools Division Superintendent, the Public Schools District Supervisor, and the school heads of the participating schools. After approval was granted, coordination was conducted with school principals and Grade 6 teachers to administer the survey questionnaires. The questionnaires were distributed to the respondents through their respective teachers. Instructions on the study's purpose and how to answer the questionnaire were clearly explained to the

participants. After completion, the researcher collected the questionnaires, checked them for completeness, and prepared them for data processing.

Scoring Procedure

When evaluating the self-regulated learning strategies and disposition to critical thinking of the learners, the scoring system will be as follows:

A. Self-Regulated Learning Strategies

Scale	Range	Descriptive Rating	Qualitative Description	Qualifying Statement
5	4.20 – 5.00	Always	Very High	5 times out of 5 instruments
4	3.40 – 4.19	Often	High	4 times out of 5 instruments
3	2.60 – 3.39	Sometimes	Moderate	3 times out of 5 instruments
2	1.80 – 2.59	Rarely	Low	2 times out of 5 instruments
1	1:00 – 1:79	Never	Very Low	1 time out 5 instruments

B. Critical Thinking Disposition

Scale	Range	Descriptive Rating	Qualitative Description	Qualifying Statement
5	4.20 – 5.00	Always	Very High	5 times out of 5 instruments
4	3.40 – 4.19	Often	High	4 times out of 5 instruments
3	2.60 – 3.39	Sometimes	Moderate	3 times out of 5 instruments
2	1.80 – 2.59	Rarely	Low	2 times out of 5 instruments
1	1:00 – 1:79	Never	Very Low	1 time out 5 instruments

Statistical Treatment of Data

Both descriptive and inferential statistical techniques were used to analyze the collected data.

The weighted mean and standard deviation were used to determine the levels of self-regulated learning strategies and critical thinking dispositions among the learners.

To determine the relationship between the two variables, the Pearson product–moment correlation coefficient (Pearson r) was used.

Ethical Considerations

Ethical standards were strictly observed throughout the study. Approval was obtained from the Schools Division Superintendent, the Public Schools District Supervisor, and the school administrators before conducting the research.

Participation in the study was voluntary. Respondents were informed about the purpose of the study and their right to withdraw from participation at any time without penalty. Confidentiality and anonymity were ensured by assigning identification codes instead of using respondents' names.

All collected data were used solely for research purposes and were stored securely. Proper citation of sources and the use of plagiarism-detection tools were also used to ensure the originality and integrity of the research.

RESULTS AND DISCUSSION

This chapter presents the analysis, interpretation, and discussion of the data gathered from the respondents. The results are presented in the order of the research problems. It includes the extent of utilization of self-regulated learning strategies among Grade 6 learners, the level of critical thinking disposition, and the relationship between these variables.

Extent of Utilization of Self-Regulated Learning Strategies

Table 1. Extent of Utilization of Self-Regulated Learning Strategies

Dimension	Mean	SD	Interpretation
Establishing Self-Study Strategies	4.42	0.613	Very High
Managing a Structured Learning Environment	4.36	0.695	Very High
Exercising Time Management	4.34	0.691	Very High
Setting Learning Goals	4.34	0.685	Very High
Overall Mean	4.37	0.671	Very High

Table 1 presents the extent of learners' use of self-regulated learning strategies, including establishing self-study strategies, managing a structured learning environment, exercising time management, and setting learning goals. The findings revealed a very high level of utilization of self-regulated learning strategies among Grade 6 learners ($M = 4.37$, $SD = 0.671$), indicating that learners consistently plan, monitor, and evaluate their learning processes. This suggests that learners possess strong metacognitive awareness and can independently manage their academic tasks.

Among the dimensions, establishing self-study strategies obtained the highest mean ($M = 4.42$), indicating that learners frequently use techniques such as summarizing, reviewing, and self-questioning. This reflects a high level of cognitive engagement and supports the argument of Coscos et al. (2022) that strategic learning behaviors enhance academic performance.

The high ratings in managing structured learning environments ($M = 4.36$) and time management ($M = 4.34$) further indicate that learners are capable of organizing both their physical and temporal learning conditions. These findings suggest that learners are not only cognitively engaged but also behaviorally disciplined.

From a theoretical perspective, the results strongly support Zimmerman's (1989) Self-Regulated Learning Model, particularly the cyclical processes of forethought, performance, and self-reflection. Learners' ability to plan and regulate their learning aligns with the forethought phase, while monitoring and adjusting strategies reflect the performance and reflection phases.

However, the consistently high ratings across all dimensions may also suggest a potential response bias or overestimation of self-reported behaviors. Future studies may incorporate observational or performance-based measures to validate these findings.

Level of Critical Thinking Disposition Among Grade 6 Learners

Table 2. Level of Critical Thinking Disposition

Variable	Mean	SD	Interpretation
Critical Thinking Disposition	4.41	0.608	Very High

Table 2 presents the level of critical thinking disposition among Grade 6 learners. The results indicated a very high level of critical thinking disposition among learners ($M = 4.41$, $SD = 0.608$), suggesting that they are inclined to question, analyze, and evaluate information in learning contexts. This reflects a shift from passive learning toward active cognitive engagement.

The findings support Ennis's (1996) theory, which emphasizes that critical thinking involves not only skills but also dispositions such as curiosity, persistence, and open-mindedness. Learners in this study demonstrated these traits, indicating readiness to engage in reflective thinking. Consistent with Araka et al. (2020), the findings suggest that learners who are actively engaged in self-directed, reflective learning environments are more likely to develop strong critical-thinking dispositions. The alignment between high SRL and high critical thinking further reinforces the interconnectedness of these constructs.

Nevertheless, similar to the SRL findings, the uniformly high ratings may indicate limited variability among responses. This suggests the need for more nuanced assessment tools to capture differences in learners' critical thinking dispositions.

Relationship Between Self-Regulated Learning Strategies and Critical Thinking Disposition

Table 3. Test of Significant Relationship between Self-Regulated Learning Strategies and Critical Thinking Disposition

Variable	r	p-value	Interpretation
Establishing Self-Study Strategies	.660	.000	Significant
Managing a Structured Learning Environment	.647	.000	Significant
Exercising Time Management	.642	.000	Significant
Setting Learning Goals	.782	.000	Significant
Overall Relationship	.755	.000	Significant

Table 3 presents the correlation analysis examining the relationship between learners' use of self-regulated learning strategies and their level of critical-thinking disposition. The correlation analysis revealed a strong and statistically significant relationship between self-regulated learning strategies and critical thinking disposition ($r = 0.755$, $p < 0.05$). This indicates that learners who actively regulate their learning processes are more likely to demonstrate stronger critical thinking tendencies.

Among the dimensions, setting learning goals showed the strongest relationship ($r = 0.782$), highlighting the importance of goal-oriented behavior in fostering analytical and reflective thinking. Goal setting enables learners to evaluate progress, adjust strategies, and engage in deeper cognitive processing.

These findings support previous research (Lim & Yeo, 2021; Sulisworo et al., 2020) that found self-regulated learners tend to exhibit higher-order thinking skills. The results also reinforce Zimmerman's (1989) assertion that goal setting is central to effective self-regulation.

While the relationship is strong, it is important to note that correlation does not imply causation. Other factors, such as instructional quality, socioeconomic background, and learning environment, may also influence the development of critical thinking. Future research may employ experimental or longitudinal designs to examine causal relationships further.

Educational Implications

The findings of this study have important implications for educators, curriculum designers, and policymakers.

For teachers, the results highlight the importance of integrating self-regulated learning strategies into classroom instruction. Teachers should design activities that encourage goal-setting, self-monitoring, and reflection to promote learners' independence and critical thinking.

For curriculum designers, integrating self-regulated learning components into instructional materials and learning modules can enhance learners' engagement and higher-order thinking skills. Structured learning tasks that promote inquiry, reflection, and problem-solving should be emphasized.

For school administrators and policymakers, the findings suggest the need to provide training programs and resources that support the implementation of self-regulated learning strategies. Creating a supportive learning environment that fosters autonomy and critical thinking is essential for improving learners' academic outcomes.

Overall, promoting self-regulated learning in elementary education can significantly enhance learners' ability to think critically, make informed decisions, and become independent learners.

CONCLUSION

Based on the results and discussions presented, the following conclusions are drawn:

The findings of the study indicate that Grade 6 students in District II of San Fernando, Bukidnon, exhibit very high levels of utilization of self-regulated learning strategies. Strategies associated with self-study practices, organized learning, time management, and goal setting are consistently used by learners to manage their learning activities. Such habits demonstrate that learners are in charge of their learning by managing their study resources, scheduling their time, and tracking their own learning.

Moreover, the research concludes that Grade 6 students have a very high level of critical-thinking disposition. The learners are persistent in completing tasks, enquiring about new knowledge, open to different points of view, and ready to resolve issues. These traits indicate high levels of preparedness and willingness to think reflectively and analytically in accomplishing academic activities.

Lastly, the study concludes that self-regulated learning strategies have far-reaching effects on the development of critical-thinking dispositions in learners. The positive relationship between the two variables is very strong, indicating that learners who engage in planning, monitoring, and controlling their learning processes are more likely to exhibit stronger tendencies toward critical thinking. Hence, the use of self-managed learning strategies is significant in enhancing the critical-thinking orientation and promoting the overall growth of learners in education.

REFERENCE

1. Araka, E., Maina, E., Gitonga, R., Oboko, R., & Kihoro, J. (2020). Self-regulated learning in an ICT-supported learning environment in Kenyan universities. *International Journal of Education and Development Using Information and Communication Technology*, 16(2), 114–130.
2. Coscos, F., Doncillo, R., Sausal, E., & Tanquilan, M. C. (2022). Self-regulated learning strategies on students' academic performance in mathematics through flexible learning. *International Journal of Applied Science and Research*, 5(4), 26–40. <https://doi.org/10.56293/IJASR.2022.5404>
3. Demircioğlu, E., & Kilmen, S. (2014). An adaptation study of the critical thinking disposition scale. *The Journal of Academic Social Science Studies*, 27(1), 203–218. <https://doi.org/10.9761/JASSS2434>
4. Ennis, R. H. (1985). A logical basis for measuring critical thinking skills. *Educational Leadership*, 43(2), 44–48.
5. Ennis, R. H. (1996). *Critical thinking*. Prentice Hall.
6. Heydari, S., & Beigzadeh, A. (2024). Medical students' perspectives on reflection for their professional development. *BMC Medical Education*, 24, 1399. <https://doi.org/10.1186/s12909-024-06401-2>
7. Lim, S. L., & Yeo, K. J. (2021). The relationship between motivational constructs and self-regulated learning: A review of the literature. *International Journal of Evaluation and Research in Education*, 10(1), 330–335. <https://doi.org/10.11591/ijere.v10i1.21006>
8. Michalsky, T. (2024). Metacognitive scaffolding for preservice teachers' self-regulated design of higher-order thinking tasks. *Heliyon*, 10(2), e24280. <https://doi.org/10.1016/j.heliyon.2024.e24280>
9. Piaget, J. (1976). *The grasp of consciousness: Action and concept in the young child*. Harvard University Press.
10. Prabhakar, K., Yongsorn, C., & Ponathong, C. (2023). Developing critical-thinking dispositions through academic assertiveness among higher-education students in Thailand. *Higher Education Studies*, 13(4), 208–217. <https://doi.org/10.5539/hes.v13n4p208>
11. Prudente, M. S., & Acar, G. R. (2021). Development and validation of a questionnaire on self-regulated learning strategies in online learning environments. *Proceedings of the IAFOR International Conference on Education – Hawaii 2021*. <https://doi.org/10.22492/issn.2186-5892.2021.2>
12. Sulisworo, D., Nugroho, L. E., & Widodo, S. A. (2020). Factors influencing the success of distance learning during the COVID-19 pandemic in Indonesia. *Journal of Educational Sciences*, 4(2), 229–236.
13. Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.

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14. Witarsa, & Muhammad, S. (2023). Critical thinking as a necessity for social science students' capacity development: How it can be strengthened through project-based learning at university. *Frontiers in Education*, 7, 983292. <https://doi.org/10.3389/feduc.2022.983292>
 15. Zimmerman, B. J. (1989). A social cognitive view of self-regulated academic learning. *Journal of Educational Psychology*, 81(3), 329–339. <https://doi.org/10.1037/0022-0663.81.3.329>