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Students' Perception of Receiving Immediate Assessment Feedback Towards Self-efficacy in Learning: Basis for Implementing Technology-Assisted Assessment Strategy

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Abstract:

This study has investigated the students' perception of receiving immediate feedback on students' self-efficacy in their learning. Students generally reported high self-efficacy (average score of 3.58), with strengths in areas like adapting learning strategies and overcoming challenges. Nevertheless, there were exceptions to this case. Some students experienced test anxiety and had no certainty that they fully understood the test given which suggests a need for things like relaxation techniques for test anxiety and metacognitive skill development that would enable students to reflect upon their learning processes. To sum up, attention should be given to every student's needs in any study of this kind. From all angles of self-efficacy, educators can modify instruction and create a supportive environment to increase student's self-confidence more than ever before. Also worth noting is that technology-based assessments accompanied by immediate feedback can help improve the understanding of the learning process among students and in general boost their self-efficacy in learning.

Keywords: Self-efficacy, Immediate feedback, Assessment, Technology-Assisted Strategy

Introduction:

Education cannot function without assessment, which informs instructional methods and offers insightful information about students' learning (Stiggins, 2005). It is well acknowledged that prompt and insightful evaluation feedback is crucial to good teaching and learning (Wiliam & Black, 1998). According to Sadler (1989), students may enhance their academic performance by recognizing their areas of strength and weakness and modifying their learning tactics accordingly. Still, a lot of educational institutions fail to providetimely assessment feedback, often falling back on delayed assessment feedback procedures.

The act of taking a long time before returning test results to students is referred to as "delayed assessment feedback" which makes it hard for them to use the comments for instant development. As a result, this delay may affect students' motivation and self-efficacy in learning (Sewagegn & Diale, 2019). A student's self-efficacy refers to how confident they are in their ability to meet certain learning objectives (Bandura, 1997). Students who get delayed feedback might lose confidence in their skills because they might not get the necessary instructions and guidance leading them towards rectifying their weaknesses.

The body of research highlights how crucial immediate and specific feedback is for fostering students' development (Brookhart, 2017). Immediate feedback has been shown by research to have positive impacts on students' performance and learning outcomes (Bangert et al., 2002). However, there is limited literature that specifically explores how immediate assessment feedback affects learners' self-efficacy. This gap in literature implies that there should be a fast response to the issue of getting timely responses that improve student's self-efficacy during the learning process.

It is worth noting that the students' trust in their own potential to learn is called self-efficacy, and is one of the greatest determinants of their academic achievement as Bandura (1997) points out. This notion forms the core of Albert Bandura's Social Cognitive Theory (SCT), which highlights how self-efficacy influences motivation and learning (Bandura, 1986). The study investigates whether immediate feedback provided through technology-based assessments enhances student self-efficacy.

Self-efficacy is the confidence a student has in overcoming problems in education. It is very necessary for learning processes to be done. (Schunk, 2012). Immediate feedback can enhance self-belief when it gives students an insight into the areas they are good at and those they are not (Nicol & Macfarlane-Dick, 2006). When learners receive their feedback at an appropriate time, they are able to adjust their study skills and have courage in performing tasks (Nicol & Macfarlane-Dick, 2006).

Immediate feedback makes it possible for students to quickly identify their strengths and weaknesses thereby adjusting their learning strategies accordingly (Bangert et al., 2003). This repetitive process of assessing, providing feedback on, and adjusting work encourages mastery and control over learning thus ultimately building self-efficacy among learners (Butler, 1987). Moreover, through progress rather than perfection, anxiety can be lowered through encouraging experimentation and collaboration (Wiliam & Black, 1989). In this regard, student collaboration increases since they are able to learn from each other's mistakes as well as accomplishments (Shuell, 1986).

An effective learning process depends on effective feedback, which is a two-way communication that calls for skills and dispositions from both teachers and students (Shum et al., 2023). It helps evaluate student learning and gives them a way to improve. The process can be hampered by delays in feedback. Immediate feedback has been shown by Ukwumaka et al. (2022) to be beneficial, as it relates to improving student performance. Immediate feedback lets errors be corrected by students thus preventing repetition of wrong practices thereby; this could clear up misconceptions and prompt relearning from previous assessments. These problems can however be solved by technology-based assessment tools, which would streamline the feedback procedures with the possibility for teachers to have quicker response time.

Research has examined why teachers might struggle to provide immediate feedback. One problem identified is workload. Fulfilling the demands of good feedback like those presented by Shum et al. (2023), requires not only knowledge but also particular skills and attitudes towards actions made as well as shortcomings highlighted during the evaluation stage. Time availability is another barrier that may limit the thoroughness of teacher's input in terms of giving comprehensive feedback (Shum et al., 2023). Additionally, an obstacle may come about through class size; large ratios between learners and tutors make it hard to give personalized comments in a timely manner (Wiliam, 2006).

Technology has greatly changed the way people do things in education which made teaching practices change drastically (Collines & Halverson, 2009). The emergence of digital tools such as Kahoot! Quizizz, EdApp, and Google Classroom have made it possible for pupils to get faster responses from their teachers as well as lessening teacher burdens concerning traditional paper-based exams. E-

assessment tools like ZipGrade come up as potential solutions to this challenge. Some studies indicate that teachers hold positive opinions toward these assessments because of grading streamlining ability and the possibility of saving time (Ferguson, 2016). Yet still teacher's attitudes may also be affected by factors such as ease of use and training provided (Ferguson, 2016).

However, some schools and teachers cannot access these technological tools due to internet connectivity challenges sometimes. Despite this challenge, the use of technology in classrooms just keeps increasing with school administrators encouraging its use in order to improve the learning experience and streamline assessment processes (Rtoglu, 2018). This trend shows how e-assessment tools can be of benefit, especially through instant feedback. Teachers' administrative tasks can be reduced by technology thereby enabling them to give individualized instruction and support students better (Dionson, 2023). For successful implementation, schools must invest in necessary resources such as dependable internet connectivity and teacher training which will enhance effective use of these tools.

Thus, this study aims to close the gap in the literature by exploring the students' perception of immediate assessment feedback on students' self-efficacy in learning. This research seeks to give insights into how educational institutions can change their assessment strategies at the end of each quarter, increasing student confidence in learning by evaluating the bond between these two factors. A possible solution for the problem of delayed assessment feedback is applying ways that give students immediate information. Several approaches can be used including technology-based assessment tools that give instant results after completion. Moreover, they promote a positive classroom environment when used as technology-based assessments. Another advantage is that teachers can offer timely feedback. When given prompt feedback about their performance; learners could correct what was wrong in their learning strategies while raising their motivation. Therefore, this study aimed to determine the students' perception of receiving immediate assessment feedback towards self-efficacy in learning and answer the research question:

1. How do Grade 7 students perceive receiving immediate assessment feedback toward self-efficacy in learning?

Body Text

Research Design

A quantitative method was used in this study, which focuses on numerical data collection and analysis to understand the phenomena under investigation (Creswell & Creswell, 2018). According to Fraenkel and Wallen (2019), using this approach a researcher is able to present facts in terms of numbers, generate measurable information, and report findings using diagrams or graphs. Researchers may uncover patterns, relationships, and directionality by quantifying the issue with numerical data that other methods such as qualitative research would not capture that concentrates on studying experiences and meanings (Merriam & Tisdell, 2016).

Locale of the Study

The study was conducted at the University of La Salette Incorporated High School also known as ULSHS. ULSHS is the La Salette School System's biggest school among others; besides it is part of the Division of Santiago City located in Malvar, Santiago City Philippines (3311) so that its outcomes can be easily applied within the local educational system. University of La Salette Incorporated High School has a junior high school for grades 7-10 and a Senior High School for grades 11-12; also, the junior high school program has its PAASCU Level II Accreditation Status. ULSHS is administered by the university president Rev. Fr. Franklin G. Picio, MS., Ph.D., who is assisted by Priscila O. Ilagan, Ph.D., the principal.

Respondents of the Study

During the academic year 2023-2024, ninety-two (92) grade seven (7) students will be sampled from

the University of La Salette, Incorporated High School. The number of students chosen is representative of about twenty-three-point nine percent (23.93%) of the entire seventh-grade enrollment population in the school. By picking a sample this size, the research has been done within reasonable length and yet it represents enough of the population. The researcher used random sampling which involved selecting participants through a chance process, eliminating bias in choosing who participates. In grade 7, each student has an equal chance to be picked for this inquiry.

Grade 7 is chosen as a sample group for some reasons. Elementary school to junior high school transition is significant for grade 7 students (Eccles & Roeser, 2011). In this case, learners have to get used to various teaching styles and assessment practices as well as learn new expectations from them (Pascarella & Terenzini, 2005). Thus, this research will examine whether student self-efficacy while entering Grade Seven can be improved through giving feedback.

Table 1: Frequency and Percentage Distribution of the Respondent

Sources of Data

Section	Number	Percentage
Grade 7 St. Monica	11	11.96
Grade 7 St. Catherine	10	10.87
Grade 7 St. Bridget	11	11.96
Grade 7 St. Lucy	10	10.87
Grade 7 St. Elizabeth	10	10.87
Grade 7 St. Therese	10	10.87
Grade 7 St. Anne	10	10.87
Grade 7 St. Angela	10	10.87
Grade 7 St. Angela	10	10.87
Grade 7 St. John Paul II	10	10.87
Total	92	100%

Data Gathering Procedures

To gather the required data, a survey questionnaire was used by the researcher. All participants were given an informed consent form that outlined the study's objectives and guaranteed their responses would remain confidential. The survey was administered after obtaining informed consent. Participants were requested to respond as well as they could and offered the chance to request a summary of research findings when done. Following the end of the data collection period, completed surveys were gathered by researcher that included both data tabulation and application of relevant statistical methods.

Statistical Analysis and Study Output

This study follows a quantitative approach by using self-administered survey questionnaires to collect data. The questionnaire was partly derived from Schunk and Pintrich's (2003) Self-Efficacy for Learning Inventory (SELFI). This tool has been found useful in measuring students' beliefs about their own ability to perform learning tasks and achieve academic success (Schunk & Pintrich, 2003). To ensure the content validity of this instrument in relation to our specific research question; the questionnaire went through a rigorous process of revision where some items were changed to fit the objective of this study.

This study employed descriptive statistics in determining how best to analyze collected data. Descriptive statistics describe features of the variables in question without making inferences regarding any larger population. While Slovin's formula has been applied to ensure sample generalizability to the target population, it is also possible to compute a representative sample size with Slovin's formula. The formula takes into consideration the desired margin of error plus the population size aimed at establishing a statistically significant sample. Given e = 0.09 (for a 9% margin of error) and no prior information about p, we can find out what smallest possible sample size n must be drawn from among N students attending grades seven (7). Frequency and Percentage were used to describe the distribution of responses for categorical variables, such as the demographic profile of the respondents.

When dealing with unequal response distributions, a weighted mean considers the frequency of each response when calculating the average hence making it more accurate in representing central tendency. Below are explained weight, scale value of weighted mean, and interpretation:

Table 2. ***Weighted Mean and Interpretation***

Weight	Scale Value	Interpretation
4	3.25-4.00	Strongly Agree
3	2.50-3.24	Agree
2	1.75-2.49	Disagree
1	1.00-1.74	Strongly Disagree

Results and Discussion:

Table 3. ***Self-Efficacy for Learning Inventory Questionnaire***

Self-Efficacy for Learning Inventory	**Weighted Mean**	**Qualitative Description**
1. Receiving immediate feedback on my assessments helps me understand my strengths and weaknesses in the learning material	3.65	Strongly Agree
2. If I receive feedback right after an assessment, I feel more motivated to improve my learning in that subject.	3.60	Strongly Agree
3. When I don't get immediate feedback, I feel unsure about whether I understand the lesson correctly	3.15	Agree
4. Knowing how I performed on an assessment immediately allows me to adjust my studying strategies for better results.	3.79	Strongly Agree
5. Immediate feedback on assessments makes me feel more confident when taking future assessments on the same topic.	3.65	Strongly Agree
6. Detailed explanations, along with feedback on my assessments, help me learn from my mistakes more effectively.	3.72	Strongly Agree
7. Waiting for feedback after an assessment creates anxiety about my performance	3.12	Agree
8. When I receive immediate feedback, I feel more in control of my learning progress.	3.61	Strongly Agree
9. Immediate feedback helps me identify areas where I need to ask the instructor for clarification.	3.59	Strongly Agree
10. I believe immediate feedback is a valuable tool for improving my overall learning experience.	3.71	Strongly Agree
11. Receiving immediate feedback makes me feel more capable of learning new things in this subject.	3.70	Strongly Agree
12. Feedback on my assessments helps me believe that I can overcome challenges in my learning.	3.63	Strongly Agree
13. Immediate feedback increases my confidence in tackling difficult learning tasks.	3.55	Strongly Agree
14. Knowing my performance right away motivates me to put in more effort in this subject	3.65	Strongly Agree
Immediate feedback makes me feel like I can achieve my learning goals in this subject.	3.62	Strongly Agree
OVERALL MEAN	3.58	Strongly Agree

The table above shows the students' perceptions of receiving immediate assessment feedback toward self-efficacy in learning. Generally, they had a high degree of confidence in themselves, as indicated by a mean score of 3.58. In short, the data given in the table reveals a largely positive trend regarding self-efficacy, as explained by an average of 3.58. This supports the idea the idea that students are

encouraged to become more determined to finish tasks and have a beneficial impact on their learning practices, which improves academic achievement. However, this means that it is necessary to scrutinize scores for individual items among the fifteen (15) assertions because such scores range from 3.12 to 3.79. This shows that students' confidence levels differ from one domain to another.

A more detailed examination of the table highlights specific areas where students excel most. For instance, a score of 3.79 was generated on statements that relate to adapting studying strategies while efficiently learning from mistakes, yielding results of (3.72). This suggests that individuals are comfortable changing their learning techniques and confident about gaining insights from past experiences, among other things. Besides, there were high ratings for phrases like "If I receive feedback right after an assessment, I feel more motivated to improve my learning in that subject." (3.60) and "Immediate feedback makes me feel like I can achieve my learning goals in this subject." (3.62), which indicate a strong desire towards succeeding in education. These factors might be affected by the fear of failing due to the assistance and feedback given immediately to the students. Students who experience mild to moderate fear may be more motivated to work harder on their academic assignments. For example, a lot of children do their schoolwork out of fear of upsetting their teacher; others behave well in class to get to recess; and still others prepare for final examinations to avoid getting a worse mark. (OECD, 2022)

However, the chart also highlights specific areas in which some students may need more help. A relatively low score of 3.12 on 'Waiting for feedback after an assessment creates anxiety about my performance' indicates that there are some students who may have difficulties regarding test anxiety or the pressure to perform well. According to Hong (1999), anxiety significantly impacted test performance, although concern alone acted as a mediator between the perceived test difficulty and performance. Targeted interventions like relaxation techniques and test-taking strategies should be considered to address this area.

It is worth noting that students demonstrated an impressive sense of confidence in their ability to acquire new knowledge (3.70) and overcome daunting challenges (3.55). Nevertheless, they scored slightly lower when it came to doubts concerning comprehending the subject matter: "When I don't get immediate feedback, I feel unsure about whether I understand the lesson correctly" (3.15). This might indicate a lack of connection somehow. Although students may have a belief in their general learning capabilities, some people will not be able to know the moments when they have not really understood a certain concept fully. In doing so, it brings out the necessity of developing metacognitive skills, which are associated with the ability to reflect upon and regulate one's own learning process, thereby closing this gap (Bond, 2013).

Moreover, the statement "I believe immediate feedback is a valuable tool for improving my overall learning experience." score of 3.71 illustrates that students usually acknowledge the need for self-efficacy in learning. The creation of an environment that allows open discussions on hardships and appreciates personal growth can help foster a positive attitude (Yeager & Dweck, 2012).

In conclusion, Table 3 gives vital perceptions about immediate feedback on students' self-efficacy concerning learning. After determining mean scores and analyzing variance within individual items, teachers can have a clearer perception of student abilities and probable areas necessitating help.

Conclusion

Within this study, students highly believed in themselves in learning, as affirmed by an average score of 3.58. This was an indication that the students had confidence in their ability to perform well. Nevertheless, there were variations across different areas. The study also found some key strengths among them. While they could easily

change their learning styles and learn from errors without any difficulty, they also wanted to do better than they had done before and accomplish their learning objectives. They additionally displayed assurance while acquiring knowledge and overcoming challenges. Similarly, the result revealed the significance of self-efficacy in learning. There were a few issues to work on too though such as test anxiety for some learners who would become anxious about how well they will perform when tested for what has been taught throughout a specific lesson in the subject, however, others are very confident about their abilities yet this does not always give insight into how much is known or understood concerning a particular topic. As a result, it would be necessary to undertake interventions such as relaxation techniques for examination stress, providing immediate assessment feedback, implementing technology-assisted assessment strategies and metacognitive skills development in enhancing learners' self-awareness of understanding during the learning process

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