

TEACHERS' FEEDBACK STRATEGIES AND STUDENTS' ACADEMIC PERFORMANCE IN GRADE 7 SCIENCE: A BASIS FOR ACTION PLAN

CHRISTINA L. RAGOT

christinaragot@gmail.com

Laguna State Polytechnic University, Philippines

ABSTRACT

The purpose of this study was to investigate the teachers' feedback strategies and students' academic performance in grade seven science. It is a correlative study in Los Banos Sub-Office in the Division of Laguna. This study aimed to answer the following questions: First, what is the level of students' awareness of feedback strategies such as oral feedback and written feedback? Second, what is the status of the teachers' utilization of feedback strategies in terms of focus, accuracy, comprehensibility, and timeliness? Third, what is the level of student's academic performance in science in terms of: written works, performance tasks, and summative test? Fourth, does students' awareness of feedback strategies significantly affect their academic performance? Fifth, does the teachers' utilization of feedback strategies significantly affect their academic performance? And lastly, what action plan may be proposed to enhance the use of feedback for the betterment of students' academic performance?

The respondents of the study were the 324 Grade 7 students of Los Banos Sub-Office in the Division of Laguna. The study seeks to describe the students' awareness of various feedback strategies and status of the teachers' utilization of feedback strategies from their own points of view. The study also looks into the students' academic performance based on the three components namely, written works, performance task, and summative assessment.

The following were the significant findings of the study; Teachers perceived that their students have high level of awareness of feedback strategies in written feedback both descriptive and formal; and in oral feedback both descriptive and formal. Teachers in the Sub-Office have very high level of utilization of feedback strategies in terms of focus, accuracy, comprehensibility, and timeliness. Students have very high level of performance in terms of written works, performance tasks, and summative tests.

Based on the findings of the study, the researcher arrived at the following conclusions. Thus, there is significant influence of student's awareness on feedback strategies to the student's academic performance. On the other hand, there is no significant influence of teacher's utilization on feedback strategies to the student's academic performance.

Keywords:

Feedback, Strategies, Utilization, Oral, Written, Focus, Accuracy, Comprehensibility, Timeliness, Written Works, Performance Tasks, Summative

INTRODUCTION

Providing feedback on learners' performance is essential to effective teaching. By providing feedback, teachers are able to communicate to the learners their strengths and areas for improvement. Through this, learners gain understanding of the adjustments they need to make

and the help that they require. Also, giving accurate and timely feedback allows both teachers and learners to resolve issues in the mastery of competencies.

Experts define feedback as information provided to the learner regarding performance in relation to learning objectives or outcomes. It aspires to and is expected to promote student learning development. By linking effort and activity with an outcome, feedback reorients or refocuses the learner's behaviors towards achieving a goal. It might be about the product or consequence of the work, the process of the task, the student's management of their learning or self-regulation, or, least effectively, about them as individuals. This feedback can be provided verbally or in writing, or through tests or digital technology. It may come from a teacher or another someone in a teaching function, as well as from peers (Education Endowment Foundation, 2022; University of South Carolina, 2021).

Historically, feedback from teachers has served as a means for pupils to assess their development. The pupils can also gauge their own personal development through the teachers' responses. Moreover, teachers are typically more adept than students at recognizing errors in their own work. Not only can a good feedback practice provide 7th graders with information to help them better their learning, but it can also supply teachers with vital information that will ultimately enhance the learning experience for students (Mamoon Al-Bashir, 2016).

While feedback offers a promising impact on teaching and learning, it is one which is not exempted from facing challenges. Literature showed that feedback can most likely improve student performance when it is constructive, timely, and consistent (Andriotis, 2018; Victoria State Government, 2022; Hommel and Rohrlach, 2022). The goal of providing learners with constructive feedback is to build them up, not tear them down. The feedback must be prompt, accurate, focused, and face-to-face. It must be provided while the learners still have time to act on it and monitor and change their learning. In the case of classroom debate and dialogue, it can be in the moment. Consistent feedback, on the other hand, causes incremental changes to occur continuously, allowing for faster observation and incorporation of student behavior into future sessions.

However, during online classes – at large, it has been a common dilemma among public school teachers to encounter difficulties in providing feedback. A number of factors affect this such as large number of students, inability of parents to comprehend written feedback, and negative acceptance of feedback. There were also experiences showing learners' disinterest to feedback. Such scenarios sometime led teacher to take giving feedback for granted.

Considering the possible impact of feedback on learners, the researcher deemed the conduct of this investigation necessary. Clarifying the degree to which teachers employ different feedback strategies and correlating it with the learners' academic performance can help determine which works best and which does not work. Also, this would be able to draw conclusions as to how much change it brought by each strategy. From this point of departure, the researcher can craft a framework that would guide teachers in ensuring meaningful feedback for their learners.

Specifically, this study answers the following questions;

1. What is the level of students' awareness on feedback strategies as to:

- 1.1 oral feedback
- 1.2 written feedback
2. What is the status of the teachers' utilization of feedback strategies in terms of:
 - 2.1 focus
 - 2.2 accuracy
 - 2.3 comprehensibility
 - 2.4 timeliness
3. What is the level of student's academic performance in science in terms of:
 - 3.1 written works
 - 3.2 performance tasks
 - 3.3 summative test
4. Does students' awareness of feedback strategies significantly effect the students' academic performance?
5. Does the teachers' utilization of feedback strategies significantly effect the students' academic performance?
6. What action plan may be proposed to enhance the use of feedback for the betterment of students' academic performance?

REVIEW OF RELATED LITERATURE

Loyola (2016) examined the three components of the Department of Education's grading system. According to her explanation, the Writing Work component ensures that students can articulate acquired abilities and ideas in written form. This may contain essays, lengthy tests, and other forms of textual output. The Performance Task allows students to demonstrate their knowledge and abilities in a variety of ways. Learners may design or innovate items or complete assignments based on performance. This may involve demonstrations of skills, group presentations, oral work, multimedia presentations, and research projects. Furthermore, written output may also be considered performance tasks. At the end of each quarter, the Quarterly Assessment measures student learning. This may consist of objective tests, performance-based evaluations, or a combination of the two.

In terms of online written works, Talent LMS (2020) argued that online tests and quizzes typically deliver instant results to the user. This is beneficial for students because they can quickly determine what they did incorrectly, what they need to focus on, and how to improve if they need to retake the test. Tests and quizzes have long served as a stimulus for students to study more when they know their progress will be evaluated on an exam, performance evaluation, etc. It establishes a deadline for when information must be mastered, and attentive students are aware that they must adhere to it.

Paul (2015) stated that research in cognitive science and psychology demonstrates that testing, when administered properly, can be an incredibly efficient method of learning. Taking tests and engaging in well-designed activities before and after testing can result in

greater retention of data, as well as a deeper and more complicated comprehension, compared to an education without exams. But a testing regime that actively fosters learning, in addition to merely assessing, would look considerably different from how testing is currently conducted in American classrooms.

Arranz (2021) further emphasized that testing activates retrieval processes that assist learning. Knowledge is more successfully stored in long-term memory and will be maintained better as a result of testing. Students can determine what they already know and where their knowledge gaps are by completing a test. It is a practical method of self-evaluation. Testing guides the students and allows them to concentrate more on the areas in which they need to improve. Students' test-based knowledge can be applied to other settings, such as new courses or daily activities, and is not merely a necessity for course completion.

Bailey (2020) explained that performance assessment allows students to participate actively in the assessment process, which, according to experts, boosts their engagement and, thus, their learning. Students can choose their assessment topic or the most effective method to demonstrate their learning. Performance evaluation is intriguing to many students because it encourages them to assume responsibility for their own learning. When students cooperate on the development of a performance assessment, they increase their understanding of the taught and assessed standards and performance outcomes.

Brookhart (2016) asserted that while a test is an efficient method for getting evidence of students' conceptual knowledge, a performance assessment is a superior method for gathering evidence of students' ability to apply their knowledge. Students are able to apply their knowledge to solve a problem or exhibit a skill on an effective performance evaluation. In performance assessments, students present or produce something, which is then evaluated based on observation and judgment, frequently using a rubric. Performance evaluation is particularly beneficial for evaluating students' mastery of difficult learning standards, their ability to apply taught concepts to solve problems, and their abilities.

Assessment Learning Network (2017) highlighted a number of obstacles in the development and utilization of performance assessments. First, because these assessments can be so "meaty" (high-quality tests such as these may contain numerous components), they require additional time and effort to administer. In addition, since students are constructing responses to the prompts, it may take longer to score these tests (multiple prompts in some cases). This necessitates greater instructional time for the administration of exams and for the grading of student replies. These obstacles may increase the price of employing these materials, since teachers may need to be compensated for additional non-instructional time spent grading student responses.

Nonetheless, Kahl and Hofman (2018) provided numerous solutions for overcoming the obstacles. First, if a pool of performance tests is created, teachers could be instructed to employ only a small subset of them and to do so throughout the school year. This will lessen the burden of assessment administration and improve the integration of assessments when they are instructionally useful. Educators might "rationalize" scoring expenses by viewing them as chances for professional development. By cooperating on scoring, teachers can refine their understandings of what high-quality student performances look like and enhance their ability to determine the amount to which students have mastered the main ideas being assessed.

Valamis (2021), on the other hand, defined constructive feedback as the form of feedback that aims to achieve a positive outcome by offering someone with comments, advice, or suggestions that are beneficial to their work or future. The result may be speedier procedures,

improved behaviors, the identification of vulnerabilities, or fresh insights. In constructive feedback, both praise and constructive criticism can play a part. Good constructive critique should concentrate on the job and not be a personal assault against the individual.

Focused Feedback is a novel method of providing feedback that was introduced by Quantum Workplace (2021). This method is advised to teachers who are either new to providing feedback or who want to position their students to take action on the most essential feedback that they receive. Through the use of Focused Feedback, teachers are able to collect student feedback and place the onus of reviewing and reflecting on that feedback squarely on the shoulders of the students themselves. This eliminates the need for students to speculate about the meaning of the feedback they have received by enabling them to concentrate on the most important lessons they may learn from it.

According to the University of Surrey (2020), a feedback strategy that places an emphasis on learning adheres to a number of fundamental criteria. A feedback mechanism is created when there is action taken based on comments. The designs of assessments need to include follow-up activities in which students can utilize the feedback and comments they receive. The extent to which students make use of feedback is one of the most important factors determining its usefulness; assessment design can help enable action. Students should be able to strengthen their grasp of quality and their ability to self-evaluate their work by actively engaging with feedback. It is important to encourage students to seek out and use feedback from a variety of sources, as well as to synthesize the feedback they receive from particular projects.

Grossman (2020) proposed that if feedback is directed toward the future, not only will it be better received but it will also drive more change. Conversations that are focused on the past have been linked to poorer rates of feedback acceptance and lower levels of motivation to change. This is because the conversations tend to center on who is at fault or responsible for what, which can convert little disagreements into significant ones. The degree to which a conversation about feedback focused on producing new ideas for future achievement was directly correlated with the degree to which an individual expressed a want to get better. People who gave the discussion a higher rating for its focus on the future were more likely to accept their comments and express a strong intention to change, even when the input was the most unfavorable.

Grossman (2020) went on to say that the people who provide feedback and the people who receive it can have very different impressions of the same experience. Those who provide feedback have a tendency to assign the causes of both excellent and bad performance to the abilities and efforts of the individual being evaluated. However, those who receive feedback have a greater propensity to attribute their successes to their own positive qualities and to attribute their failures to external forces that are beyond their control. These factors can include excessive job responsibilities, a lack of resources, or even bad luck. Those who received adverse feedback evaluated it and concluded that it was erroneous. They also concluded that the source of the input lacked trustworthiness. Feedback should place less of an emphasis on diagnosing previous performance and more of an emphasis on shaping future performance in order to encourage behavior change.

The Association for Supervision and Curriculum Development (2016) proposed that teachers should refrain from assigning grades to students' work and instead offer only comments in order to guide pupils' attention away from their position in the class and toward ways in which they can improve their education. The feedback is unambiguous (a recipe for action) on how to improve, and it is (1) unique to the qualities of the work; (2) geared to foster

thinking; and (3) specific to the qualities of the work itself. It has been found through research that students learn better when teachers assign grades as infrequently as possible while they are learning. This is due to the fact that once a grade is assigned to a piece of work, it is highly unlikely that students would take in any additional feedback. It is not always simple to write insightful comments that stimulate student thought, but doing so can be quite rewarding. It is a smart move to put this strategy into practice alongside other educators in order to solicit suggestions and comments.

Tepper and Flynn (2020) recommended learner-focused which will allow teachers to be able to put the ground-breaking study on visible learning into practice with the assistance of feedback, which has been recognized for concentrating on activities that have large impact sizes. Accelerating student achievement can be accomplished when educators employ instructional practices that have impacts that are bigger than 0.40. The power of the visible learning research lies in its ability to assist educators in gaining an understanding of which factors have the greatest influence on the levels of student achievement. This enables educators to initiate the process of making strategic decisions based on evidence that will allow them to make the most efficient use of their time, energy, and resources. The research conducted by Visible Learning is predicated on the unrivaled meta-analysis conducted by Professor John Hattie, which includes more than 1,600 research reviews, a total of 95,000 studies, and the participation of more than 300 million students. This constitutes the world's largest evidence base on what strategies are most effective in improving student learning in schools.

According to O'Reilly Media (2021), providing feedback that is accurate is one of the most important aspects of a rapid approach. According to the findings of comprehensive research, it is also the second most important behavior of the most effective coaches-style teachers. Giving feedback that a student perceives as inaccurate (off-base, unfair, unbalanced, or factually wrong) is a sure way to undermine that credibility, particularly if the teacher is evaluating a student's performance task. This is why the accurate element is so important: every time a teacher provides a student with feedback, his or her credibility is on the line. On the other hand, pupils develop a trusting and valuable relationship with professors who provide correct feedback on a frequent basis.

According to Reynolds (2017), delivering feedback to students entails explaining to them both what they are doing well and badly when assessing their own performance. On the other hand, the focus of the comments should be based mostly on the positive aspects of the pupils' performance. When a student is given an explanation and an example of what is correct and what is incorrect in their work, the learning that takes place as a result is most likely to be effective. When feedback is provided quickly after the student demonstrates that they have learnt something, the student responds favorably to it and recalls the experience regarding what is being learned in a self-assured manner. When we wait too long to provide feedback, the moment is lost, and the student may be less likely to make the connection between the feedback and the action.

When providing feedback to students, it is imperative that teachers take each student's unique circumstances into account. The students in the schools come from all walks of life. Some students need a gentle push in the right direction to achieve at a higher level, while others require a much firmer hand to ensure that they do not get disinterested in studying and suffer a blow to their sense of self-worth. It is imperative to find a happy medium between the desire to avoid upsetting a student's sentiments and the need to provide appropriate encouragement. Research on efficient methods of teaching and learning has revealed that

students desire to be informed about their progress in relation to the task that they have been assigned. Regularly responding with responses to the four questions that are presented below will assist in the delivery of high-quality feedback.

Related Studies

O'wen (2017) did an analysis of the changes that were made to a research techniques class in order to improve students' learning for understanding and transfer. Before the students turned in their final project, the teacher gave them a series of progressively more difficult low-stakes assignments to complete. These assignments were based on the concepts of formative assessment, which were taken from the existing academic literature.

Students were provided with specific, constructive feedback at each stage of the project, either from the instructor, their peers, or both, so that they would have the opportunity to evaluate their work and make adjustments before moving on to the next assignment. This feedback could come from either their peers or the instructor. A scoring rubric was utilized to evaluate the students' performance on each consecutive submission that was turned in. The instructor's decision to not require a preliminary draft of the final project ultimately resulted in a mixed set of results at the end of the course (T3). This serves to highlight the importance of providing multiple active learning opportunities for students by utilizing an approach that is progressive in nature.

Wisniewski et al. (2020) conducted a meta-analysis of empirical research on the effects of feedback on student learning. The goal of the research was to replicate and expand the Visible Learning research. There were a total of 435 studies included in the meta-analysis, and the number of participants was greater than 61,000. A random-effects model was used to analyze the data, and the overall findings suggest that feedback had a medium effect ($d = 0.48$) on student learning.

However, the significant heterogeneity that was found in the data demonstrated that feedback cannot be understood as a single consistent form of treatment. An investigation into the moderator indicated that the information content that was communicated had a significant influence on the effect. In addition, feedback has a greater influence on the development of cognitive and motor abilities than it did on the development of motivational and behavioral skills. The assumptions that were made in "The power of feedback" were taken into consideration when they explored the findings. The findings, taken as a whole, lend credence to the notion that feedback has, quite correctly, emerged as a central concern in both academic research and professional practice. On the other hand, they also highlighted the importance of understanding various forms of feedback as separate measures.

Morris and Chikwa (2016) investigated the preferences of students about the usage of audio and textual feedback, as well as the ways in which each kind of feedback received by students influences their academic performance on following tasks. In the study, 68 students participated, and they were split into two groups, each of which got feedback on their first project in the form of either audio or written comments. This information was then recalled and applied to the second assignment. The findings that were received from the second assignment were analyzed, and comparisons were made between the students who were in the audio feedback group and the students who were in the written feedback group.

A survey was sent to the students in the form of an online questionnaire, and their responses were analyzed to find out what kind of feedback they felt they had received. According to the findings of the study, the manner in which students were given feedback had no bearing on the scores they obtained on the subsequent assignment. In addition, students generally expressed satisfaction with audio feedback; nevertheless, when asked about their preferences

for input on future tasks, they strongly favored receiving written comments. The findings of the study called for a number of recommendations, one of which is that additional research be conducted on the connection between the learning styles of students and their preferences for various sorts of feedback.

Kourgiantakis et al. (2019) investigated the effect that feedback plays in the academic development of students by employing a simulation-based learning activity designed to foster holistic competency in the classroom in order to better prepare students for learning in the field. The purpose of the study was to investigate the ways in which students learn as a result of receiving feedback and the factors that contributed most to their success in doing so. They identified four elements that described the impact of feedback on student learning: (1) feedback improved abilities; (2) feedback developed professional judgment; (3) feedback boosted self-reflection; and (4) feedback expanded knowledge. The manner in which feedback was delivered, the sort of feedback that was provided, and the source of the feedback were the processes that influenced the impact of feedback. Because of these findings, our comprehension of feedback as a learning mechanism with repercussions for field education has been expanded.

Thomas and Sondergeld (2015) conducted research to determine the effectiveness of scaffolded feedback training delivered within the context of an undergraduate methods class. As a result of preservice teachers' desire to gain online teaching experience and middle school students' poor performance on edTPA assessments, a project that paired preservice teachers with students in middle school was developed. This initiative brought together preservice teachers and students. Students were working on a research project as preservice teachers received scaffolded training regarding feedback in their methods class.

The preservice teachers provided digital feedback to the students. In their research, they employed a design known as a mixed-methods intrinsic case study. There was a total of 82 pupils from rural middle schools and 16 future educators from a prominent public institution in the Midwest who took part in the study. The preservice teachers' capabilities, confidence, and views regarding the provision of feedback all improved as a direct result of their participation in the techniques course. Students in the middle grades said that they had favorable feelings about receiving comments and that they felt it was useful. The implications for preservice teacher education, learning opportunities for students in middle school, and problems associated with the study of education for teachers are examined.

Molin et al. (2020) investigated further the impact of formative feedback on the metacognitive skills of students when employing feedback strategies with polling technology. We explore assessments using the polling technology Socrative by splitting 633 physics students from six secondary schools in the Netherlands into three groups for a randomized field experiment. In the cooperative group, students use both peer conversations and teacher input, whereas in the solo group, students use only teacher feedback. In order to compare variations in metacognitive skills, students in the control group utilize Socrative but receive no formative feedback from teachers or peers.

In compared to the control group, the cooperative treatment significantly enhanced both metacognitive abilities and motivation. Researchers discovered that pupils with poor metacognitive abilities benefited much more from the cooperative treatment than those with good metacognitive abilities. There were no observed effects for the particular therapy. Using an individual treatment, girls greatly improved their metacognitive abilities and were more motivated than boys. In addition, a mediation study revealed that desire partially mediated the relationship between cooperative treatment and metacognitive abilities. They proposed a

combination of peer conversations and instructor feedback in physics courses based on these findings.

Zhu (2015) centered their research on the preferences of students regarding formative feedback methodologies and the effects of formative feedback provided by teachers on student learning. The primary benefit of electronic feedback is that it enables quick and personalized feedback to be provided. 109 undergraduate students from a university in Beijing, China, who were in their third year of study in the Business Management program were recruited to take part in the study. Participants were given a questionnaire to fill out in order to ascertain their level of metacognition as well as the types of feedback that they valued the most. In addition, for the purpose of analysis, feedback from teachers was collected in the form of emails and interactions between teachers and students were compiled. The findings revealed that students who scored high or low on the metacognition test expressed a diverse range of preferences for various feedback mechanisms. The findings indicate that students valued their teachers' formative comments, which in turn improved student learning and was recognized by students.

In their study, Lee et al. (2015) utilized TI-Navigator™, a Classroom Connectivity Technology (CCT) that provides data for teachers to provide instructional feedback. Six physical science teachers and their students participated in focus group interviews and observation surveys that were evaluated to construct a conceptual model. The final model was validated using structural equation modeling (SEM). The conceptual model highlighted the functions of student metacognition in connection to the awareness and feedback of the teacher.

The findings revealed that, first, the information gathered by CCT might be used to increase teachers' awareness of their students' learning. Second, instructor awareness is frequently a method for boosting students' metacognitive potential. The improved metacognitive ability of pupils has a substantial correlation with their learning attitudes and engagement. Teachers' feedback is a crucial educational method for enhancing students' metacognitive opportunities. Fourthly, CCT-enhanced classroom conversations regarding common issues or challenges may foster a stronger sense of community.

Moreover, a paper argued that communication of student feedback to educators is fundamental to the concept of Student Voice. Feedback can take on a wide number of forms, and the efficacy and applicability of various feedback systems may vary. Zou and Lambert (2016) compared student impressions of two traditional feedback methods—pencil-and-paper surveys and oral question-and-answer reports—to feedback gained via three digital technology platforms (Socrative, Today's Meet and Google Drive). The findings show that the employment of digital technologies in scenarios including Student Voice is likely to be highly effective due to the students' overwhelmingly positive attitude toward these tools.

Stien et al. (2022) compared performance and movement quality after a five-week resistance-training program with technology or verbal feedback from an experienced trainer. 19 untrained girls (21.84 ± 2.24 years, 169.95 ± 5.92 cm, 65.05 ± 7.93 kg) completed five weeks of training with two weekly sessions. Physical performance (back squat and isometric mid-thigh pull strength) and movement quality were measured pre- and post-intervention (weight distribution, center of gravity variation, and subjective rating of the back squat technique). Both groups increased training resistance and back squat strength during the intervention ($p = 0.01$). Only the traditional feedback group improved isometric mid-thigh pull strength ($ES = 1.11$, $p = 0.008$) and lifting technique ($p = 0.046$). Post-test force distribution ($p = 0.062$ – 0.993) and center of gravity did not change in either group ($p = 0.160$ – 0.969). Both

groups showed larger change in center of gravity at post-test (technological feedback group: $p = 0.001$; traditional feedback group: $p = 0.006$). No differences between groups were noted ($p = 0.205-0.401$).

Verbal feedback increased isometric mid-thigh pull strength and subjectively assessed lifting technique from pre- to post-test, but technical feedback did not. Both strategies improved squat strength and resistance. Beginners should choose feedback techniques based on desired results, expertise, and equipment.

Denton et al. (2017) investigated computer-assisted feedback solutions, including Electronic Feedback freeware. This MS Office tool lets tutors synthesize and email student feedback reports. 169 first-year Pharmaceutical Science and Pharmacy students answered a questionnaire to assess the software's utility. Three instructors rated 110 student replies using handwritten annotations or Electronic Feedback. PCA of Likert scale responses showed that marker identity didn't effect student replies. Electronic feedback was evaluated higher by pupils than paper feedback. A Mann-Whitney analysis of satisfaction ratings (generated by PCA) showed that four features of the assignment and feedback were significantly improved when the software was used to create feedback: markscheme clarity, feedback legibility, information on deficient aspects, and identification of the student's good work. Large class numbers and little face-to-face interaction make it difficult for modern academics to provide students meaningful feedback. Assessors reported spending less time marking with the software, which was encouraging. Electronic formative feedback can be returned faster and utilized to synthesize fair and balanced input.

Similarly, Parkin et al. (2019) studied how technology-enabled feedback can increase student learning. "Technology, Feedback, Action!" evaluated how a range of technical interventions may motivate students to engage with feedback and design activities to promote future learning. The study used qualitative methods and 23 undergraduate students to evaluate their experiences receiving electronic feedback with grades withheld, online grade publishing, criteria-based feedback, and more standard feedback approaches. Students were encouraged to discuss criticism in semi-structured interviews. Online publication of grades and comments and adaptive grade release increased student engagement with feedback. Thematic data analysis was utilized to produce good practice guides. The results are explored in context.

METHODOLOGY

This chapter outlines the data collection and analysis methods used to address the study's primary and secondary research questions. It describes the research design, sample methodologies, and data collection methods employed, as well as the analysis of the collected data. This study was conducted using quantitative research methods. Utilizing a technique of data collection in the form of survey-questionnaires, the evaluation was conducted. The literature evaluation served as the basis for the development of the survey-questionnaires used to collect quantitative data.

Research Design

The research design defines how a researcher integrates the many components of the study to ensure that the research challenge is adequately addressed (Sacred Heart University, 2018). This study will adopt a quantitative research strategy. Specifically, the survey method of quantitative research was applied in this study.

In conducting this study, the researcher uses descriptive survey method of research in assessing the different feedback strategies used by Grade 7 teachers in Science subject. It will

be done through a set of questionnaires focusing on the students' awareness of various feedback strategies and status of the teachers' utilization of feedback strategies from their own points of view. The study also looks into the students' academic performance based on the three components namely, written works, performance task, and summative assessment. According to Rick Penwarden (2014), this type of research takes form of closed-ended questions. This means that descriptive research gathers quantifiable information that can be used for statistical inference on the target audience through data analysis.

Population of the Study

The population of the study are the 9,432 Grade students enrolled in Los Baños Sub-Office. Considering the very large number of population, the researcher concentrated on Grade 7 students. The study's sample was composed of 324 grade seven students from five public junior high schools. They shall be selected via stratified random sampling.

Research Procedure

The study began by submitting survey questionnaires to a subject matter expert, a language critic, and a statistician for content and face validity. It was also a measure to ensure that the data collected with the instrument were suitable for answering the study questions. Five (5) science instructors from a neighboring sub-office were then given the electronic version of the instrument for pilot testing. After passing pilot testing, it was determined that the assessment could be administered to all 324 pupils. The researcher then obtained permission from the appropriate authorities prior to data collection.

During the data collection phase, the researcher communicated with the sub-school office's science coordinators. The researcher asked the coordinators for assistance in distributing the survey-questionnaire. The researcher allocated one month for the data collection phase, allowing all science coordinators to meet their schools' professors and students.

Research Instrument

A researcher-created and expert-validated survey questionnaire was encoded and distributed to 324 student respondents after obtaining permission from the appropriate authorities and validation. In order to protect the respondents' interests, it was made optional for them to provide their identities and the names of their schools.

The research instrument was composed of three parts. In Part I the instrument focused only on the feedback strategies. It required student-respondents to indicate their awareness of their teachers' use of oral and written feedback. A four-point Likert scale was employed in this part.

Part II, on the other hand, focused on the student-respondents' assessment of the status of their teachers' utilization of feedback. Areas such

as focus, accuracy, comprehensibility, and timeliness were looked into. To make it possible, the searcher listed descriptors for each area taken from literatures and studies reviewed.

Respondents indicated their level of agreement or disagreement to each descriptor.

Part III concerned the students' level of academic performance. The areas of considerations for this part were taken from the components required by the Department of Education. In this part, the teacher gives an assessment based on the student's written work, performance task, and summative test.

Statistical Treatment of Data

The data gathered were treated and interpreted statistically by a statistician. Weighted mean and multiple linear regression analysis were used to test the influence of teachers' awareness of feedback strategies and status of utilization of feedback strategies on the students' academic performance.

RESULT AND DISCUSSION

Table 1. Level of Student's Awareness on Descriptive Written Feedback

STATEMENTS	Mean	SD	REmarks
<i>a. writes comments on my outputs regularly.</i>	3.16	0.87	Aware
<i>b. writes specific instructions on improving my output or performance.</i>	3.43	0.70	Highly Aware
<i>c. writes letters to my parents discussing my performance in my science subject.</i>	2.94	1.10	Aware
<i>d. writes clear remarks, suggestions, and corrections on my outputs.</i>	3.31	0.88	Highly Aware
<i>e. lists both the good and bad points of the output I submitted.</i>	3.23	0.93	Aware
Weighted Mean	3.21		
SD	0.55		
Verbal Interpretation	High Aware		

Table 1 illustrates the level of student's awareness on feedback strategies in written feedback as to descriptive.

From the statement above, students were found highly aware of their teachers' writing specific instructions on improving their output or performance" after yielding the highest mean score ($M=3.43$, $SD=0.70$). Students were also highly aware about writing clear remarks, suggestions, and corrections on their outputs with a mean score ($M= 3.31$, $SD=0.88$). On the other hand, they were only aware about writing letters to their parents discussing their performance in science subject after receiving the lowest mean score of responses with ($M=2.94$, $SD=1.10$).

The level of student's awareness on feedback strategies in descriptive written feedback was very high among the respondents as shown by a weighted mean score of 3.21 and a standard deviation of 0.55 and. Results imply that teachers' use descriptive written feedback to emphasize their comments on their students' outputs and performance. However, results showed a need to improve teachers' practices in communicating these feedback to the parents. It was in consideration of the lowest mean calculated for the indicator.

According to the NSW Government (2022), effective written feedback provides students with a record of what they are doing well, what needs improvement and suggested next steps. Effective written feedback

also needs to be timely, written in a manner that is understandable to the student and actionable so that the student can make revisions.

Table 2. Level of Student's Awareness on Formal Written Feedback

STATEMENTS	Mean	SD	Remarks
<i>a. writes comments on my work using words from the rubric.</i>	2.90	1.15	Aware
<i>b. observes formal letters when discussing my points for improvement with my parents.</i>	3.30	0.84	Highly Aware
<i>c. writes me feedback using kind and unoffending words.</i>	3.14	0.90	Aware
<i>d. gives me a rubric to assess my own performance.</i>	3.21	1.09	Aware
<i>e. encourages me to assess others' performance using a set of written criteria or a rubric.</i>	3.27	0.92	Highly Aware
Weighted Mean	3.16		
SD	0.73		
Verbal Interpretation	High Aware		

Table 2 illustrates the level of student's awareness on feedback strategies in written feedback as to formal. From the statement above, it was found that students were highly aware that their teachers "observe formal letters when discussing their points for improvement with the parents" after yielding the highest mean score ($M=3.30$, $SD=0.84$). Similarly, students were highly aware that their teachers "encourage them to assess others' performance using a set of written criteria or a rubric" considering the mean score ($M= 3.27$, $SD=0.92$). On the other hand, students indicated that they were only aware of their teachers' "writing comments on works using words from the rubric" after receiving the lowest mean score of responses with ($M=2.90$, $SD=1.15$).

The results showed that the students have very high level of awareness on formal written feedback employed by their teachers as emphasized in a weighted mean score of 3.16 and a standard deviation of 0.73. Results imply the high level of formality among teachers when giving feedback to their learners.

The use practices of teachers as observed by their students support their observance of the standard procedures in assessment and feedbacking. According to the Federation University (2023), formal feedback is planned and systematically scheduled into the process. Usually associated with assessment tasks, formal feedback includes the likes of marking criteria, competencies or achievement of standards, and is recorded for both the student and school as evidence. High level of observance of teachers in using forms and letters in communicating their feedback prove their value for the importance of formalities and for the standard procedures.

Table 3. Level of Student's Awareness on Descriptive Oral Feedback

STATEMENTS	Mean	SD	Remarks
<i>a. talks to me to give comments on my outputs regularly.</i>	3.31	0.97	Highly Aware
<i>b. talks with me about how I can improve my output or performance.</i>	3.42	0.82	Highly Aware

<i>c. solicits a dialogue with me to talk about my growth.</i>	3.13	0.89	Aware
<i>d. gives praise or suggestions for scores I receive for an output or performance.</i>	3.27	0.88	Highly Aware
<i>e. explains to me the meaning of the scores I get for output or performance.</i>	3.41	0.90	Highly Aware
Weighted Mean	3.31		
SD	0.59		
Verbal Interpretation	Very Aware		

Table 3 illustrates the level of student's awareness on feedback strategies in oral feedback as to descriptive.

From results, it was observed that students were highly aware that their teachers "talk with them about how they can improve their outputs or performances" considering the highest mean score ($M=3.42$, $SD=0.82$). They were also highly aware that their teachers "explain to them the meaning of the scores they get for output or performance" as shown in the mean score ($M= 3.41$, $SD=0.90$). On the other hand, students were only aware of their teachers' "solicitation of dialogues to talk about their growth" as indicated in the mean score ($M=3.13$, $SD=0.89$).

Results showed that students were highly awareness of their teachers' oral feedback strategies as exhibited by the weighted mean score of 3.31 and a standard deviation of 0.59. Teachers seem to practice oral feedback more often than written feedback considering the higher weighted mean.

According to the NSW Government (2022), oral feedback is usually given during a lesson while written feedback tends to be given after a task. Oral feedback is sometimes underestimated because it is less formal, but it can be a very powerful and effective tool as it can be provided easily in the 'teachable moment' and in a timely way. However, according to the findings of Tian and Li (2018), students prefer receiving positive oral feedback and negative written feedback.

Table 4. Level of Student's Awareness on Formal Oral Feedback

STATEMENTS	Mean	SD	Remarks
<i>a. often explains to me the meaning of his/her comments on my work.</i>	3.21	0.96	Highly Aware
<i>b. uses clear ideas when discussing my points for improvement.</i>	3.46	0.81	Highly Aware
<i>c. talks about my mistakes in a nice manner.</i>	3.28	0.93	Highly Aware
<i>d. makes me talk to my classmates regarding our comments on each other's works.</i>	3.38	0.90	Highly Aware
<i>e. encourages me to talk about how I feel about my own work.</i>	3.16	0.93	Aware
Weighted Mean	3.30		
SD	0.67		
Verbal Interpretation	Very Aware		

Table 4 illustrates the level of student's awareness on feedback strategies in oral feedback as to formal. Based on the results, students were highly aware that their teachers "use clear ideas when discussing their points for improvement" as shown by highest mean score ($M=3.46$, $SD=0.81$). Students were also highly aware that their teachers "make them talk to their classmates regarding their comments on each other's works" as signified by the mean score ($M= 3.38$, $SD=0.90$). On the other hand, students were only aware that their teachers "encourage them to talk about how they feel about their own works" as it received the lowest mean score of responses with ($M=3.16$, $SD=0.93$).

Results indicated that student have very high level of awareness on the formal oral feedback strategies employed by their teachers as implied by the weighted mean score of 3.30 and a standard deviation of 0.67. These showed a very high level of oral formal feedback which teachers practice more than written feedback. Moreover, the results highlight the student's ability to explain clearly the feedback they give their students.

According to Andersen (2018), clarity of feedback has a 0.75 effect size—in other words, it doubles the speed of learning. This effect is an amalgamation of the essential ingredients that bring focus to the lesson or unit and ensure that learning and mastery of the standards is evident and in progress. Clarity of feedback includes explicit goal, success criteria, worked examples, and learning progressions.

Table 5. Level of Teacher's Utilization of Feedback Strategies in terms of Focus

STATEMENTS	Mean	SD	Remarks
<i>describes my performance concretely, citing specific scenarios that lead to my performance goal.</i>	3.54	0.86	Highly Focus
<i>communicates clear expectations for me and my performance.</i>	3.39	0.81	Highly Focus
<i>gives constructive, fair, and non-threatening comments.</i>	3.38	0.79	Highly Focus
<i>always provides feedback that is based on behavior; not my personality or characteristics, unless absolutely necessary.</i>	3.52	0.78	Highly Focus
<i>provides feedback that only relates to performance in specific and clear competencies.</i>	3.31	0.93	Highly Focus
Weighted Mean	3.43		
SD	0.58		
Verbal Interpretation	Very Focus		

Table 5 illustrates the level of teacher's utilization on feedback strategies in terms of Focus.

Results showed that teachers highly focus on "describing students' performance concretely, citing specific scenarios that lead to their performance goal" after yielding the highest mean score ($M=3.54$, $SD=0.86$). Also, teachers highly focus on providing feedback that is based on behavior, not students' personality or characteristics, unless absolutely necessary" as shown by the mean score ($M= 3.52$, $SD=0.78$). Although also highly focused, "providing feedback that only relates to performance in specific and clear competencies" received the lowest mean score of responses with ($M=3.31$, $SD=0.93$).

Results illustrated the very focused feedback strategies utilized by teachers after obtaining a weighted mean score of 3.43 and a standard deviation of 0.58. These implied the teachers' ability to keep their feedback in the right track especially in pointing out to the students' specific points.

According to Northwest Executive Education (2021), focused feedback can help address how things can be handled better, allowing students receiving that feedback to see how things can change while not feeling like they cannot do anything about the negative aspect of their performance. Additionally, University of South Carolina (2021) explained that the most effective feedback is focused, clear, and considers motivation and learning, not justifying a grade or on copyediting.

Table 6. Level of Teacher's Utilization of Feedback Strategies in terms of Accuracy

STATEMENTS	Mean	SD	Remarks
<i>My teacher gives me feedback based on accurate information.</i>	3.60	0.64	Always Accurate
<i>My teacher provides varied data and supports feedback with specific examples of observed behavior.</i>	3.45	0.73	Always Accurate
<i>My teacher avoids citing other students by name when referencing their observations.</i>	3.28	0.95	Always Accurate
<i>My student's feedback is specific and guides me in the most desired direction with clear, descriptive feedback.</i>	3.29	0.94	Always Accurate
<i>My student's feedback on my performance comes from multiple sources or assessment results.</i>	3.35	0.82	Always Accurate
Weighted Mean	3.39		
SD	0.52		
Verbal Interpretation	Very Accurate		

Table 6 illustrates the level of teacher's utilization on feedback strategies in terms of Accuracy.

Results showed that teachers were very accurate when "giving students feedback based on accurate information" considering the highest mean score ($M=3.60$, $SD=0.64$). Additionally, teachers were found very accurate when "providing varied data and supports feedback with specific examples of observed behavior" based on the mean score ($M=3.45$, $SD=0.73$). While also found very accurate, lowest results were obtained for "using student's feedback in directing clear, descriptive feedback" as evidenced by the lowest mean score of responses with ($M=3.29$, $SD=0.94$).

Results showed the teachers' high level of accuracy when utilizing feedback strategies as supported by the weighted mean score of 3.43 and a standard deviation of 0.58. This implied that teachers give their students accurate feedback i.e., they indicate the correctness or incorrectness of a response and provide additional information.

According to O'Byrne (2020), for feedback to be successful, teachers should explain in detail what they like the students to do in the future. Feedback should be explicit about what they would like to see next time the same task is given.

Table 7. Level of Teacher's Utilization of Feedback Strategies in terms of Comprehensibility

STATEMENTS	Mean	SD	Remarks
<i>explains how my behavior impacts my performance.</i>	3.61	0.76	Always Comprehensive

<i>uses descriptive language and actionable suggestions that help facilitate understanding and lead to greater learning.</i>	3.36	0.83	Always Comprehensive
<i>avoids judgmental language.</i>	3.19	0.96	Comprehensive
<i>gives actionable feedback.</i>	3.34	0.81	Always Comprehensive
<i>makes me know exactly how to increase my performance and what steps I need to get good scores.</i>	3.41	0.99	Always Comprehensive
Weighted Mean	3.38		
SD	0.62		
Verbal Interpretation	Very Comprehensive		

Table 7 illustrates the level of teacher's utilization on feedback strategies in terms of Comprehensibility. Results showed that teachers were always comprehensive in "explaining how student's behavior impacts performance" after yielding the highest mean score ($M=3.61$, $SD=0.76$). They were also very comprehensive in telling to student "their performance and the steps student need to take to get good scores" as supported by a mean score ($M=3.41$, $SD=0.99$). While also very comprehensive, "avoiding judgmental language" received the lowest mean score of responses with ($M=3.19$, $SD=0.96$).

Results indicated that teachers were very comprehensive when utilizing feedback strategies as evidenced by a weighted mean score of 3.38 and a standard deviation of 0.62 and was Very High among the respondents. Result imply that teachers are capable of giving feedback that students can easily understand. Making comments that students understand makes feedback more effective.

Feedback that can easily be understood is as important at comprehensible input. Lewis (2020) explained Krashen's Theory of comprehensible input and defined it as language which learners can understand. Using a language that students understand when giving feedback is important to attain the goal of giving feedback.

Table 8. Level of Teacher's Utilization of Feedback Strategies in terms of Timeliness

STATEMENTS	Mean	SD	Remarks
<i>gives me feedback as close to the assessment or activity as possible.</i>	3.74	0.48	Always Timely
<i>uses real-time metrics (rubrics) that are readily available to me as he provides immediate, helpful feedback about my performance.</i>	3.42	0.82	Always Timely
<i>does not delay or avoid providing feedback.</i>	3.23	0.80	Timely
<i>identifies issues and provides feedback before they become problems or have a large impact on my grades.</i>	3.38	0.78	Always Timely
<i>regularly schedules performance reviews.</i>	3.40	0.88	Always Timely
Weighted Mean	3.43		
SD	0.49		

Verbal Interpretation**Very Timely**

Table 8 illustrates the level of teacher's utilization on feedback strategies in terms of Timeliness.

Based on the results, teachers were always timely in "giving students feedback as close to the assessment or activity as possible" as shown by the highest mean score ($M=3.74$, $SD=0.48$). They were also always timely as they "use real-time metrics (rubrics) that are readily available as they provide immediate, helpful feedback about student's performance" as supported by a mean score ($M= 3.42$, $SD=0.82$). However, they were only often timely "not delaying or avoiding the giving of feedback" after the statement received the lowest mean score of responses with ($M=3.23$, $SD=0.80$).

Results showed that teacher were very timely in their utilization on feedback strategies as indicated by a weighted mean score of 3.43 and a standard deviation of 0.49 and was Very High among the respondents. Results imply that teacher provided immediate and timely feedback that is essential for correcting and appraising student learning.

According to Bradley University (2022), regular feedback helps learners efficiently direct their attention and energies, helps them avoid major errors and dead ends, and keeps them from learning things they later will have to unlearn at great cost. It also can serve as a motivating form of interaction between teacher and learner, and among learners.

Table 9. Level of Student's Academic Performance in Science as to Written Task

STATEMENTS	Mean	SD	Remarks
<i>are regularly submitted.</i>	3.63	0.76	Excellent
<i>contain minimal errors.</i>	3.27	0.78	Excellent
<i>are organized in a portfolio.</i>	3.01	1.01	Very Good
<i>are submitted within given period.</i>	3.44	0.92	Excellent
<i>exhibit at least 85% mastery of the competencies.</i>	3.32	0.88	Excellent
Weighted Mean	3.33		
SD	0.64		
Verbal Interpretation	Excellent		

Table 9 illustrates the level of student's performance in Science as to Written Task.

Results showed that students were excellent in their regular submissions ($M=3.63$, $SD=0.76$). They were also excellent as the submit outputs within given period ($M= 3.44$, $SD=0.92$). However, they were only very good when talking about being organized in portfolio as it received the lowest mean score of responses with ($M=3.01$, $SD=1.01$).

The level of student's performance in Science as to written task attained a weighted mean score of 3.33 and a standard deviation of 0.64 and was excellent among the respondents. Results imply that students comply with the standards in submitting outputs in Science. This led to high level of performance in the subject.

Table 10. Level of Student's Academic Performance in Science as to Performance Task

STATEMENTS	Mean	SD	Remarks
<i>Performance tasks are completed within the deadline set.</i>	3.70	0.60	Excellent
<i>Performance tasks exhibit a complete understanding of the required scientific knowledge.</i>	3.50	0.87	Excellent

<i>Student uses appropriate and complete strategies for carrying out given tasks.</i>	3.38	1.02	Excellent
<i>Student provides a clear, effective explanation of the performance.</i>	3.43	0.75	Excellent
<i>Student carefully observes all steps included in the performance task guidelines.</i>	3.44	0.77	Excellent
Weighted Mean	3.49		
SD	0.62		
Verbal Interpretation	Excellent		

Table 10 illustrates the level of student's performance in Science as to Performance Task.

Results showed that students were excellent considering the fact that performance tasks are completed within the deadline set ($M=3.70$, $SD=0.60$). Additionally, the performance tasks exhibiting complete understanding of the required scientific knowledge ($M= 3.50$, $SD=0.87$) further support students' excellence in performance tasks. However, it was observed that the lowest mean as recorded for their use of appropriate and complete strategies for carrying out given tasks ($M=3.38$, $SD=1.02$) .

Results indicated that the level of student's performance in Science as to performance task was excellent based on the weighted mean score of 3.49 and a standard deviation of 0.62. Result also show the compliance of students to the accomplishment of performance activities. Their performance also showed quality considering their use of scientific knowledge and appropriate strategies. The students in the public schools involved were highly performing in Science. However, priority improvement is required for using appropriate strategies in doing given tasks.

Table 11. Level of Student's Academic Performance in Science as to Summative Test

STATEMENTS	Mean	SD	Remarks
<i>takes summative assessments as scheduled.</i>	3.65	0.75	Excellent
<i>obtains scores higher than 80% in science.</i>	3.38	0.84	Excellent
<i>reflects on score obtained by asking the teacher.</i>	3.32	0.99	Excellent
<i>tries to review items missed in the summative assessment.</i>	3.46	0.94	Excellent
<i>shows diligence in preparing for the summative assessment</i>	3.42	0.88	Excellent
Weighted Mean	3.45		
SD	0.73		
Verbal Interpretation	Excellent		

Table 11 illustrates the level of student's performance in Science as to Summative Test.

Results showed that students were excellent in "taking summative assessments as scheduled" based on the highest mean score ($M=3.65$, $SD=0.75$). They were also excellent in "trying to review items missed in the summative assessment" with a mean score ($M= 3.46$, $SD=0.94$). While also showing excellence among students, lowest mean was recorded for "reflecting on score obtained by asking the teacher with ($M=3.32$, $SD=0.99$).

Results indicated that the level of student's performance in Science as to summative test was excellent considering the weighted mean score of 3.45 and a standard deviation of 0.73. Results were indicative of the students' desirable attitude towards summative tests. They also imply that students developed a habit of using their own scores as basis for reflecting on their performance.

Table 12. Influence of Student's Awareness on Feedback Strategies to the Student's Academic Performance

Variables		t-stat	p-value	Analysis
<i>Descriptive Written Feedback</i>	<i>Written Task</i>	-3.096	0.002	Significant
	<i>Performance Task</i>	-7.134	0.000	Significant
	<i>Summative Test</i>	-5.165	0.000	Significant
<i>Formal Written Feedback</i>	<i>Written Task</i>	-4.042	0.000	Significant
	<i>Performance Task</i>	-7.445	0.000	Significant
	<i>Summative Test</i>	-6.413	0.000	Significant
<i>Descriptive Oral Feedback</i>	<i>Written Task</i>	-0.621	0.535	Not Significant
	<i>Performance Task</i>	-4.580	0.000	Significant
	<i>Summative Test</i>	-3.263	0.001	Significant
<i>Formal Oral Feedback</i>	<i>Written Task</i>	-1.035	0.301	Not Significant
	<i>Performance Task</i>	-5.743	0.000	Significant
	<i>Summative Test</i>	-3.867	0.000	Significant

Table 12 presents the influence of student's awareness on feedback strategies to the student's academic performance.

It is interesting to note that descriptive written feedback has significant influence on student's academic performance in terms of written task (t stat = -3.096, p = 0.002), performance task (t stat = 7.134, 0.000), and summative test (t stat = -5.165, p=0.000). Similarly, formal written feedback has significant influence on written task (t stat = -4.042, p=0.000), performance task (t stat = -7.445, 0.000), and summative test (t stat = 6.413, p=0.000).

Concerning descriptive oral feedback, no significant influence was found on written task (t stat = -0.621, p=0.535). However, it was found significantly influential on performance task (t stat = -4.580, p=0.000) and summative test (t stat = -3.263, p=0.001). Similarly, formal oral feedback showed no significant influence on student's academic performance in terms of written task (t stat = -1.035, p=0.301). On the other hand, it has significant influence on performance task (t stat = -5.743, p=0.000) and summative test (t stat = -3.867, p=0.000).

Results showed that overall, descriptive and formal written feedback totally affect the academic performance of the students in all aspects. Descriptive and formal oral written feedback, on the other hand, almost have complete influence on student's academic performance. These mean that student's performance generally depends on the feedback that the teachers provide.

Results imply that when teachers are more aware of feedback strategies, their students perform better. However, it may not be true to Oral Feedback as to Descriptive and Formal to the Written Task and Performance Task. This supports the argument of Mamoon-Al-Bashir (2016) that giving feedback is an important skill for teacher and has a major influence on the quality of the students' learning process.

Table 13. Regression of Student's Academic Performance based on Teacher's Utilization of Feedback

Teacher's Utilization on Feedback Strategies	Student's Academic Performance	t-stat	p-value	Analysis
<i>Focus</i>	<i>Written Task</i>	2.851	0.005	Significant
<i>Accuracy</i>		2.014	0.045	Significant
<i>Comprehensibility</i>		1.521	0.129	Not Significant
<i>Timeliness</i>		3.014	0.003	Significant
<i>Focus</i>	<i>Performance Task</i>	-1.717	0.087	Not Significant
<i>Accuracy</i>		-2.951	0.003	Significant
<i>Comprehensibility</i>		-3.210	0.001	Significant
<i>Timeliness</i>		-1.564	0.119	Not Significant
<i>Focus</i>	<i>Summative Test</i>	-0.471	0.638	Not Significant
<i>Accuracy</i>		-1.556	0.121	Not Significant
<i>Comprehensibility</i>		-1.507	0.133	Not Significant
<i>Timeliness</i>		-0.344	0.731	Not Significant

Table 13 presents the significant influence of teacher's utilization on feedback strategies to the student's academic performance.

Results showed that students' performance in terms of written tasks significantly regressed with teachers' utilization of feedback in terms of focus (t stat = 2.851, p=0.005), accuracy (t stat=2.014, p=0.045), timeliness (t stat=3.014, p=0.003). However, comprehensibility showed no significant effect on written tasks (t stat=1.521, p=0.129).

It was further observed that performance tasks regressed along with accuracy (t stat=-2.951, (p=0.003) and comprehensibility (t stat=-3.210, p=0.001) but not with focus (t stat=-1.717, p=0.087) and timeliness (t stat=-1.564, p=0.119). It was also worth noting that none of the indicators of feedback utilization significantly regressed with summative tests. Focus (t stat=-0.471, p=0.638), accuracy (t stat=-1.556, p=0.121), comprehensibility (t stat=-1.507, p=0.133), and timeliness (t stat=-0.344, p=0.731) do not determine the students' academic performance in terms of summative tests.

The Focus, Accuracy, Comprehensibility and Timeliness was observed to have some significant effect to the student's performance as to: Written Task, and Performance Task. This is based on the computed t values obtained from the tests which were less than the critical t value. Furthermore, the p-values obtained were greater than the significance alpha 0.05, hence there is majority absence of a significance. However, none among focus, accuracy, comprehensibility and timeliness has significant effect on summative test.

From the findings above, it can be inferred that at 0.05 level of significance, the null hypothesis "There is no significant influence of teacher's utilization on feedback strategies to the student's academic performance" is accepted.

The results were different from the findings of Wisniewski et al. (2020) that feedback has higher impact on learning outcomes and of Mackinney et al. (2021) that feedback may enhance student engagement in the process and could improve academic performance when made richer and clearer.

CONCLUSION

Based on the findings of the study, the researcher arrived at the following conclusions.

1. There is significant influence of student's awareness on feedback strategies to the student's academic performance.
2. There is no significant influence of teacher's utilization on feedback strategies to the student's academic performance.

RECOMMENDATIONS

Considering the findings and conclusions of the study, the following are recommended.

For the researcher to propose an action plan that will help enhance the use of feedback for the betterment of students' academic performance.

For teachers to continuously use various feedback strategies to provide more meaningful experiences to students. Moreover, they may consider giving positive feedback (commendations) orally while negative ones may be written.

For students to observe and value the feedback provided by teachers on their outputs and performance and use such feedback to reflect on their own learning.

For learning leaders to conduct workshops on giving more meaningful and effective feedback. This will help teachers increase their skills in giving constructive criticisms on students' outputs and performance.

For parents to also engage in giving feedback on their children's outputs and performance and serve as partners of teachers in monitoring learning progress.

For future researcher to conduct a deeper investigation on how feedback impact student learning in different learning areas and what type of feedback is more effective to particular type of students.

ACKNOWLEDGEMENTS

REGINA E. GLORIA, PhD, her thesis adviser, and her inspiration to make this study possible, for being so patient in teaching her, and for the support and suggestions;

SERAFIN G. RAGOT AND AGRIPINA L. RAGOT, to her loving and supportive parents;

JULIUS CAESAR C. LITA, to her loving and kind-hearted husband;

ANGELICA L. RAGOT AND BEATHLEA C. JORVINA, to her amazing and supportive sisters;

CRISOLO L. RAGOT, to her supportive brother.

REFERENCES

Andersen, K. (2018). Feedback Without Clarity is Meaningless...At Best.

<https://corwin-connect.com/2018/09/feedback-without-clarity-is-meaninglessat-best/>

Bailey, J. (2020). Engaging Students through Performance Assessment.
<https://www.edc.org/blog/engaging-students-through-performance-assessment>

- Constructive Feedback: Examples & Tips on How to Give It. (2021, December 19). Valamis. Retrieved October 11, 2022, from <https://www.valamis.com/hub/constructive-feedback>
- Denton, P., Madden, J., Roberts, M., & Rowe, P. (2017). Students' response to traditional and computer-assisted formative feedback: A comparative case study. *British Journal of Educational Technology*, 39(3), 486-500.
- Feedback and reporting. (n.d.). Feedback and Reporting. Retrieved October 11, 2022, from <https://www.education.vic.gov.au/school/teachers/teachingresources/practice/Pages/insight-feedback.aspx>
- Feedback Theory & Strategies | Faculty Instructional Development. (n.d.). Feedback Theory & Strategies | Faculty Instructional Development. Retrieved October 11, 2022, from <https://fid.medicine.arizona.edu/clinical-educators/feedback2>
- Loyola, A.P. (2016). Performance Tasks vs Written Work. <https://www.pressreader.com/philippines/sunstar-pampanga/20160519/281663959237675>
- Mackinney, R., Kelly, J., & Pulling, C. (2021). The Effect of Feedback Type on Academic Performance. *Practice and Evidence of the Scholarship of Teaching and Learning in Higher Education*, 15(1), 78–93. <https://www.pestlhe.org/index.php/pestlhe/article/view/231>
- Owen, L. (2016). The Impact of Feedback as Formative Assessment on Student Performance. *International Journal of Teaching and Learning in Higher Education*, 28(2), 168-175.
- Parkin, H. J., Hepplestone, S., Holden, G., Irwin, B., & Thorpe, L. (2012). A role for technology in enhancing students' engagement with feedback. *Assessment & Evaluation in Higher Education*, 37(8), 963-973.