

Self-Assessment in Improving Writing Performance

Nataly Monserrat Romero Mayorga

Guide: Angélica Alexandra Vélez Palacios

Modality: Research Report

Presented as Partial Fulfillment for the Degree of Magíster en Pedagogía de los Idiomas Nacionales y Extranjeros con Mención en la Enseñanza de Inglés. CES: RPC-SE-19-N°.140-2020. Cohort 2022 - 2023. Author's email: nataly.romero@casagrande.edu.ec. Guayaquil, April 15th, 2024.

Self-Assessment in Improving Writing Performance

In the dynamic setting of education, self-assessment has emerged as a tool for promoting learning. Among the various subjects that benefit from this practice, writing stands as a skill that requires continuous improvement because it plays an important role in academic, personal, and future professional contexts. Hyland (2009) mentioned that "writing is central to our personal experience and social identities, and we are often evaluated by our control of it" (p. 2). Therefore, the present research focuses on the application of self-assessment technique in writing for ninth graders in a public school in the rural area of Ambato city.

This research aims to address the barriers that ninth-grade students encounter in developing their writing skills. Many learners in this age group struggle with different aspects of writing, such as structuring their ideas, using appropriate grammar and vocabulary, and conveying their thoughts. These challenges are often compounded by a lack of self-awareness and scarce ability to evaluate their own writing. Consequently, this leads to a reliance on external feedback without fostering the necessary skills for self-improvement. Against this backdrop, the study aims to explore the role of self-assessment in mitigating these difficulties. The guiding research questions is: - What is the effect of applying self-assessment on students' written production? By investigating this issue, the research aims to understand if self-assessment strategies can empower students to overcome common writing challenges and enhance their writing proficiency.

Literature Review

After analyzing outcomes obtained in researches conducted across various repositories worldwide, this literature review summarizes the variables under examination, and their definitions.

Writing

Writing might be defined from a cognitive point of view as "a problem-solving activity where writers approach a writing task as a problem and bring intellectual resources to solving it" (Hyland, 2009, p.20). This skill could also be considered as a tool for learning. Young (2006) noted that "writing to learn" focuses on the learner's language and values, prioritizing their personal development. This approach aims to instill a sense of achievement in the writer, derived from exploring new insights, information, and perspectives.

Self-Assessment

According to McMillan and Hearn (2008), self-assessment involves the systematic monitoring and evaluation of students' cognitive processes and behaviors during learning, allowing them to discern and implement strategies for enhancing their understanding and skills. Similarly, Boud and Falchikov (1989) defined self-assessment as "the involvement of learners in making judgements about their achievements and the outcomes of their learning" (p. 529). Henceforth, it is a learner-centered process of reflection that evaluates student's work, abilities, and progress.

Constructivism and Experiential Learning theories are closely linked to the practice of self-assessment. Constructivism, as conceptualized by Jean Piaget and Lev Vygotsky, proposes that learners actively construct their knowledge through experiences and reflection (Piaget, 1954; Vygotsky, 1978). Similarly, Experiential Learning, a concept developed by John Dewey highlighted the importance of experience in the learning process and the critical role of reflection in converting experience into knowledge (Dewey, 1938). Thus, these theories advocate for an educational approach where self-assessment is integral, enabling learners to develop greater self-awareness, reflective skills, and independence in their educational journey.

Self-assessment might help students to be more reflective and autonomous. McMillan and Hearn (2008) highlighted that "its powerful impact on student performance-in both classroom assessments and large-scale accountability assessments, empowers students to guide their own learning and internalize the criteria for judging success" (p. 40). Students that use self-assessment exhibit greater self-reliance compared to their peers who undergo traditional assessments. It is advisable for educators to incorporate self-assessment to nurture this autonomy, while students should consistently apply it to enhance their independent learning capabilities (Ratminingsih et al., 2018). Consequently, it cultivates self-awareness and independence, qualities of long-term learning and written expression in a foreign language.

Self-assessment is linked to enhanced writing outcomes. First, writing instruction incorporating self-assessment practices improve students' writing skills compared to traditional methods (Cömert & Kutlu, 2018). In line with these findings, a study was conducted to improve the use of writing conventions in second-grade students through a self-assessment rubric intervention. The results revealed that students who were trained on topics such as capitalization, usage, punctuation, and spelling achieved significantly higher mean scores compared to the control group (Koehler, 2019). In conclusion, a structured revision process that incorporates self-reflection, planning, and goal setting prior to revision, as well as reflection and self-assessment post-revision, not only boosts students' confidence in their writing revision abilities but also improves their writing performance (Chung et al., 2021, p. 1885).

Moreover, other studies highlighted constraints and limitations while applying self-assessment. For instance, Sahragard and Mallahi (2014) discovered that in writing self-assessments, more advanced writers often undervalued their skills, while many less-skilled

writers overvalued certain aspects of their work. In their study, Zhang and Zhang (2022) investigated the impact of incorporating self-assessment on EFL students' writing performance and the accuracy of their ratings within the context of EFL writing pedagogy. The findings indicated that it might require additional time to observe significant progress in specific areas, such as the enhancement of students' rating accuracy. This delay in improvement was attributed to the discrepancy between the ratings assigned by students and those provided by raters. Hence, providing clear instructions to students on how to utilize self-assessment prevents these difficulties.

Instruments for Implementing Self-assessment in Writing Instruction

Some instruments can be applied for self-assessment such as rubrics and checklists. They outline specific criteria or expectations for successful writing and serve as a reference point during the self-assessment process. Nation (2009) mentioned the importance of reviewing and refining the content of the text during the writing process. For formal pieces, especially academic assignments, employing a checklist can enhance the revision process by providing specific points of evaluation. Consequently, checklists are tools that provide students with a framework for assessing their own writing.

For self-assessment implementation, certain procedures must be observed. First, it is necessary to clarify the standards students will use to review their work. Next, educators should guide students on how to use these standards. Following this, students should receive feedback on their reviews and be supported in using this information to elevate their performance. Two more guidelines are suggested: allowing sufficient time for adjustments after the self-review and abstaining from grading these self-assessments. By adhering to these guidelines, every student is ensured timely feedback, boosting their learning and success (Ross, 2006, as cited in Andrade & Valtcheva, 2009).

Finally, self-assessment is an integral part of the writing process as it allows writers to critically evaluate their own work. McMillan and Hearn (2008) concluded that when students define goals, this practice enhances their comprehension, determine criteria, gauge their advancement in learning, contemplate their educational journey, and formulate further learning strategies, they manifest enhanced performance driven by profound motivation. Therefore, self-assessment encourages metacognitive thinking, where writers monitor and regulate their own cognitive processes enabling writers to make choices about their strategies, resulting in better written communication.

Innovation

After discussing the key principles of self-assessment, its advantages, and limitations in enhancing writing skills, the teacher-researcher and students collaboratively developed an implementation plan. The lesson plan used a backward design method and lasted four weeks, with a total of 12 class sessions (Appendix 1). During this time, the teacher introduced topics such as: the use of simple present tense, the use of because to give opinions, and expressing feelings. The instructor also gave examples, and provided feedback to reinforce the self-assessment process. Students participated in various activities like writing sentences, discussions, group projects, and surveys. They also assessed their own work using checklists and reflected on their progress and areas needing improvement. The lesson plan was designed to introduce new concepts slowly, reinforce them through guided activities, and end with tasks that test students understanding.

In the first week, lasting 3 hours, the focus was on learning how to assess a text, the simple present tense, and expressing feelings about leisure activities. The teacher showed a self-assessment checklist and examples of the desired writing. Students practiced using the checklist by assessing various text samples provided by the teacher in order to get acquainted

with the tool. After practicing, the pretest was applied. For the second hour, students watched a video related to emotions and opinions and discussed it. The instructor offered sentence starters to guide their writing. In groups, students practiced writing about their feelings regarding leisure activities. The first practice consisted of writing about their favorite hobbies and assessing their work with the checklist.

Week two concentrated on subject-verb agreement and vocabulary about hobbies and feelings. Students received feedback on their previous practice. They brainstormed vocabulary in groups. The teacher presented the rules of subject-verb agreement with examples. The guide also introduced the conjunction "because" and its usage. In groups, students matched subjects and verbs and created sentences. They also practiced subject-verb agreement using flashcards. Learners completed the second practice and assessed their work.

In the third week, the goal was to teach students how to write negative sentences and question in the simple present tense. After getting feedback on previous work, learners discussed leisure activities using the new sentence structures. During this part of the lesson, the teacher explained how to construct negative and question sentences. Students applied this knowledge by converting provided affirmative sentences into questions and shared their work with peers to identify errors. In these groups, they collaboratively transformed each sentence into both negative and question forms, practicing subject-verb agreement, appropriate use of auxiliary verbs, and word order. Pairs exchanged their worksheets, offering feedback and corrections to one another. Finally, students formulated questions about hobbies, conducted surveys with five classmates to gather responses, wrote these responses as complete sentences, and evaluated their own work using a checklist.

Moving on to week four, the objective was for students to create an infographic summarizing their classmates' opinions about different hobbies. The teacher offered feedback

on how students used the collected answers to create sentences summarizing their classmates' opinions. Pupils were given a performance task to create an infographic with the results of the survey and sentences that reflected their classmates' opinions. They included pictures related to the mentioned activities and reviewed their work for accuracy and clarity before submission.

Research Methodology

The methodology applied was action research which is an approach to guide practical change and improvement, involving real-world problem identification, strategy development, implementation, and outcome evaluation that can be applied to enhance teaching and learning practices. Efron and Ravid (2013) defined action research "as an inquiry conducted by practitioners in their own educational settings in order to advance their practice and improve their students' learning" (p. 9). This rural context provides a different perspective, enabling a deeper understanding of self-assessment's role in specific educational settings. The selection of this environment and grade level aims to investigate the potential of self-assessment in fostering writing skills during the initial stages of language learning and to answer the research question.

In this study, action research was conducted to address these queries: -What is the effect of applying self-assessment on students' written production? -Does self-assessment improve the written outcomes of ninth grade students? The primary focus was on the enhancement of writing skills (dependent variable), with self-assessment serving as the influencing factor (independent variable).

Participants

The participants of this study were 13 ninth-grade students who are learning English as a foreign language in a public school in Ambato city. The population consists of 8 female students and 5 male students, aged between 12 and 13, who were studying English as a foreign language. According to Ministerio de Educación (2016), ninth grade students in Ecuadorian public schools are expected to have an English proficiency level of A1.1 at the beginning of the course. However, all the students were found to have an A1 level of English proficiency, after taking the Cambridge online placement test for Young Learners (Cambridge University Press & Assessment, 2023). Students were selected based on their proficiency level and their capability to connect remotely, ensuring uniformity in skill and flexibility in case of issues with face-to-face lessons.

Instruments

In this study, a range of instruments were employed to collect data. The improvement in students' written production was quantified by a pre-test and a post-test. They were administered to assess students' initial writing abilities and to track their progress after introducing the self-assessment technique. The pretest consisted of a written task where students polled their classmates about their likes and dislikes regarding school, subsequently crafting at least 5 sentences from the survey results. The posttest involved students summarizing the findings of a survey regarding a group of students' favorite leisure activities. Both instruments required the same number of sentences, similar complexity as they were designed for the same proficiency level, to ensure they could be assessed using the same criteria. An expert in the field assessed the validity of the pretest and posttest (writing tasks).

This study employed a checklist as an assessment tool during the formative stage to enhance students' writing skills. Additionally, a rubric was employed to quantify data for the summative assessment. Classroom observations were carried out to document students'

active involvement and interactions during self-assessment tasks. Scores from the pre-test and post-test, assessed using the rubric, were entered into an Excel spreadsheet for a comprehensive processing. For the quantitative data, statistical methods were applied, specifically using a paired two-tailed *t*-test in Excel. Descriptive statistics and inferential tests, such as the *t*-test, were used to determine the significance of the findings.

Ethical Considerations

In order to maintain ethical principles (Resnik, 2020), the study obtained informed consent from students and their parents or legal tutors through a Google form. This form provided detailed information about the research objectives and procedures. Ethical decisions were taken by the researcher to guarantee the protection of participants' confidentiality and anonymity. Students were regarded as both participants and collaborators in the study and their involvement was voluntary. The research carried no foreseeable risks and participants stood to gain a valuable self-assessment strategy that could benefit their academic goals.

Collected data was treated as confidential and used exclusively for research purposes (Shamoo & Resnik, 2009). Moreover, the educational institution where the study took place granted authorization, confirming that the research proposal aligned with ethical standards and the institutional guidelines stablished in its code of ethics (Bhandari, 2023).

Results

This study aimed to measure the effect of self-assessment on ninth graders' written production. A descriptive statistics analysis displayed in table 1, showed an increase in average grades, with a rise of about 4.85 points from the pretest to the posttest, suggesting improvement after implemented the pedagogical strategy. The score range also widened post-intervention, as evidenced by raised minimum and maximum scores, along with a greater standard deviation, which suggests an increased diversity in student outcomes. This proposes

that while some students benefited from self-assessment, others experienced less improvements. The statistical significance of these results is supported by a paired-samples *t*-test, which yielded a *t*-value of -3.34 and a *p*-value below 0.05. Cohen's *d* value of 0.927 indicates a large effect size, highlighting the significant role of self-assessment in enhancing students' writing skills.

Table 1Descriptive Statistics

	N	MIN	MAX	MEAN	SD
Pretest	13	10	17	13.692	1.797
Posttest	13	12	24	18.538	4.135
Valid N	13				

Note: N= population, SD=Standard deviation,

The researcher also employed a statistical and inferential analysis to answer the research question. The texts produced by students were assessed by the use of a rubric which considered five parameters: Sentence Construction, Use of Simple Present Tense, Subject-Verb agreement, Vocabulary Usage, Use of "because" conjunction, and Organization and Clarity. The results obtained are showed in the table 2.

 Table 2

 Descriptive and Inferential Statistics per Parameter

		Pretest					Posttest				
	N	MIN	MAX	M	SD	N	MIN	MAX	M	SD	p value
Sentence Construction	13	2	3	2.154	0.38	13	2	4	3.077	0.76	0.004
Simple Present Tense	13	2	4	2.615	0.77	13	2	4	3.154	0.80	0.085
Subject-Verb agreement	13	2	4	2.385	0.65	13	2	4	3.154	0.80	0.017

Vocabulary Usage	13	2	3	2.154	0.38	13	2	4	2.923	0.76	0.009
Use of ''because'' conjunction	13	0	3	2.231	1.30	13	2	4	2.923	0.66	0.001
Organization and Clarity	13	2	3	2.154	0.38	13	2	4	2.769	0.73	0.020

The application of a self-assessment strategy had a positive impact on all evaluated parameters of writing with different degrees of statistical significance. Particularly noteworthy are the constructs with the highest levels of significance which are sentence construction, subject-verb agreement, vocabulary usage, and the use of the preposition "because". These parameters show evidence of the strategy's usefulness in improving written production. Students exhibited enhanced sentence production, better expression of feelings and opinions, and more sophisticated vocabulary usage, showcasing enriched content in their writing. Additionally, the improvement in employing a variety of sentence structures, organizational coherence, and the correct use of conjunctions, such as "because", indicates the statistical significance observed. However, the researcher noticed that two students had lower grades post-intervention, suggesting a potential adaptation challenge to the new methodology. These observations, in harmony with the statistical outcomes, validate the positive impact of the self-assessment strategy on improving students' writing skills.

Discussion

The use of self-assessment strategy in improving students' writing skills has gained support through a rigorous research approach similar to that employed by Cömert and Kutlu (2018) and Pino (2022). These methodologies administered a pretest and a posttest, as basis for measuring the educational impact and revealing a significant enhancement.

The descriptive statistics show a significant increase in average grades postintervention, with a 4.85-point rise. This suggests that the self-assessment pedagogical strategy is effective in enhancing students' written products. These positive results are similar to those found by Koehler (2019), and Chung et al. (2021), further reinforcing the rationale for the incorporation of self-assessment techniques in writing education.

The criteria defined on the checklists for self-assessment ensured success. Checklists offer explicit criteria and descriptors that help students in comprehending the expectations and goals for proficient writing as explained by Nation (2009). This clarity supports students in identifying their strengths and areas requiring improvement, in accordance with insights from McMillan and Hearn (2008) regarding the role of self-assessment in the writing process. The relevance of applying self-assessment to enhance texts was also sustained in the research conducted by Cömert and Kutlu (2018), Koehler (2019), and Chung et al. (2021), which emphasize the benefits that detailed writing standards may offer to learners while developing this macro skill.

The study presents statistical evidence, marked by low *p*-values, of improvements in key writing aspects such as grammar, vocabulary, sentence structure, clarity, and text organization. These findings suggest that self-assessment enhanced specific writing skills, leading to better written texts. This corroborates the insights from McMillan and Hearn (2008) on writing skill enhancement and the role of self-assessment on learner development mentioned by Ratminingsih et al. (2018). Thus, the data encourages integrating self-assessment because of its implication in academic growth.

While the overall view of the results is positive, the data also reveals that some students benefited more than others from the self-assessment strategy. Constructivist theories from Piaget (1954) and Vigotsky (1978) regard learning as a process that depends on the individual and contextual factors. This believes might describe the variation among students, their unique backgrounds and social contexts that influence their learning and commitment

with self-assessment. Furthermore, Dewey's (1938) theory on learning through experience offers an explanation about the challenges faced by some students during the implementation of self-assessment methods, since it was their first time applying the process. Therefore, educators should employ elements from these fundamental theories (Dewey, 1938; Piaget, 1954; Vygotsky1 1978) to adjust self-assessment instruments and practice according to their students' requirements. For instance, integrating visual aids in checklists, adapting the classroom environment, and thoroughly explaining and reinforcing the self-assessment process and its relevance for their learning journey. Further qualitative research is required to explore how different learners respond to self-assessment.

This research explored the application of self-assessment in improving students' writing skills and identified concerns regarding the depth of students' self-assessment and the precision of their self-rating abilities. Ross (2006, as cited in Andrade and Valtcheva, 2009) emphasized that adequate time is indispensable for students to reflect and adjust after their self-reviews. The limited duration of this study may have restricted students' engagement with the self-assessment process and their development of accurate self-assessing skills, emulating the findings from the research developed by Zhang and Zhang (2022). Some students with lower skill levels, tended to overrate the quality of their writing despite following the checklist criteria. These results were similar to those obtained by Sahragard and Mallahi (2014). This tendency for overestimation was a noteworthy outcome, emphasizing the need for consistent teacher feedback and support.

Conclusions

The research findings affirm the beneficial effects of self-assessment on students' writing skills, as indicated by a significant increase in average grades and statistical indicators. Time constraints underscore the importance of providing longer periods for

students to engage with self-assessment and improve their writing abilities. Moreover, the study identifies that most of the students enhanced aspects of writing performance that increase coherence of their texts. For example, there was an increase of diversity and connectivity in the written products. They used a varied range of vocabulary, employed conjunctions appropriately, and showed implicit awareness about the use of sentence structures. The results also drew attention to the diversity in student's learning styles and preferences which aligns with different constructivist theories. This evidences how teachers should offer a range of activities and accommodate their methodologies to match with their students' needs. There was a tendency among students with lower proficiency levels to overestimate their writing skills. Teacher feedback proves to be relevant to guide students during the self-assessment process and also to develop their self-awareness and writing skills.

Limitations

The study's limited timeframe may have restricted the depth of student engagement in self-assessment and development of accurate self-evaluation skills. In addition, the observed tendency among less skilled students to overestimate their abilities, even when utilizing checklists, highlights difficulties in the accuracy of self-assessment for these students.

Recommendations

Future studies should extent timeframes to six months or a full academic term. This extension would allow students to engage with the self-assessment process and a development of their self-evaluation skills. A longer duration might provide a better understanding of the impacts and effectiveness of self-assessment strategies. To reduce the skill level overestimation, upcoming research should focus on refining self-assessment tools and incorporating regular revisions to adjust student self-evaluations with actual performance levels.

References

- Andrade, H., & Valtcheva, A. (2009). Promoting learning and achievement through self-assessment. *Educational theory and practice faculty scholarship*, *12*, 13-19. https://doi.org/10.1080/00405840802577544
- Bhandari, P. (2023, June 22). *Ethical considerations in research | Types & examples*.

 Scribbr. https://www.scribbr.com/methodology/research-ethics/
- Boud, D., & Falchikov, N. (1989). Quantitative studies of student self-assessment and peer assessment. *Higher Education*, 18(5), 529 -549.

 https://www.researchgate.net/profile/David-Boud/publication/239969990_Enhancing_Learning_Through_Self-Assessment/links/5b277a5e0f7e9be8bdae93d8/Enhancing-Learning-Through-Self-Assessment.pdf
- Cambridge University Press & Assessment 2023. (2023). *Test your English Young learners*. Cambridge English. https://www.cambridgeenglish.org/test-your-english/young-learners/
- Chung, H. Q., Chen, V., & Olson, C. B. (2021). The impact of self-assessment, planning and goal setting, and reflection before and after revision on student self-efficacy and writing performance. *Reading and Writing*, *34*(7), 1885-1913. https://doi.org/10.1007/s11145-021-10186-x
- Cömert, M., & Kutlu, Ö. (2018). The effect of self-assessment on achievement in writing in English. *Journal of Educational Sciences Research*, 8(1), 107-118. https://doi.org/10.22521/jesr.2018.81.4
- Dewey, J. (1938). Experience and education. MacMillan.

- Efron, S. E., & Ravid, R. (2013). *Action research in education: A practical guide*. Guilford Press. https://www.daneshnamehicsa.ir/userfiles/files/1/9-%20Action%20Research%20in%20Education_%20A%20Practical%20Guide.pdf
- Hyland, K. (2009). *Teaching and researching writing*. Pearson Education. https://doi.org/10.4324/9781315717203
- Koehler, S. (2019). The impact of self-assessment on writing convention usage of second grade students [Unpublished master's thesis]. Goucher College. https://doi.org/10.1016/j.sbspro.2015.06.082.
- McMillan, J., & Hearn, J. (2008). Student Self-Assessment: The key to stronger student motivation and higher achievement. *Horizons*, 87(1), 40-49. http://files.eric.ed.gov/fulltext/EJ815370.pdf
- Ministerio de Educación, Ecuador. (2016). *Introduction: English as a Foreign Language*. https://educacion.gob.ec/wp-content/uploads/downloads/2016/08/EFL-for-Subnivel-BGU-final-ok.pdf
- Nation, P. (2009). Teaching ESL/EFL reading and writing. Routledge.
- Piaget, J. (1954). *The construction of reality in the child*. New York: Basic Books. http://dx.doi.org/10.1037/11168-000
- Pino, L. (2022). Influence of Self-Assessment in the Writing Performance of Narrative

 Texts [Master's thesis]. http://dspace.casagrande.edu.ec:8080/handle/ucasagrande/3462
- Ratminingsih, N. M., Marhaeni, A. A., & Vigayanti, L. P. (2018). Self-assessment: The effect on students' independence and writing competence. *International Journal of Instruction*, 11(3), 277-290. https://doi.org/10.12973/iji.2018.11320a

- Resnik, D. B. (2020, December 23). What is ethics in research & why is it important? National Institute of Environmental Health

 Sciences. https://www.niehs.nih.gov/research/resources/bioethics/whatis
- Sahragard, R., & Mallahi, O. (2014). Relationship between Iranian EFL learners' language learning styles, writing proficiency and self-assessment. *Procedia Social and Behavioral Sciences*, 98, 1611-1620. https://doi.org/10.1016/j.sbspro.2014.03.585
- Shamoo, A. E., & Resnik, D. B. (2009). *Responsible conduct of research*. Oxford University Press.
- Vygotsky, L. (1978). *Mind in society: The development of higher psychological processes*.

 Harvard University Press. https://doi.org/10.2307/j.ctvjf9vz4
- Young, A. (2006). *Teaching writing across the curriculum* (4th ed.). Pearson. https://wac.colostate.edu/docs/books/young_teaching/young_teaching.pdf
- Zhang, X. S., & Zhang, L. J. (2022). Sustaining learners' writing development: Effects of using self-assessment on their foreign language writing performance and rating accuracy. *Sustainability*, *14*(14686). https://doi.org/10.3390/su142214686

	Appendix 1
	Lesson Plan
Available upon request.	
	Appendix 2
	Rubric
Available upon request.	
	Appendix 3
	Checklist
Available upon request.	
	Appendix 4
	Grades
Available upon request.	
	Appendix 5
	Portfolio
Available upon request.	