Online ISSN: 3082-5121
Aloysian Interdisciplinary Journal of Social Sciences, Education, and Allied Fields
https://journals.aloysianpublications.com
Volume 1 Issue 5 (2025)

Student and Teacher Factors: Implications on Student Writing Proficiency in Integrated Schools

Corsini S. Amplayo, MA [1], Miguela B. Napiere, PhD [1]
1 – DepEd Misamis Oriental

Publication Date: May 23, 2025 DOI: 10.5281/zenodo.15508239

Abstract

Fostering critical thinking skills, encouraging the use of metacognitive strategies, and providing effective teacher feedback are essential components of a supportive learning environment that cultivated strong writing proficiency in learners. The combined impact of metacognitive strategies, critical thinking, and teacher feedback on writing proficiency in Philippine Integrated schools, however, received little attention. This research is aligned with Sustainable Development Goal (SDG) 4 on Quality Education. The participants of this study were 89 students enrolled in public schools of Opol District. The participants were selected using stratified random sampling. To measure their critical thinking skills, a survey questionnaire was used. Results reveal that participants' critical thinking skills were rated as being in the generally developing level, implying that the participants were in the process of building the foundational cognitive skills necessary for proficient writing. The students' metacognitive strategy use (planning and goal-setting, monitoring and self-regulation, and evaluating and reflecting) were rated at a generally moderate level. The teachers generally perceive students' writing abilities as satisfactory but with considerable variability. This finding indicates that as these abilities are developed, so does their writing ability. Furthermore, significant relationships were found between students' cognitive skills, metacognitive strategy use, and teachers' feedback, with improved writing proficiency. It is recommended that future researchers may extend the study to examine additional cognitive and affective factors that influence writing and develop targeted interventions that integrate cognitive skills training with effective feedback strategies.

Keywords: *argumentation, cognitive skills, critical thinking, problem-solving, self-regulation, reasoning, writing proficiency*

Introduction

In the universal context, the interplay of cognitive skills and writing proficiency reiterates that writing is a diverse cognitive activity which involves mental processes like critical thinking, memory, and

Online ISSN: 3082-5121
Aloysian Interdisciplinary Journal of Social Sciences, Education, and Allied Fields
https://journals.aloysianpublications.com
Volume 1 Issue 5 (2025)

executive functions. Moreover, various studies looked into how this cognitive process influenced writing performance (Cordero et al., 2023). Additionally, Papi (2023) reviewed the possible links of transcription skills, executive functions, and writing performance, ruminating the purpose of motivational factors like self-efficacy and attitudes. The results showed that cognitive processes were related to writing performance. Although their impact of motivational variables was not evident, it emphasized the sophisticated distinctiveness of these relationships, thus considering both dimensions (cognitive and motivational) in addressing writing proficiency was important in educational settings.

Although there were extensive studies on cognitive development and writing performance, an observable gap still exists in terms of perception on cognitive factors that leverage diverse writing sub-skills such as organization, vocabulary and coherence. More often, several writing improvement or cognitive theory failed to deliver how these training affected particular areas of writing proficiency. Moreover, limited research discussed these dynamics within different student populations. According to Jones and Moore (2023) the studies should distinguish effectiveness of cognitive sub-skills on writing multi-lingual atmosphere. In addition, Zhang et al. (2023) contend that research should deal with how socio-emotional factors relate with cognitive skills that affect writing outcomes.

This study intended to fill this gap by focusing on the cognitive skills such as critical thinking, metacognitive strategies, as well as teachers' feedback and correlating these with the students' writing proficiency. This research is aligned with Sustainable Development Goal (SDG) 4 on Quality Education. Legal structures in education reiterated the enhancement of foundational academic skills which included writing, as part of the right to quality education along with the policies of UNESCO and national education laws which authorized integration of cognitive development techniques to assure equal learning benefits for all learners.

Specifically, Republic Act No. 10533 or the Enhanced Basic Education Act of the Philippines elevated curricula in order to cultivate cognitive growth alongside subject-specific proficiency. At present, reforms classify evidence-based teaching technique that would integrate both cognitive and writing objectives. This was explained by Gómez-Gallego et al. (2023), who emphasized that lawful accreditation on inclusive and specified education had heightened cognitive training as a tool for uplifting writing skills. Similarly, Chiu and Law (2023) reviewed how policy objectives on literacy enhancement required monitoring cognitive skill advancement improved writing ability.

Theoretical and Conceptual Framework

The study argues that the student factors of critical thinking ability and use of metacognitive strategies, as well as the teacher factor on their feedback on writing have significant association on student's writing proficiency. This argument is anchored on the Cognitive Development Theory by Jean Piaget (Piaget, 1970) which affirms that individuals progress through stages of cognitive growth, influence how they acquire, process, and apply knowledge.

In this study, writing proficiency refers to students' ability to engage in abstract reasoning, problem-solving, and organization of ideas as demonstrated in their write up. Piaget's framework implies that students at more advanced cognitive stages can construct good arguments, apply various vocabulary in writing, and create coherent compositions. Furthermore, his theory of cognitive development points out that children form knowledge through active exploration and engagement with the surroundings. For instance,

Online ISSN: 3082-5121
Aloysian Interdisciplinary Journal of Social Sciences, Education, and Allied Fields
https://journals.aloysianpublications.com
Volume 1 Issue 5 (2025)

assimilation and accommodation refers how individuals adapt their comprehension based on new experiences. Therefore, when teachers give feedback on their students' writing outputs, this can foster students' improved writing outcomes (Balioussis et al., 2019).

At length, the study was also supported by the Information Processing Theory of Atkinson & Shiffrin (2020) which pointed to the different stages of cognitive operations such as encoding, storage, and retrieval information. It explains how students utilize working memory and long-term memory in order to absorb and produce concepts during writing. Consequently, retention of vocabulary, grammar rules, and content knowledge had been a crucial role in writing proficiency (Schlebusch & Fourie, 2022).

Statement of the Problem

This study analyzed student and teacher factors' implications of students' writing proficiency. The study specifically composed of cognitive skills such as critical thinking, use of metacognitive strategies, and teachers' feedback on writing, and how these variables related to diverse aspects of writing, including content, grammar, vocabulary, organization, and mechanics. It particularly addressed the following questions:

1. What is the level of the participants' critical thinking skills in terms of:
   1.1 Analysis and Interpretation;
   1.2 Reasoning and Argumentation; and
   1.3 Problem-Solving and Reflection?
2. What is the level of the participants' use of metacognitive strategies in terms of:
   2.1 Planning and Goal-Setting;
   2.2 Monitoring and Self-Regulation; and
   2.3 Evaluating and Reflecting?
3. How do the participants assess the teachers' feedback on writing in terms of:
   3.1 Idea Development;
   3.2 Language; and
   3.3 Process-Oriented?
4. What is the teacher's assessment of the students' writing proficiency in terms of:
   4.1 Content;
   4.2 Grammar;
   4.3 Vocabulary;
   4.4 Organization; and
   4.5 Mechanics
5. Are the students' critical thinking skills, metacognitive strategy use and teachers' feedback significantly associated with the students' writing proficiency?

Online ISSN: 3082-5121
Aloysian Interdisciplinary Journal of Social Sciences, Education, and Allied Fields
https://journals.aloysianpublications.com
Volume 1 Issue 5 (2025)

Research Methods

The study used descriptive correlational research design. The participants were 89 (out of 15) Grade 10 students who were enrolled in five different Integrated Schools of Opol District in Misamis Oriental. The sample size was determined using the Taro Yamane formula (Bautista & Fernandez, 2023). The inclusion criteria consist of Grade 10 students whose ages range from 16 to 18 chosen; and they were the learners who needed to be given full attention in terms of their writing proficiency. Additionally, participants must be enrolled in an integrated school identified by DepEd (as defined by DECS Order No. 91, s. 1999, and RA 9155) for a minimum of one academic year in order to guarantee that the students' experiences take place within the framework of an integrated school environment. The sample size was deemed sufficient to provide reliable results based on statistical guidelines for correlational studies (Ledesma & Ong, 2023).

The research instruments were questionnaires based on Wen (2011) for critical thinking skills; Villaruz and Palma (2024) for metacognitive strategies and teachers' feedback. It underwent validity and reliability processes. Ethical principles were observed in the conduct of the study and the data were organized using descriptive and inferential statistics.

Results and Discussion

The data show that students' critical thinking skills across three core dimensions namely Analysis and Interpretation, Reasoning and Argumentation, and Problem-Solving and Reflection, are predominantly at a generally moderate, neutral level, with overall mean scores of approximately 3.28. The low standard deviations (ranging from 0.58 to 0.70) suggest consistency in responses, indicating that most students perceive their critical thinking abilities without extreme variations. The neutral interpretation across all dimensions signifies that students possess a basic level of critical thinking but have not yet developed the higher-order skills necessary for complex reasoning, analysis, or reflective judgment.

The marginally higher mean in Analysis and Interpretation (3.32) suggests slightly stronger competency in analyzing information compared to reasoning and argumentation or problem-solving, yet all areas remain at a moderate level. The uniformity of moderate scores indicates that there is a foundational understanding but an identifiable gap in advanced critical thinking skills. Enhancing pedagogical strategies such as explicit instruction on critical analysis, argumentative writing, and reflective practices could elevate students' proficiency. Therefore, developing these skills is crucial for students to perform effectively in academic tasks requiring critical evaluation, synthesis of ideas, and reflective judgment, which are vital for academic success and lifelong learning. These findings are consistent with research by Caldoza et al. (2023) and Villanueva & Fernando (2023), emphasizing that strengthening sub-skills like analysis, reasoning, and reflection is key to improving overall critical thinking and academic writing capabilities.

The moderate ratings suggest that while students recognize these processes' importance, their habitual use remains moderate, highlighting room for development. This implies that developing metacognitive skills is crucial for students' academic growth, particularly in complex tasks like writing, which require strategic planning, ongoing self-monitoring, and reflective evaluation. This points to the need for educators to incorporate explicit instruction and activities that foster these skills, such as goal-setting workshops, self-monitoring checklists, and reflective journaling. Along with this, improving students' metacognitive engagement can lead to an enhancement of the quality of their work.

Online ISSN: 3082-5121
Aloysian Interdisciplinary Journal of Social Sciences, Education, and Allied Fields
https://journals.aloysianpublications.com
Volume 1 Issue 5 (2025)

Since all dimensions are in the moderate range, targeted interventions that promote strategic planning, active monitoring, and post-task reflection are necessary to elevate students' metacognitive engagement. The overall teachers' feedback got a mean of 3.36 indicating the suggesting that teachers view students' writing skills as moderate, neither strongly proficient nor significantly lacking. This implies that teachers recognize that students display an adequate level of idea development, language use, and engagement with the writing process. The moderate rating and the variability in the ratings imply that some students excel while others require further support and instruction. While overall performance is acceptable, there is room for targeted interventions to elevate students from satisfactory to proficient levels, especially in core areas like idea development and language precision.

Correlation (Spearman's Rho) Result of Participants' Critical Thinking and Writing Proficiency

WRITING PROFICIENCY	Measures	CRITICAL THINKING			
		Analysis and Interpretation	Reasoning & Argumentation	Problem Solving & Reflection	Overall Critical Thinking
Content	Correlation Coefficient	.583**	.422**	.214**	.613**
	Sig. (2-tailed)	.000	.000	.044	.000
Grammar	Correlation Coefficient	.600**	.467**	.229**	.634**
	Sig. (2-tailed)	.000	.000	.031	.000
Vocabulary	Correlation Coefficient	.577**	.411**	.238**	.585**
	Sig. (2-tailed)	.000	.000	.025	.000
Organization	Correlation Coefficient	.567**	.397**	.183**	.586**
	Sig. (2-tailed)	.000	.000	.085	.000
Mechanics	Correlation Coefficient	.582**	.463**	.234**	.618**

Online ISSN: 3082-5121
Aloysian Interdisciplinary Journal of Social Sciences, Education, and Allied Fields
https://journals.aloysianpublications.com
Volume 1 Issue 5 (2025)

	Sig. (2-tailed)	.000	.000	.027	.000
Overall Writing Proficiency	Correlation Coefficient	.610**	.448**	.211**	.637**
	Sig. (2-tailed)	.000	.000	.047	.000

***significant at 0.01 level*

The data reveal statistically significant positive correlations between students' critical thinking skills and their writing proficiency across various dimensions. This combination of analytical methods ensured that the results would be strong and reliable, allowing for meaningful interpretations (Santos & Morales, 2023). All correlation coefficients are positive, indicating significance at the 0.01 level ($p < .01$). The data suggest Higher levels of critical thinking specifically in analysis and interpretation, reasoning and argumentation, and problem-solving and reflection are closely associated with better performance in writing skills, including content development, grammar, vocabulary, organization, and mechanics. The strongest relationships are observed between the overall critical thinking and overall writing proficiency ($r= .637$), demonstrating that students who engage more in critical thinking tend to produce higher-quality written work. This implies that critical thinking is significantly associated with writing quality; as students' critical thinking skills improve, so does their ability to produce cohesive, well-structured, and linguistically accurate texts. The consistent strength of correlations across all dimensions suggests that cultivating critical thinking may have a broad, positive impact on multiple facets of writing competence.

The findings further reveal that metacognitive strategy use and writing proficiency are significantly related with their writing proficiency. Thus, the null hypothesis is rejected, implying that students who use metacognitive strategies more frequently also are more proficient in writing. Zhang (2023) noted that student who practiced consistent evaluation and reflection demonstrated significant progress in their writing skill. Clearly, the overall result showed a significant relationship between teachers' feedback on writing and writing proficiency. Thus, the Ho is rejected. Ramos and Torres (2023) stated that students who consistently received feedback when writing produced better revisions and good final outputs. The findings align with the study of Villanueva and Fernando (2023) who advocated that intentional cultivation of metacognitive strategies boosts academic performance through increased self-awareness and strategic learning. In fact, focusing on enhancing planning skills could improve students' ability to set clear goals and organize their work effectively.

Conclusion

Based on the findings of the study, it may be inferred that students possess moderate critical thinking and metacognitive skills, indicating a foundational level of cognitive and self-regulatory abilities. While these skills are evident, there is significant potential for further development to enhance academic performance and higher-order thinking. Additionally, implications for writing proficiency include the need

to strengthen both student and teacher practices to enhance students' writing skills. Fostering critical thinking, metacognitive strategies, and providing effective teacher feedback can lead to improved clarity, coherence, and overall quality of students' written communication. These improvements can contribute to better academic performance, more confident expression of ideas, and increased readiness for higher education and professional endeavors.

References

Atkinson, R., & Shiffrin, R. (2020). Human memory: A proposed system and its control processes. Psychology of Learning and Motivation, 89-195. https://doi.org/10.1016/s0079-7421(08)60422-3

Balioussis, C., Johnson, J., & Pascual-Leone, J. (2019). Fluency and complexity in children's writing: The role of mental attention and executive function. Rivista di Psycholinguistic Applicate / Journal of Applied Psycholinguistics, 12, 33–45.

Bautista, S. R., & Fernandez, M. J. (2023). Stratified sampling techniques in language and literacy research. Journal of Educational Research and Development, 7(3), 102-119. https://doi.org/10.26885/jerd.2023.v7.n3.89

Caldoza, M. C. S., Julhamid, N. U., & Asiri, M. S. (2023). Critical thinking skills and reading proficiency among English language students of public higher education institutions in Sulu. Frontiers in Language and Teaching, 6(3), 1–15. https://doi.org/10.30564/fls.v6i3.6624

Chiu, M. M., & Law, N. (2023). Policy guidelines on literacy development and monitoring cognitive skill progress to improve writing performance. Computers & Education, 200, 1046 https://doi.org/10.1016/j.compedu.2023.104649

Cordero, T. C., Wilson, J., Myers, M. C., Palermo, C., Eacker, H., Potter, A., & Coles, J. (2023). Writing motivation and ability profiles and transition during a technology-based writing intervention. Frontiers in Psychology, 14, 1196274. https://doi.org/10.3389/fpsyg.2023.1196274

Gómez-Gallego, M., Rodríguez, S., & Martínez, L. (2023). Legal mandates on inclusive and differentiated education emphasizing cognitive training for boosting writing skills. Contemporary Educational Psychology, 72, 102345. https://doi.org/10.1016/j.cedpsych.2023.102345

Jones, A., & Moore, B. (2023). The differentiated impacts of cognitive sub-skills on writing in multilingual contexts. Studies in Educational Evaluation, 79, 101110. https://doi.org/10.1016/j.stueduc.2023.101110

Ledesma, C. B., & Ong, A. D. (2023). Determining appropriate sample sizes for correlational research in education. Philippine Journal of Research Methods, 6(1), 15-28. https://doi.org/10.29072/pjrm.2023.61

Papi, M. (2023). The role of motivational and affective factors in L2 writing performance and written corrective feedback processing and use. In R. H. Jones (Ed.), The Routledge Handbook of Language and Creativity (pp. 152–168). Routledge. https://doi.org/10.4324/9780429199691-18

Ramos, M. F., & Torres, L. V. (2023). The impact of multi-stage feedback on students' revision quality and writing improvement. Journal of Language 99 and Literature Teaching Studies, 5(2), 34-51. https://doi.org/10.30564/jllts5.v2.2023

Santos, M. D., & Morales, P. T. (2023). Descriptive and inferential analysis: Their role in education-related research. Philippine Journal of Statistical Applications, 8(3), 77-94. https://doi.org/10.11945/pjsa.2023

Schlebusch, G., & Fourie, M. (2022). Information processing ability and its implications for teaching and learning. International e-Journal of 101 Educational Studies, 6(12), 110–123. https://doi.org/10.31458/iejes.1130846

Zhang, Y., & Zhang, D. (2023). Information processing theory in language learning among students. Journal of Language Teaching and Research, 14(2), 345–356.

Wen, Q.F ., Wang, J.Q. (2011). Study of the reliability of critical thinking disposition inventory for Chinese colleges students. Educational Technology for Foreign Language Teaching, 11(142): 19-21.

Villanueva, L. R., & Fernando, M. A. (2023). The role of reflection in improving students' academic writing in senior high schools the Philippines. Journal of Language and Teaching Studies, 4(2), 78-90. https://doi.org/10.555.phl.acadwriting.45678