

## Journaling for Improved Reflective Writing

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**ABSTRACT:** Writing skills are essential for effective communication, critical thinking, and self-expression in academic and real-world contexts. These skills are particularly important in reflective writing, which requires students to analyze, evaluate, and articulate their thoughts effectively. However, many students struggle with reflective writing, as evidenced by low performance in writing assessments. This study investigates the impact of journaling as an instructional strategy to enhance students' reflective writing skills. Utilizing a quasi-experimental research design, the study employed pretest and posttest assessments to measure students' reflective writing proficiency in terms of reporting, responding, relating, reasoning, and reconstructing. A total of 60 Grade 8 learners from Dr. Maria D. Pastrana National High School participated, divided into experimental and control groups. The study revealed that students exposed to journaling showed significant improvements in their reflective writing skills across all five dimensions—reporting, responding, relating, reasoning, and reconstructing—with results significant at the 0.01 level within the experimental group. However, when comparing the post-test scores of the experimental and control groups, no statistically significant differences were found at the 0.01 level, although a slight advantage in relating experiences emerged at the 0.05 level. These findings suggest that while journaling is effective in enhancing students' reflective writing skills over time, its superiority over traditional methods was not strongly established.

**KEYWORDS:** Reflective Writing, Journaling, Writing Skills, Writing Proficiency, Experimental Research

### INTRODUCTION

Reflective writing has become a central focus in the K–12 curriculum, valued for enhancing students' critical thinking, self-awareness, and personal development. Through reflective practices, students are encouraged to document and analyze their learning experiences, connect classroom knowledge to real-world applications, and develop self-assessment skills. This approach promotes a deeper understanding of their learning processes and fosters self-reflection that supports academic achievement and personal growth.

Journaling is frequently utilized to help students write more reflectively by assisting them in expressing and analyzing their ideas and improving the coherence and clarity of their writing. Reflective writing abilities are crucial in today's schools to help students synthesize information, integrate new concepts with existing knowledge, and critically analyze their experiences. According to research, students who write reflectively daily tend to do better academically and are more resilient when faced with difficulties (Baresh, 2022).

To support this, the 5Rs of Reflective Writing—Reporting, Responding, Relating, Reasoning, and Reconstructing—is an organized method for reflective writing that provides a platform for students to think more deeply about what they have learned. In addition to reciting their experiences, students are encouraged by this framework to analyze their answers, make connections to past information, decipher meaning, and update their comprehension. Applying the 5Rs in journaling allows students to develop critical thinking, adaptability, and insight while fostering clarity and depth in their reflections.

Moreover, research shows regular feedback and organized journaling prompts are essential for cultivating strong reflective writing abilities. By presenting focused prompts, showcasing sample entries, and providing helpful criticism to assist students to hone their concepts and broaden their perspectives, teachers can increase their students' interest in reflective writing (Alsalem, 2013). Additionally, consistent journaling improves writing skills and self-awareness, enabling students to create more effective and cohesive reflections (Walter, 2008). Journaling is a flexible tool that can be used to support academic and personal development when it is in line with curriculum objectives.

Journaling also fits in nicely with the goals of education in the twenty-first century, which place a high value on abilities like creativity, critical thinking, and self-directed learning. By encouraging students to take charge of their education and create meaningful personal objectives, reflective journaling helps them develop lifelong learning habits (Wallin & Adawi, 2018). These benefits emphasize how it is to incorporate journaling into the curriculum to promote students' general growth and flexibility.

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Considering these observations, the purpose of this study, "Journaling for Improved Reflective Writing," is to investigate how the 5Rs of reflective writing—Reporting, Responding, Relating, Reasoning, and Reconstructing—can be used to improve students' reflective writing abilities through structured journaling. This study will concentrate on how journaling, using the 5Rs as a guide, helps students improve the coherence, clarity, and critical analysis of their reflections, which in turn helps them become more reflective and advance academically. This will give teachers important insights into how to help students become more proficient writers who are reflective.

### OBJECTIVES OF THE STUDY

The main purpose of the study was to evaluate the effectiveness of journaling in promoting reflective writing and to compare the reflective writing proficiency of students exposed to journaling (experimental group) with those who were not (control group).

Specifically, the study sought answers to the following questions:

1. What is the pretest score of the experimental group in reflective writing before using the journaling strategy in terms of:
  - 1.1 reporting;
  - 1.2 responding;
  - 1.3 relating;
  - 1.4 reasoning;
  - 1.5 and reconstructing?
2. What is the pretest score of the control group in reflective writing in terms of:
  - 2.1 reporting;
  - 2.2 responding;
  - 2.3 relating;
  - 2.4 reasoning;
  - 2.5 and reconstructing?
3. What is the posttest score of the experimental group after using the journaling strategy in terms of:
  - 3.1 reporting;
  - 3.2 responding;
  - 3.3 relating;
  - 3.4 reasoning;
  - 3.5 and reconstructing?
4. What is the posttest score of the control group in reflective writing in terms of:
  - 4.1 reporting;
  - 4.2 responding;
  - 4.3 relating;
  - 4.4 reasoning;
  - 4.5 and reconstructing?
5. Is there a significant difference between the pretest and posttest scores of the experimental group in reflective writing in terms of:
  - 5.1 reporting;
  - 5.2 responding;
  - 5.3 relating;
  - 5.4 reasoning;
  - 5.5 and reconstructing?
6. Is there a significant difference between the pretest and posttest scores of the control group in reflective writing in terms of:
  - 6.1 reporting;
  - 6.2 responding;
  - 6.3 relating;
  - 6.4 reasoning;
  - 6.5 and reconstructing?
7. Is there a significant difference between the pretest scores of the experimental and control group in terms of:
  - 7.1 reporting;
  - 7.2 responding;
  - 7.3 relating;
  - 7.4 reasoning;
  - 7.5 and reconstructing?

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8. Is there a significant difference between the posttest scores of the experimental and control group in terms of:

- 8.1 reporting;
- 8.2 responding;
- 8.3 relating;
- 8.4 reasoning;
- 8.5 and reconstructing?

### METHODOLOGY

This study used a quasi-experimental research method to examine how journaling helps students in Grade 8 develop their reflective writing abilities. The researcher collected information on the journaling strategy's efficacy as a teaching aid using this design.

With an emphasis on the five main components of reflective writing—reporting, responding, relating, thinking, and reconstructing, the study specifically assessed how well eighth-grade students do on reflective writing assignments both before and after utilizing journaling. It measured also variations in reflective writing abilities between a control group that did not use journaling and an experimental group that did.

During the third quarter, Grade 8 students participated in a month-long study that included a few classes and journaling exercises. To determine baseline scores in reflective writing abilities, pretests were given to the experimental and control groups.

There were weekly lessons that cover subjects related to the English 8 Most Essential Learning Competencies (MELCs) for the third quarter and used validated lesson exemplars. Journaling exercises were incorporated into these lectures for the experimental group, while a different kind of reflective writing, essay, was used for the control group.

After every weekly lecture, the experimental group participated in journaling while control group--essay. By using the 5Rs of reflective writing, these aim to help students to think critically about the subject matter covered. Throughout the reflective writing sessions, the researcher kept an eye on the students' participation, offered comments, and recorded their progress.

Both groups took a posttest to reevaluate their reflective writing abilities following the three sessions. By comparing pretest and posttest results, the researcher aims to determine any significant improvements in reflective writing scores within each group and between the experimental and control groups across all five components.

Before implementing the study, the researcher sought permission from the superintendent of the Schools Division to carry out the study at Dr. Maria D. Pastrana National High School, with an emphasis on Grade 8 students. After approval, letters inviting English master teachers were distributed to validate the study instruments.

To ensure the success of the study, the researcher made sure all necessary documents were ready and accessible prior to implementation. This preparation addressed potential challenges and supported accurate evaluation of the journaling strategy's effect on students' reflective writing scores.

### RESULTS AND DISCUSSION

**Table 1: Pretest Score of Experimental Group in Reflective Writing**

| Score Interval | Reporting |               | Responding |               | Relating  |               | Reasoning |               | Reconstructing |               | VI         |
|----------------|-----------|---------------|------------|---------------|-----------|---------------|-----------|---------------|----------------|---------------|------------|
|                | f         | %             | F          | %             | F         | %             | f         | %             | F              | %             |            |
| 1              | 4         | 13.33         | 4          | 13.33         | 18        | 60.00         | 9         | 30.00         | 9              | 30.0          | Emerging   |
| 2              | 10        | 33.33         | 8          | 26.67         | 8         | 26.67         | 7         | 23.33         | 8              | 26.67         | Developing |
| 3              | 14        | 46.67         | 16         | 53.33         | 4         | 13.33         | 13        | 43.33         | 12             | 40.00         | Proficient |
| 4              | 2         | 6.67          | 2          | 6.67          | 0         | 0.00          | 1         | 3.33          | 1              | 3.33          | Excellent  |
| <b>TOTAL</b>   | <b>30</b> | <b>100.00</b> | <b>30</b>  | <b>100.00</b> | <b>30</b> | <b>100.00</b> | <b>30</b> | <b>100.00</b> | <b>30</b>      | <b>100.00</b> |            |

*Legend: 4 Excellent, 3 Proficient, 2 Developing, 1 Emerging*

The results from Table 1 illustrate the initial performance of the experimental group in reflective writing across the five components of the 5Rs—Reporting, Responding, Relating, Reasoning, and Reconstructing. It shows that among the 5Rs of reflective writing, Responding was the strongest area while Relating was the weakest.

For Reporting, 14 students (46.67%) were at the Proficient level. This shows that almost half of the group could explain the topic and give some specific details about the lesson, though they still missed some important points. Ten students (33.33%) were at the Developing level, meaning they mentioned the topic but only gave short descriptions. Four students (13.33%) were at the Emerging level, which means they barely explained the topic and left out important details. Only two students (6.67%) reached the Excellent level, showing they were able to clearly explain the topic with enough supporting details and explanations.

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For Responding, 16 students (53.33%) were Proficient, which is the highest among all components. This means that most of the students could describe their emotions with some clarity, though not deeply. Eight students (26.67%) were Developing, giving only a brief idea of their feelings without much explanation. Four students (13.33%) were Emerging, showing they didn't explain how they felt about the lesson. Only two students (6.67%) reached the Excellent level, meaning they could clearly describe their emotions and explain the reasons behind those feelings.

Relating had the lowest performance, with 18 students (60.00%) rated as Emerging and none at the Excellent level. This means that most of the students could not make meaningful or clear connections between what they learned and their past experiences or knowledge. Eight students (26.67%) were at the Developing level, showing that they could mention a connection, but it was not clear or specific. Only four students (13.33%) were Proficient, meaning they could make some connection to their prior knowledge but gave only limited explanation.

For Reasoning, 13 students (43.33%) were rated Proficient. This shows that some students could explain what they learned, though their reasoning was still not deep. Nine students (30.00%) were at the Emerging level, showing they didn't give much explanation or didn't assess their learning well. Seven students (23.33%) were at the Developing level, giving only short or unclear explanations. Only one student (3.33%) reached the Excellent level, which means that this student could give deep insights and explain how the lesson changed or confirmed their thinking.

In Reconstructing, 12 students (40.00%) were at the Proficient level, showing that they could mention how to apply for the lesson in the future, but their ideas were not detailed or specific. Nine students (30.00%) were at the Emerging level, showing they did not mention any future application of the lesson. Eight students (26.67%) were at the Developing level, giving only brief or unclear future applications. Only one student (3.33%) reached the Excellent level, meaning that only one student could give clear and realistic ideas about how to use the lesson in the future.

Overall, these results show that, prior to the implementation of journaling, majority of students demonstrated proficiency in describing what happened and how they felt about the lesson, although lacks depth, as seen in the Responding component. However, notably, most students struggled with deeper thinking skills, particularly in making connections between the lesson and their personal experiences, as reflected in the Relating component.

Before the implementation of journaling, most students could express their feelings towards the lesson by identifying basic emotions. They clearly articulated their emotional reactions, such as "happy because the lesson was engaging," "confused due to the difficulty," or "interested in learning something new." However, while their emotions were clear, the explanation often lacked depth, as they did not elaborate on why they felt that way, showing limited reflection on the causes of their emotions.

However, most students do not show any meaningful connection between the lesson and their prior knowledge or experiences. They tend to simply narrate what they have learned, leaving out deeper reflections that link new concepts to their past experiences. This lack of depth in making connections is evident in the Relating component of the pretest, where most students were rated as Emerging. While they can articulate their immediate feelings, they struggle with the more complex cognitive processes needed for deeper reflection, such as connecting new knowledge with their previous experiences. These gaps in relating and higher-level reflection are areas where an intervention, like guided reflective activities, could make a significant impact. By encouraging students to engage more deeply with the content and relate it to their own lives, such activities could help bridge these gaps and promote more meaningful, critical reflection.

**Table 2: Pretest Score of Control Group in Reflective Writing**

| Score Interval | Reporting |               | Responding |               | Relating  |               | Reasoning |               | Reconstructing |               | VI         |
|----------------|-----------|---------------|------------|---------------|-----------|---------------|-----------|---------------|----------------|---------------|------------|
|                | f         | %             | f          | %             | f         | %             | f         | %             | f              | %             |            |
| 1              | 2         | 6.67          | 2          | 6.67          | 3         | 10.00         | 3         | 10.00         | 3              | 10.00         | Emerging   |
| 2              | 7         | 23.33         | 3          | 10.00         | 25        | 83.33         | 10        | 33.33         | 14             | 46.67         | Developing |
| 3              | 18        | 60.00         | 25         | 83.33         | 2         | 6.67          | 13        | 43.33         | 12             | 40.00         | Proficient |
| 4              | 3         | 10.00         | 0          | 0.00          | 0         | 0.00          | 4         | 13.33         | 1              | 3.33          | Excellent  |
| <b>TOTAL</b>   | <b>30</b> | <b>100.00</b> | <b>30</b>  | <b>100.00</b> | <b>30</b> | <b>100.00</b> | <b>30</b> | <b>100.00</b> | <b>30</b>      | <b>100.00</b> |            |

Legend: 4 Excellent, 3 Proficient, 2 Developing, 1 Emerging

The results from Table 2 highlight the initial performance of the control group in reflective writing across the five components of the 5Rs—Reporting, Responding, Relating, Reasoning, and Reconstructing. Among these components, Responding emerged as the strongest area while Relating was identified as the weakest.

In Responding, the majority, 25 students (83.33%), were rated Proficient. This shows that most students could describe their emotions with some clarity, although lacks depth. Three students (10.00%) were Developing indicating that these students give only brief description of feelings but lacking explanations. Two (6.67%) were Emerging, indicating that these students do not

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explain their feelings towards the lesson. Notably, no students (0.00%) scored Excellent, highlighting that while students could describe how they felt, they often failed to explain why those emotions occurred, as expected in the highest level of the rubric.

In Reporting, most of the students, 18 (60.00%), scored Proficient. This indicates that most students could generally explain the topic and present specific details about the lesson although they miss some details and focus. This was followed by 7 students (23.33%) at the Developing level, which indicates that these students mentioned the lesson but gave only brief description and 3 students (10.00%) achieved Excellent, indicating that only these 3 students can clearly explain the topic with supporting details and explanation. Two students (6.67%) scored Emerging indicating that these students barely explain the lesson by leaving important details.

In Relating, 25 students (83.33%) were at the Developing level, indicating that these students can mention a connection but lacking clarity or specificity. Three students (10.00%) scored Emerging which shows that these students were unable to make meaningful or specific connections between what they learned and their previous knowledge or experiences. Only 2 students (6.67%) achieved Proficient which points that only these students make some connections to prior knowledge with only limited explanation, and none (0.00%) were rated Excellent.

Regarding Reasoning, 13 students (43.33%) were Proficient indicating that these students, while could articulate what they learned, the depth of their reasoning was still limited. Ten students (33.33%) scored Developing, indicating that these students give only brief or unclear explanations of what they have learned. Only 4 students (13.33%) scored Excellent, meaning that these students can explain what they have learned while providing deep insights about how the lesson changed or confirmed thinking—this is the highest number of excellent scorers among all the 5Rs for this group and 3 students (10.00%) were Emerging, which indicates that these students do not explain much about what was learned or does not critically assess their learning.

In Reconstructing, 14 students (46.67%) were Developing level indicating that these students give only short or unclear future application of the lesson. 12 students (40.00%) reached Proficient, suggesting that these students can mention how the lesson can be used in the future although it lacks detailed or specific ideas. Three students (10.00%) were Emerging level indicating that these students do not mention future application of the lesson and only 1 student (3.33%) scored Excellent, showing that almost all the students do not provide clear and realistic ideas about the future application of the topic.

Overall, these results show that, prior to the implementation of the traditional writing activity to the control group, most students demonstrated proficiency in describing what happened and how they felt about the lesson, although lacking depth, as seen in the Responding component. This is like the findings for the experimental group in Table 1, where Responding was also the strongest area. However, notably, most students struggled with deeper thinking skills, particularly in making connections between the lesson and their personal experiences, as reflected in the Relating component, where a significant portion of students were rated as Developing. This pattern is consistent with the experimental group, where Relating was also identified as the weakest area.

These results were clearly reflected in the students' actual written outputs. In Responding, most students describe their feelings as "I felt happy because the lesson was interesting" or "I enjoyed the topic because it was engaging" without offering reasons why. Very few attempted to explain what triggered such emotions or how the lesson influenced them emotionally, reflecting a lack of depth in understanding the reasons behind their feelings. In the Relating component, students often wrote vague lines such as "This lesson is like something I learned before" or "It reminds me of past lessons"—but failed to specify what that prior lesson was or how exactly it related to the new one.

To address these gaps, an intervention involving structured reflective activities could significantly help students. This approach can support learners by gradually enhancing their ability to reflect more deeply and meaningfully. Specifically, the activities can guide students to describe their feelings, explore the reasons behind them, make clearer personal connections, and articulate thoughtful applications of their learning in real-life contexts.

**Table 3: Posttest Score of the Experimental Group in 5rs of Reflective Writing**

| Score Interval | Reporting |               | Responding |               | Relating  |               | Reasoning |               | Reconstructing |               | VI         |
|----------------|-----------|---------------|------------|---------------|-----------|---------------|-----------|---------------|----------------|---------------|------------|
|                | f         | %             | f          | %             | f         | %             | F         | %             | f              | %             |            |
| 1              | 0         | 0.00          | 0          | 0.00          | 0         | 0.00          | 0         | 0.00          | 0              | 0.00          | Emerging   |
| 2              | 10        | 33.33         | 6          | 20.00         | 11        | 36.67         | 9         | 30.00         | 8              | 26.67         | Developing |
| 3              | 8         | 26.67         | 16         | 53.33         | 13        | 43.33         | 11        | 36.67         | 14             | 46.67         | Proficient |
| 4              | 12        | 40.00         | 8          | 26.67         | 6         | 20.00         | 10        | 33.33         | 8              | 26.67         | Excellent  |
| <b>TOTAL</b>   | <b>30</b> | <b>100.00</b> | <b>30</b>  | <b>100.00</b> | <b>30</b> | <b>100.00</b> | <b>30</b> | <b>100.00</b> | <b>30</b>      | <b>100.00</b> |            |

Legend: 4 Excellent, 3 Proficient, 2 Developing, 1 Emerging

The post-test results of the experimental group show that all components of the 5Rs of reflective writing showed changes, with varying degrees. Notably, the largest shift is in the Relating component. The lowest shift was observed in Responding, where the overall shift was less pronounced, maintaining a steady number of students at the Proficient level.

In terms of Reporting, no students remained at the Emerging level in the post-test compared to 13.33% (4 students) in the pretest,

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reflecting an evident improvement in students' ability to describe the topic clearly, meaning no students barely explain the lesson or leave out important details after journaling was implemented. At the Developing level, the proportion remained consistent at 33.33% (10), suggesting that while some students moved up, others who were previously Emerging advanced into this category. Meanwhile, Proficient scorers decreased from 46.67% (14) to 26.67% (8), yet this drop is offset by a significant rise in the Excellent category from 6.67% (2) to 40.00% (12), indicating a notable shift toward higher-quality reporting supported by detailed examples and clarity.

For Responding, students at the Emerging level decreased from 13.33% (4) in the pretest to none in the post-test, indicating that after the intervention, all students were able to express their feelings. Those in the Developing level slightly decreased from 26.67% (8) to 20.00% (6), while Proficient scores remained steady at 53.33% (16), indicating consistency in number of students who can describe feelings although lacks depth. However, the rise in Excellent responses from 6.67% (2) to 26.67% (8) affirms that journaling helped students go beyond surface-level reactions to deeper emotional engagement and insight through describing feelings and reactions towards the topic deeply.

In Relating, the most dramatic improvement was observed. Students at the Emerging level dropped from 60.00% (18) to 0.00%, highlighting that learners were now able to connect their experiences with the content. The Developing group rose slightly from 26.67% (8) to 36.67% (11), indicating that many Emerging students transitioned here. A significant rise in the Proficient category was seen from 13.33% (4) to 43.33% (13), while Excellent scorers increased from 0.00% to 20.00% (6). These results demonstrate that journaling effectively fostered deeper personal connections to learning content.

Regarding Reasoning, none of the students remained at the Emerging level post-intervention, compared to 30.00% (9) during the pretest. This drop shows that after the intervention, all students can explain what they have learned. The Developing level slightly increased from 23.33% (7) to 30.00% (9), likely reflecting students' movement upward from the Emerging group. A slight decrease in the Proficient level from 43.33% (13) to 36.67% (11) occurred as some students progressed further. Importantly, the Excellent level rose from 3.33% (1) to 33.33% (10), indicating enhanced logical interpretation and explanation of the topic due to journaling.

Finally, in Reconstructing, no students were at the Emerging level in the post-test, a significant improvement from the 30.00% (9) in the pretest, showing enhanced skills in planning and applying learned concepts in the topic. The Developing level remained the same at 26.67% (8), though likely composed of previously Emerging students. The Proficient category increased from 40.00% (12) to 46.67% (14), while the Excellent group grew from 3.33% (1) to 26.67% (8), signifying that journaling enabled more students to articulate thoughtful, future-oriented applications of their learning.

Overall, the post-test results indicate that journaling had the most significant impact on students' ability to relate content to personal experiences, as evidenced by the dramatic improvement in the Relating component. On the other hand, the lowest improvement was observed in Responding, with students remaining at the Proficient level in large numbers, indicating that while journaling encouraged emotional expression, it did not lead to as pronounced a shift in this area.

The significant improvement in the Relating component observed in the post-test can be attributed to the structured journaling activities implemented during the study. Initially, students faced challenges in connecting lesson content to their personal experiences. However, as the journaling sessions progressed, students were provided with prompts that encouraged them to reflect on and relate the material to their own lives. This approach facilitated deeper engagement with the content, allowing students to make meaningful connections between their personal experiences and academic material. (Sage & Sele, 2015).

On the other hand, the lowest improvement in the Responding component can be linked to the brief intervention of only three journaling sessions. Pennebaker and Beall (2015) suggest that writing about emotions can lead to small improvements in emotional well-being, but more sessions may be needed for bigger changes. Similarly, Boniel-Nissim and Barak (2015) found that students who wrote about their emotions over a longer period showed better emotional outcomes.

**Table 4: Posttest Score of the Control Group in 5rs of Reflective Writing**

| Score Interval | Reporting |               | Responding |               | Relating  |               | Reasoning |               | Reconstructing |               | VI         |
|----------------|-----------|---------------|------------|---------------|-----------|---------------|-----------|---------------|----------------|---------------|------------|
|                | f         | %             | f          | %             | f         | %             | f         | %             | f              | %             |            |
| 1              | 2         | 6.67          | 2          | 6.67          | 2         | 6.67          | 2         | 6.67          | 2              | 6.67          | Emerging   |
| 2              | 8         | 26.67         | 7          | 23.33         | 12        | 40.00         | 6         | 20.00         | 7              | 23.33         | Developing |
| 3              | 10        | 33.33         | 15         | 50.00         | 16        | 53.33         | 13        | 43.33         | 14             | 46.67         | Proficient |
| 4              | 10        | 33.33         | 6          | 20.00         | 0         | 0.00          | 9         | 30.00         | 7              | 23.33         | Excellent  |
| <b>TOTAL</b>   | <b>30</b> | <b>100.00</b> | <b>30</b>  | <b>100.00</b> | <b>30</b> | <b>100.00</b> | <b>30</b> | <b>100.00</b> | <b>30</b>      | <b>100.00</b> |            |

Legend: 4 Excellent, 3 Proficient, 2 Developing, 1 Emerging

Table 4 presents the post-test scores of the control group in the five components of reflective writing. While there were changes across all areas, the degree varied. Notably, Relating component saw the highest shift. In contrast, the Responding component

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showed the least significant shift. The Reporting, Reasoning, and Reconstructing components experienced moderate shift, representing the middle range of change.

The number of students at the Emerging level in Reporting remained the same at 6.67% (2 students), indicating that a small number continued to struggle with providing explanations of the topic. Developing level slightly increases to 26.67% (8 students) from 23.33% (7 students). The percentage of students at the Proficient level decreased from 60.00% (18 students) in the pre-test to 33.33% (10 students) in the post-test. However, the Excellent category showed a significant increase, from 10.00% (3 students) to 33.33% (10 students). This upward movement from Proficient to Excellent indicates notable improvement in students' ability to articulate their ideas with clear organization and supporting details, demonstrating enhanced understanding of the topic through reflective writing.

In the Responding component, the Emerging level remained unchanged at 6.67% (2 students), showing that a small group of students still struggled to express personal reactions and feelings. The Developing level increases to (23.33%) or 7 students from (10.00%) or 3 students. Meanwhile, the Proficient level decreased from 83.33% (25 students) in the pre-test to 50.00% (15 students) in the post-test. Despite this drop, the Excellent level rose from 0% to 20.00% (6 students), reflecting a marked improvement in students' ability to articulate their emotions with greater clarity, depth, and personal insight.

In the Relating component, there was a noticeable improvement across performance levels. The Emerging level slightly decreased from 10.00% (3 students) to 6.67% (2 students), suggesting fewer students failed to make connections to prior knowledge or personal experiences. The Developing level declined significantly from 83.33% (25 students) in the pre-test to 40.00% (12 students) in the post-test, as students moved into more competent categories. The number of students at the Proficient level increased markedly from 6.67% (2 students) to 53.33% (16 students), indicating that more than half of the group became able to draw relevant, though somewhat general, connections. However, no students reached the Excellent level in either the pre-test or post-test, highlighting an area where deeper, more specific connections still need to be fostered. This movement from Developing to Proficient demonstrates improvement in relating new ideas to prior experiences, even though high-level reflective insight remains limited.

For the Reasoning component, the Emerging level slightly decreased from (10.00%) or 3 students to (6.67%) or 2 students meaning few students continued to struggle with critically explaining the lesson. Developing level decreased from 33.33% (10 students) to 20.00% (6 students), reflecting some growth in basic reasoning skills. The Proficient level remained unchanged at 43.33% (13 students), indicating that a substantial portion of the class continued to demonstrate average reasoning skills, such as drawing reasonable conclusions without deep analysis. However, the Excellent level increased from 13.33% (4 students) to 30.00% (9 students), showing that more students developed the ability to engage in higher-order thinking, providing thoughtful reasoning and justifications in their reflective responses.

In the Reconstructing component, the Emerging level slightly decreased from (10.00%) or 3 students to (6.67%) or 2 students meaning few students continued to struggle with identifying practical applications or setting realistic future goals based on what they learned. The Developing category decreased from 46.67% (14 students) to 23.33% (7 students), showing progress in students' forward-thinking abilities. The Proficient level improved from 40.00% (12 students) in the pre-test to 46.67% (14 students) in the post-test, indicating that nearly half of the students were able to identify realistic applications or make thoughtful plans for future learning although lacks specific details. Most notably, the Excellent level rose from 3.33% (1 student) to 23.33% (7 students), demonstrating enhanced ability among some students to propose specific, relevant, and well-developed ideas for applying their learning in new or meaningful contexts.

Overall, the Relating component showed the highest gain in the control group, but the improvement was still more limited compared to the experimental group. While students were able to connect their personal experiences to the reflective task, the formal nature of the essay limited the depth of these connections, making it harder for students to fully explore their emotions and experiences (Sharif & Zainuddin, 2017),

In contrast, the Responding component showed the least significant improvement, with most students remaining at the Proficient level. This is likely due to the structured nature of traditional reflective writing tasks, such as essays, which prioritize cognitive analysis over emotional engagement. Reflecting on emotions requires a level of self-awareness and emotional literacy that students may not have fully developed, and the formal structure of essays may have hindered deeper emotional expression (Baig, 2019).

Therefore, the control group's more formal reflective writing tasks did not provide the same opportunities for emotional and personal engagement as journaling, which may explain the more limited progress in the Responding and Relating components.

The moderate improvements in the Reporting, Reasoning, and Reconstructing components in the control group are due to the structured nature of traditional essay writing, which focuses on cognitive skills like organization and analysis. While this approach helped students make steady progress, the lack of emotional engagement in essay writing limited deeper reflection, preventing more significant improvement (Perez, 2021). As a result, students were able to apply their cognitive skills but did not fully engage with personal or emotional reflection, leading to only moderate gains.

Table 5: Test of Difference in 5rs of Reflective Writing of the Experimental Group

| 5Rs            | Pre-test |      | Post-test |      | t-value | df | p-value |
|----------------|----------|------|-----------|------|---------|----|---------|
|                | Mean     | SD   | Mean      | SD   |         |    |         |
| Reporting      | 2.45     | 0.83 | 3.03      | 0.87 | -4.627  | 29 | < .001  |
| Responding     | 2.52     | 0.83 | 3.07      | 0.70 | -5.191  | 29 | < .001  |
| Relating       | 1.55     | 0.74 | 2.83      | 0.76 | -10.587 | 29 | < .001  |
| Reasoning      | 2.17     | 0.93 | 3.03      | 0.82 | -6.699  | 29 | < .001  |
| Reconstructing | 2.17     | 0.93 | 3.00      | 0.76 | -6.272  | 29 | < .001  |

Legend: If p-value < 0.01, significant

Table 5 presents the statistical comparison of students' performance in the 5Rs of reflective writing before and after the implementation of journaling. The findings indicate that all dimensions of the 5Rs showed statistical improvement, with Relating demonstrating the most substantial gain while Responding shows the least gain.

Reporting, improved from a pre-test mean of 2.45 (SD = 0.83) to a post-test mean of 3.03 (SD = 0.87), showing a mean increase of 0.58 with a t-value of -4.627 and a p-value of < .001. This increase indicates that students became better at recalling and describing experiences, showing that journaling helped them organize and express observations more clearly. It also suggests that regular journaling improved their ability to structure and sequence events effectively (Adang, 2016).

Responding shows the lowest increase, from 2.52 (SD = 0.83) in the pre-test to 3.07 (SD = 0.70) in the post test, showing a mean increase of only 0.55 (t = -5.191, p < .001). This slight improvement suggests that students became more confident and articulate in expressing their thoughts and emotions, with journaling providing a safe space for open, thoughtful, and clear self-expression, although (Smith & White, 2021).

Relating exhibited the most substantial increase, with scores rising from 1.55 (SD = 0.74) to 2.83 (SD = 0.76), showing a substantial mean increase of 1.28 (t = -10.587, p < .001), indicating significant improvement in students' ability to connect personal experiences with prior knowledge. This finding suggests that journaling helped students connect personal experiences with academic concepts, encouraging critical analysis and reflective thinking that deepened their understanding and supported personal growth (Dymet, 2019).

Reasoning improved significantly from 2.17 (SD = 0.93) in the pre-test to 3.03 (SD = 0.82) in the post-test, showing a mean increase of 0.86 (t = -6.699, p < .001). This indicates that students developed stronger analytical skills, moving from simple narration to critical evaluation of their experiences. Journaling encouraged deeper thinking, allowing them to explain their thoughts logically, identify patterns, and consider multiple perspectives with greater clarity (Keogh, 2018).

Reconstructing increased from 2.17 (SD = 0.93) to 3.00 (SD = 0.76), showing a mean increase of 0.83 (t = -6.272, p < .001). This demonstrates significant growth in students' ability to draw insights and make resolutions, showing that journaling helped them reflect critically, learn from experiences, and apply those lessons to future situations. It also promoted metacognition, encouraging goal setting, informed decision-making, and intentional learning (Walker, 2018).

Notably, the most substantial increase in Relating can be attributed to how the journaling strategy helped students bridge the gap between their personal experiences and academic knowledge, which was a challenge reflected in their low pre-test scores. Many students initially struggled with connecting what they learned in the classroom to real-life situations, likely because they had limited prior experience with reflective practices or had never been encouraged to consider the relevance of academic content to their own lives. Journaling provided a structured space for students to reflect on their experiences and how these could relate to the lessons being taught, fostering deeper connections. The prompts guided them to think critically about their experiences in relation to academic concepts, helping them recognize patterns and draw connections they might have otherwise overlooked.

On the other hand, Responding showed the lowest mean increase, which can be attributed to students' relatively higher pre-test scores in this area, indicating an already developed ability to express initial emotional and personal reactions. Since reflective journaling often prioritizes spontaneous emotional expression, students may have already felt confident in this aspect, leaving less room for measurable growth. As a result, the improvement in Responding was less pronounced compared to other areas like Relating, which demanded more critical thinking and integration of personal experiences.

Overall, the significant improvements across all the 5Rs in experimental group were supported by structured nature of the journaling process, which encouraged students to engage deeply with their experiences and thoughts. Reflective practice provided a space for critical analysis and personal expression, allowing students to connect their learning to real-life situations and develop a greater understanding of their own thoughts and behaviors. This aligns with existing literature, such as the work of Dymet and O'Connell (2019), who highlighted how journaling fosters deeper cognitive engagement, and Moon (2016), who emphasized its

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role in developing higher order thinking skills. By guiding students to reflect meaningfully on their experiences, journaling not only improved their writing skills but also encouraged personal growth and a more thoughtful approach to learning.

**Table 6: Test of Difference in 5rs of Reflective Writing of the Control Group**

| 5Rs                   | Pre-test |      | Post-test |      | t-value | df | p-value |
|-----------------------|----------|------|-----------|------|---------|----|---------|
|                       | Mean     | SD   | Mean      | SD   |         |    |         |
| <b>Reporting</b>      | 2.73     | 0.74 | 2.93      | 0.94 | -1.361  | 29 | 0.184   |
| <b>Responding</b>     | 2.77     | 0.57 | 2.83      | 0.83 | -0.571  | 29 | 0.573   |
| <b>Relating</b>       | 1.97     | 0.41 | 2.47      | 0.63 | -4.785  | 29 | < .001  |
| <b>Reasoning</b>      | 2.60     | 0.86 | 2.97      | 0.89 | -2.626  | 29 | 0.014   |
| <b>Reconstructing</b> | 2.37     | 0.72 | 2.87      | 0.86 | -4.014  | 29 | < .001  |

*Legend: If p-value < 0.01, significant*

The results from Table 6 reveal varying degrees of improvement in the control group's performance across the five components of reflective writing. Relating, Reconstructing and Reasoning demonstrated significant gains, with Reasoning reaching significance at the 0.05 level, but not meeting the stricter threshold of 0.01. In contrast, Reporting and Responding showed no significant changes. Thus, the strongest statistical gain was in Relating.

For reporting, the mean score slightly increased from 2.73 (SD = 0.74) in the pre-test to 2.93 (SD = 0.94) in the post-test, showing a mean increase of 0.2. The computed t-value of -1.361 and p-value of 0.184 indicate that this difference is not statistically significant. This finding suggests that traditional reflective writing lacked the structure needed to effectively improve students' reporting skills. Without prompts or scaffolding, many struggled to organize their thoughts, resulting in minimal and inconsistent growth, as seen in the varied scores. This highlights the need for more structured support to enhance students' ability to report their learning (Peterson 2022).

Similarly, for responding, the mean score showed the least increase from 2.77 (SD = 0.57) to 2.83 (SD = 0.83), showing a mean increase of only 0.06. The computed t-value of -0.571 and p-value of 0.573 confirm that this change is not statistically significant. This suggests that students in the control group showed limited progress in expressing personal reflections, likely due to the lack of structured guidance in traditional reflective writing. The minimal score gains and increased variability highlight the limitations of unguided reflection and the need for structured support to foster deeper self-expression (Jones, 2019).

A different trend is observed in relating, where the mean score significantly increased from 1.97 (SD = 0.41) in the pre-test to 2.47 (SD = 0.63) in the post-test, with the mean increase of 0.50. The computed t-value of -4.785 and p-value of < .001 indicate a statistically significant difference. This suggests that students in the control group made some progress in connecting new learning to prior knowledge, indicating that traditional reflective writing offered support for knowledge integration. (Kline, 2020).

For reasoning, the mean score increased from 2.60 (SD = 0.86) to 2.97 (SD = 0.89), with a t-value of -2.626 and a p-value of 0.014, showing a mean increase of 0.37. This indicates a statistically significant improvement at the 0.05 level only, suggesting that traditional reflective writing supported basic reasoning. However, the absence of structured prompts may have limited students' ability to develop deeper, more critical thinking, highlighting the need for additional instructional support (Anderson, 2019).

Lastly, reconstructing showed a significant increase from 2.37 (SD = 0.72) in the pre-test to 2.87 (SD = 0.86) in the post-test, showing a mean increase of 0.50 with a computed t-value of -4.014 and a p-value of < .001. This indicates a statistically significant improvement suggesting that students in the control group showed some growth in generating insights from their experiences. Traditional reflective writing offered opportunities for synthesis, but inconsistent outcomes point to a need for more structured guidance to support meaningful and coherent reflection for all learners. (Garrison, 2021).

Notably, the highest gain in Relating can be attributed to the reflective writing task's inherent nature, which encourages students to connect their current learning experiences with prior knowledge. Reflective writing requires individuals to engage in deep, personal reflection and consider how new learning relates to past experiences, a task that aligns with the Relating component. The pre-test results for Relating showed a low mean, indicating that students were initially struggling to make these connections effectively. However, over time, as they engaged more deeply with their reflections, they likely developed a better understanding of how to relate new knowledge to their experiences. The significant improvement in Relating, suggests that students were able to enhance their ability to draw on their past experiences and apply them to new information, demonstrating the power of reflective tasks to foster this skill.

In contrast, Responding exhibited the lowest gain among the five components in the control group. This small change was not statistically significant. The relatively high pre-test means suggests that students already had a moderate level of proficiency in expressing their immediate reactions or surface-level thoughts. Moreover, the nature of the essay writing task used in the control group may have contributed to the limited progress. Essay writing generally emphasizes structured argumentation and logical

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organization, which might not sufficiently support the development of reflective skills such as emotional expression and personal insight required in Responding. Consequently, the activity did not substantially enhance students' ability to convey their feelings or internal responses, resulting in the lowest and statistically insignificant gain in this component.

Reasoning and Reconstructing showed significant gains, indicating that students engaged in more analysis and synthesis of their learning. While Reasoning improved, its p-value of 0.014 suggests that additional support, like structured prompts, may be needed for deeper critical thinking.

The overall results underscore the importance of structured prompts and guidance in reflective writing tasks. While the reflective writing task encouraged significant improvement in certain areas, particularly in connecting new learning to prior knowledge and synthesizing ideas, it fell short in promoting emotional engagement and deeper, critical reasoning. These findings suggest that to maximize the effectiveness of reflective writing as a tool for learning, further scaffolding and support should be incorporated to ensure balanced development across all components of reflective writing (Carter, 2023).

**Table 7: Test of Difference of Pretest Scores in 5rs of Reflective Writing Between Experimental and Control Groups**

| 5Rs            | Experimental |      | Control |      | t-value | df | p-value |
|----------------|--------------|------|---------|------|---------|----|---------|
|                | Mean         | SD   | Mean    | SD   |         |    |         |
| Reporting      | 2.47         | 0.74 | 2.73    | 0.82 | -1.323  | 58 | 0.191   |
| Responding     | 2.53         | 0.57 | 2.77    | 0.82 | -1.282  | 58 | 0.205   |
| Relating       | 1.53         | 0.41 | 1.97    | 0.73 | -2.828  | 58 | 0.006   |
| Reasoning      | 2.20         | 0.86 | 2.60    | 0.93 | -1.74   | 58 | 0.087   |
| Reconstructing | 2.17         | 0.72 | 2.37    | 0.91 | -0.943  | 58 | 0.350   |

*Legend: If p-value < 0.01, significant*

Table 7 presents the comparison of pre-test scores between the experimental and control groups across the 5Rs of reflective writing. The results indicate that before the intervention, both groups had largely comparable reflective writing abilities in four of the five Rs—Reporting, Responding, Reasoning, and Reconstructing—as no statistically significant differences were found. However, a significant difference was observed in the "Relating" component ( $p = 0.006$ ), where the control group had higher pre-test scores.

For Reporting, the experimental group had a mean score of 2.47 (SD = 0.74), while the control group had a slightly higher mean of 2.73 (SD = 0.82). The computed t-value of -1.323 and p-value of 0.191 suggest that this difference is not statistically significant, indicating that students in both groups had similar initial abilities in summarizing and describing experiences before receiving any instructional intervention. This is expected, as reporting is often the most basic level of reflective writing, requiring only a retelling of events rather than deeper analysis. Without explicit instruction, students may naturally develop this skill but struggle to advance to higher-order reflection. (Basoot, 2020).

For Responding, the experimental group had a mean score of 2.53 (SD = 0.57), while the control group had a slightly higher mean of 2.77 (SD = 0.82). With a t-value of -1.282 and p-value of 0.205, the difference is not statistically significant, suggesting that both groups had comparable initial tendencies to express personal reactions and emotions in reflective writing. This result highlights a common baseline among students, where emotional expression is present but remains largely surface-level. (Thorpe, 2020).

A statistically significant difference was found in Relating, where the control group (1.97, SD = 0.73) outperformed the experimental group (1.53, SD = 0.41), with a t-value of -2.828 and p-value of 0.006 ( $p < 0.01$ ). This suggests that, before the intervention, students in the control group had a significantly stronger ability to connect their reflections to prior knowledge or real-world experiences. This could be influenced by prior exposure to structured reflection or differences in learning experiences. (Morley & Dun, 2021).

For Reasoning, the experimental group had a mean score of 2.20 (SD = 0.86), while the control group had a slightly higher mean of 2.60 (SD = 0.93). The t-value of -1.740 and p-value of 0.087 indicate that the difference is not statistically significant, meaning that both groups had similar initial analytical thinking skills in interpreting their reflections. This result is commonly observed among students, as reasoning requires higher order thinking skills that are not easily developed without structured support. At the baseline, students typically find it difficult to move beyond surface-level explanations toward deeper interpretation, resulting in similarly low performance across groups prior to any targeted instructional intervention (Farell, 2018).

Lastly, Reconstructing, the pre-test mean scores were 2.17 (SD = 0.72) for the experimental group and 2.37 (SD = 0.91) for the control group, with a t-value of -0.943 and p-value of 0.350. This confirms no significant difference between the two groups, suggesting that students in both groups had similar abilities in drawing conclusions and applying insights before the intervention. Reconstructing is a complex skill that requires students to synthesize reflections and apply learning to future situations, which is often underdeveloped without explicit instruction. The similarity in pre-test scores suggests that both groups needed substantial support in this area (Koh, 2017).

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Notably, the significant difference in Relating suggests that not all students begin reflective writing instruction at the same level. This finding aligns with prior research by Morley & Dun (2021), who emphasize that students' ability to make connections between their personal experiences and broader concepts is shaped by various external influences like community and family. Additionally, previous exposure to reflective writing, whether in previous academic settings or through journaling activities, can provide a foundation that allows students to better understand how to connect their thoughts in a reflective context. These factors play a crucial role in shaping students' relational thinking, as students with more exposure to diverse experiences or reflection tend to be better at making connections between their own lives and academic content. As a result, students who have had such opportunities may naturally find it easier to engage in relating during reflective writing. Conversely, students with fewer such experiences may struggle to make these connections and, therefore, may perform at a lower level in reflective tasks that require relating.

Overall, these results indicate that both groups started with largely similar reflective writing abilities across most of the 5Rs, except for Relating, where the control group demonstrated significantly higher pre-test performance. While the cause of this difference is unclear, possible explanations include prior educational experiences, external learning opportunities, or differences in instructional exposure. The absence of significant differences in the other four Rs suggests that both groups were at a comparable starting point, allowing for a fair comparison of the intervention's effectiveness. The findings align with research by Suraworachet, et.al, 2022, which emphasizes that reflective writing skills are generally underdeveloped among students unless explicitly taught.

**Table 8: Test of Difference of Posttest Scores in 5rs of Reflective Writing Between Experimental and Control Groups**

| 5Rs            | Experimental |      | Control |      | t-value | df | p-value |
|----------------|--------------|------|---------|------|---------|----|---------|
|                | Mean         | SD   | Mean    | SD   |         |    |         |
| Reporting      | 3.07         | 0.94 | 2.93    | 0.87 | 0.569   | 58 | 0.571   |
| Responding     | 3.07         | 0.83 | 2.83    | 0.69 | 1.180   | 58 | 0.243   |
| Relating       | 2.83         | 0.63 | 2.47    | 0.75 | 2.057   | 58 | 0.044   |
| Reasoning      | 3.03         | 0.89 | 2.97    | 0.81 | 0.304   | 58 | 0.762   |
| Reconstructing | 3.00         | 0.86 | 2.87    | 0.74 | 0.643   | 58 | 0.523   |

*Legend: If  $p < 0.01$ , significant*

Table 8 presents the comparative analysis of the post-test scores in the 5Rs of reflective writing between the experimental group and control group. Although the experimental group consistently achieved higher mean scores across all five dimensions, Responding, Relating, Reasoning, and Reconstructing—the differences were not statistically significant at the set threshold of  $p < 0.01$ . A slight improvement was observed in the Relating dimension; however, it still did not meet the stricter significance criteria. In Reporting, the mean post-test score of the experimental group ( $M = 3.07$ ,  $SD = 0.94$ ) was slightly higher than that of the control group ( $M = 2.93$ ,  $SD = 0.87$ ). However, the t-value (0.569) and p-value (0.571) indicate that this difference is not statistically significant. The comparable scores suggest that both instructional strategies had a similar impact on students' reporting skills, likely because they already possessed basic abilities in recalling and summarizing experiences. While journaling provided structure, it did not offer a clear advantage over traditional reflective writing in this area. This may be due to reporting's focus on factual recounting, a skill student had likely developed through prior academic work, limiting the potential for significant improvement (Thorpe, 2020).

For Responding, the experimental group ( $M = 3.07$ ,  $SD = 0.83$ ) also outperformed the control group ( $M = 2.83$ ,  $SD = 0.69$ ), but the difference was not statistically significant ( $t = 1.180$ ,  $p = 0.243$ ). This suggests that journaling did not significantly enhance students' ability to express their reactions compared to traditional reflective writing, likely because both groups already had basic skills in articulating their thoughts. The lack of statistical significance could be due to the lack of variety in response prompts that could also limit the depth of reflection, as students may not have been encouraged to explore their feelings in a more nuanced way, thus hindering significant growth in this area (Bassot, 2020).

The results for Relating reveal that the experimental group ( $M = 2.83$ ,  $SD = 0.63$ ) scored higher than the control group ( $M = 2.47$ ,  $SD = 0.75$ ), with a t-value of 2.057 and a p-value of 0.044. While this indicates a notable difference in students' ability to connect learning experiences to prior knowledge and real-life situations, the result does not meet the stricter significance threshold of  $p < 0.01$ , suggesting that the difference, although meaningful, may not be as substantial as required for strong statistical evidence. The higher performance in Relating could indicate that journaling was particularly effective in encouraging students to engage in deeper reflection, allowing them to make meaningful connections between what they were learning and their personal experiences or the world around them. This aligns with Kolb's Experiential Learning Theory which emphasizes the transformative nature of reflection in helping learners draw connections between their experiences and conceptual understanding. Kolb's model suggests that reflection is key to moving from concrete experience to abstract conceptualization, and it may explain why journaling—an active reflective tool—helped students in the experimental group make these connections.

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However, despite this positive outcome, the absence of statistical significance at a stricter threshold may indicate that the duration of the journaling intervention was insufficient to develop students' abilities to make these connections with greater consistency or depth. Kolb's theory suggests that the process of reflective learning involves multiple stages and requires time for students to internalize and apply their learning to new situations. Thus, while journaling showed promise in enhancing students' ability to relate their learning experiences to personal contexts, it may take more sustained engagement for the full impact of relating to be realized, emphasizing the need for longer-term interventions to allow deeper connections to form.

For Reasoning, the mean post-test scores were nearly identical for both groups, with the experimental group scoring 3.03 (SD = 0.89) and the control group scoring 2.97 (SD = 0.81). The computed t-value (0.304) and p-value (0.762) indicate no statistically significant difference. A possible reason for this is that both journaling and traditional reflective writing may not have been structured to encourage deep cognitive engagement. Reasoning requires students to synthesize and apply their learning to broader contexts, but journaling often focuses more on personal reflections and emotions, which may not prompt the necessary analytical thinking. Both groups may have remained at a surface-level analysis, failing to engage in deeper critical reflection and conceptualization, as outlined in Kolb's Experiential Learning Theory.

For Reconstructing, the experimental group obtained a mean score of 3.00 (SD = 0.86), while the control group scored 2.87 (SD = 0.74). However, the t-value (0.643) and p-value (0.523) reveal no significant difference. The lack of significant difference in Reconstructing between the two groups may be due to students' limited ability to apply reflective insights to future contexts. While they have personal experiences, reconstructing requires cognitive maturity and critical thinking to synthesize past experiences into abstract concepts and apply them forward. Many students may lack the necessary analytical and metacognitive skills to make these complex connections, which could explain the similar outcomes across both groups (Keogh, 2013).

Overall, while the results indicate that the experimental group performed slightly better across all 5Rs, none of the differences were statistically significant based on the study's predefined significance level of  $p < 0.01$ . This suggests that while journaling may support students' reflective writing development, its effects on Reporting, Responding, Reasoning, and Reconstructing were comparable to the alternative reflective writing strategy used. The improvement in Relating, though not meeting the stricter significance threshold, highlights journaling's potential in helping students connect learning to prior experiences.

## CONCLUSIONS

Based on the findings of the study, the following conclusions are drawn:

1. Journaling significantly improved reflective writing in the experimental group. All five components showed statistically significant gains ( $p < 0.01$ ), leading to the rejection of the null hypothesis that there is no significant difference between the pre-test and post-test scores of the experimental group.
2. The control group showed limited improvement in reflective writing. Significant gains were only found in Relating and Reconstructing ( $p < 0.01$ ), while the other components showed minor or no statistically significant changes. Thus, the second null hypothesis is partially accepted.
3. Pre-test scores of the experimental and control groups were mostly comparable, with no significant difference in Reporting, Responding, Reasoning, and Reconstructing. However, Relating showed a significant difference ( $p = 0.006$ ), leading to a partial rejection of the third null hypothesis.
4. Post-test scores showed that the experimental group outperformed the control group across all five components of reflective writing. However, none of the differences met the  $p < 0.01$  threshold for statistical significance. The closest was Relating ( $p = 0.044$ ), which, while suggestive, did not meet stricter criteria. Therefore, the fourth null hypothesis is retained, and further research with a longer intervention period is recommended to verify the effectiveness of journaling.

## RECOMMENDATIONS

Based on the findings of the study, the following recommendations are proposed:

1. Teachers should refine instructional strategies by providing clear guidance, encouraging student engagement, and incorporating critical thinking activities to enhance reflective writing skills.
2. Future studies should focus on early intervention activities that promote personal reflection and connect new learning to students' prior experiences to address the initial differences in reflective writing skills.
3. Teachers should implement continuous reflective writing exercises with targeted journaling prompts to help students consistently connect academic content to personal experiences, fostering improvement in reflective writing.

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