



PEER FEEDBACK AND QUALITY OF TEACHING: IMPLICATIONS ON TEACHER EDUCATION STUDENTS' SELF-REGULATION

Junar P. Patlunag, Judith C. Chavez

Lourdes College, Inc., Cagayan De Oro City, Philippines

<https://doi.org/10.5281/zenodo.15282700>

ABSTRACT

Effective teaching and feedback mechanisms play a crucial role in fostering students' self-regulation, affecting their ability to manage learning processes independently. However, limited research explores the direct relationship between peer feedback, teaching quality, and self-regulation in teacher education programs, highlighting a gap in understanding how these factors interact to shape students' learning behaviors. This study investigated the correlation between peer feedback, teaching quality, and self-regulation among teacher education students. Specifically, it examined students' assessments of peer feedback, teaching quality—including teacher preparation, methodology, and feedback—and their self-regulation skills in terms of emotional and behavioral regulation. Utilizing a descriptive correlational research design, the study targeted 180 second-year BEED students from an identified college, applying the Taro Yamane formula for sampling. Grounded in Bandura's Social Cognitive Theory (1977) and Zimmerman's Self-Regulation Theory (2000), the research instruments were developed to reflect key constructs related to teacher self-efficacy, professional learning, and academic support. To ensure the validity and reliability of the instruments, expert validation was conducted, followed by pilot testing. Internal consistency was confirmed through acceptable Cronbach's alpha values, indicating that the items reliably measured the intended constructs. Findings reveal that teacher education students highly perceived peer feedback as effective, while teaching quality—especially teacher preparation—was favorably rated. The students, generally, demonstrated strong self-regulation skills, with behavioral regulation scoring higher than emotional regulation. Spearman's Rho correlation analysis indicated significant positive relationships between peer feedback, teaching quality, and self-regulation, with teaching quality showing the strongest link to

behavioral self-regulation. The study concludes that structured teaching practices and constructive feedback mechanisms play a pivotal role in enhancing students' self-regulatory skills. Given the study's reliance on self-reported measures, future research may address this limitation by employing a longitudinal approach, incorporating objective behavioral assessments, and exploring contextual factors that may influence the relationship between teaching qualities, peer feedback, and self-regulation over time.

Keywords: *Peer feedback, teaching quality, self-regulation, and self-regulation*

INTRODUCTION

Teacher-student relationships are essential to student learning by fostering self-regulation, facilitating peer assessment activities, and ensuring high-quality instruction. Self-regulation is critical for effective learning as it enables students to control their cognitive processes, emotions, and behaviors to achieve personal learning goals (Cumming et al., 2022). When students develop self-regulation skills, they gain autonomy and responsibility for their academic progress, reinforcing their ability to manage coursework and enhance problem-solving abilities (Smith, 2024). The development of self-regulation aligns with the United Nations Sustainable Development Goal (SDG) 4—Quality Education, which aims to ensure inclusive and equitable education by enhancing students' learning capabilities and critical thinking skills (United Nations, 2020). Despite its significance, research on maintaining self-regulation in relation to peer feedback, teaching quality, and diverse learning styles remains limited (Rodríguez et al., 2021).

Peer feedback has gained prominence as an innovative pedagogical tool that enhances learning experiences. Research suggests that peer feedback fosters critical thinking, strengthens problem-solving abilities, and deepens students' comprehension of academic content (Tan et al., 2023). Through active engagement in peer assessment, students cultivate a sense of responsibility and inclusivity, contributing to a collaborative and participatory learning environment (Wu et al., 2023). However, studies have yet to fully explore the interplay between peer feedback and self-regulation, particularly in the context of diverse teaching strategies and learning environments. Moreover, there is a research gap regarding the correlation of peer feedback, self-regulation, and teaching effectiveness, necessitating further investigation.

Moreover, high-quality instruction plays a crucial role in shaping students' ability to regulate their learning. Teachers who are well-trained and possess strong pedagogical expertise create inclusive learning environments that cater to varied learning styles (Zeichner et al., 2024). Effective teaching practices not only enhance academic engagement but also promote self-discipline, motivation, and focus among students (Adams et al., 2024). Given the importance of teacher quality in promoting self-regulated learning, this study aligns with SDG 4 and SDG 10—Reduced Inequalities—by advocating for inclusive education that addresses diverse student needs and enhances equitable access to high-quality learning opportunities (United Nations, 2020).

This study seeks to address these research gaps by investigating the correlation of peer feedback and teaching quality on students' self-regulation. By identifying key patterns of interaction among these variables, the research aims to provide valuable insights into educational interventions that support self-regulated learning. Findings from this study will inform educators and policymakers in designing evidence-based strategies to improve student self-regulation and optimize teaching methodologies for enhanced academic success.

Research Questions

This study aimed to determine the peer feedback and quality of teaching: implications on teacher education students' self-regulation. Specifically, the following research questions were addressed.

1. What is the participants' assessment of peer feedback?
2. What is the participants' assessment of the quality of teaching in terms of:
 - 2.1. teacher's preparation;
 - 2.2. teacher's methodology and;
 - 2.3. teacher's feedback in terms of:
 - 2.3.1. Clarity of feedback
 - 2.3.2. Timeliness of feedback?
3. What is the participants' assessment of their self-regulation skills in terms of:
 - 3.1. emotional self-regulation and;
 - 3.2. behavioral self-regulation?
4. Are the participants' assessment of peer-feedback and quality of teaching significantly associated with self-regulation?

METHODOLOGY

This research employed a descriptive correlational method, which academic communities use to study variable relationships. According to Creswell et al. (2018), this particular research design excelled at pattern and variable relationship detection and served as an excellent correlation analysis instrument. In this study, the descriptive correlational design was applied to investigate the relationship between peer feedback, teaching quality, and self-regulation among education students. Data were collected to assess how these variables correlated with the students' ability to regulate their learning. By using this approach, the study identified patterns and correlations between teaching strategies, peer evaluations, and self-regulation skills, providing empirical implications on students' self-regulation. The study employed research-made instruments that draw from Bandura's Social Learning Theory (1977) and Zimmerman's Self-Regulation Theory (2000) to explore the relationship between peer feedback and quality of teaching on teacher education students' self-regulation abilities. The survey contained statements that measured key factors through which participants provide their feedback using a five-point Likert rating scale. To validate and determine the reliability of the research instruments, a pilot test was administered to 30 third-year BEED students of the said College. To

minimize concerns related to content validity, professors in educational psychology and pedagogy were consulted to ensure that the items were valid in measuring the constructs under analysis. Internal reliability was tested by administering the instruments to a sample similar to the target population of the study, allowing for an inter-administration reliability check. Cronbach's Alpha was used to assess the internal consistency of the final set of instruments.

RESULTS

Table 1

Frequency, Percentage, and Mean Distribution of the participant's assessment of Peer feedback

| Range | Interpretation | Frequency | Percentage |
|------------------------------------|----------------|------------|--------------|
| 4.51-5.00 | Very High | 61 | 36.09 |
| 3.51-4.50 | High | 101 | 59.76 |
| 2.51-3.50 | Moderate | 7 | 4.14 |
| 1.51-2.50 | Low | 0 | 0.00 |
| 1.00-1.50 | Very Low | 0 | 0.00 |
| Total | | 169 | 100.0 |
| Overall Mean Interpretation | | | 4.32 |
| SD | | | 0.45 |

| Specific Indicators | M | Interpretation | SD |
|--|------|----------------|------|
| Feedback that I received from my peers includes clear suggestions for improvement. | 4.44 | High | 0.59 |
| I find the feedback relevant to my learning objectives. | 4.43 | High | 0.56 |
| The feedback points out my strengths as well as areas to improve. | 4.40 | High | 0.62 |
| Feedback provides specific examples that clarify my mistakes. | 4.40 | High | 0.61 |
| I feel confident implementing the suggestions provided in the feedback. | 4.34 | High | 0.63 |
| I can readily identify areas of improvement in the feedback given. | 4.34 | High | 0.54 |
| The language used in the feedback is clear and direct. | 4.32 | High | 0.58 |

| | | | |
|--|------|------|------|
| The feedback I receive from my peers is easy to understand. | 4.32 | High | 0.61 |
| Feedback from my peers is concise and doesn't include unnecessary information. | 4.11 | High | 0.74 |
| I understand the feedback without needing further explanation. | 4.11 | High | 0.72 |

Table 2

Frequency, Percentage, and Mean Distribution of Participants' Assessment of Quality of Teaching in terms of Teacher's Preparation

| Range | Interpretation | Frequency | Percentage |
|-----------------------|----------------|------------------|--------------|
| 4.51-5.00 | Very High | 92 | 54.44 |
| 3.51-4.50 | High | 71 | 42.01 |
| 2.51-3.50 | Moderate | 6 | 3.55 |
| 1.51-2.50 | Low | 0 | 0.00 |
| 1.00-1.50 | Very Low | 0 | 0.00 |
| Total | | 169 | 100.0 |
| Overall Mean | | 4.51 | |
| Interpretation | | Very High | |
| SD | | 0.48 | |

| Specific Indicators | M | Interpretation | SD |
|---|------|----------------|------|
| <i>Our Teacher...</i> | | | |
| Prepares real-life examples to help illustrate key points. | 4.61 | Very High | 0.56 |
| Prepares the lesson will that makes me more confident. | 4.59 | Very High | 0.56 |
| Identifies potential student misunderstandings and provides feedback to enhance academic performance. | 4.57 | Very High | 0.55 |
| Reviews previous lessons to help us connect new knowledge with what we've already learned. | 4.51 | Very High | 0.62 |
| Sets clear learning goals for each lesson. | 4.50 | High | 0.56 |
| Is well-prepared to address questions and clarify complex /difficult concepts. | 4.50 | High | 0.61 |
| Arrives in class fully prepared to deliver the lesson. | 4.49 | High | 0.67 |

| | | | |
|---|------|------|------|
| Organizes and structures the class content in a way that is easy to follow. | 4.48 | High | 0.60 |
| Has a deep understanding of the subject - matter. | 4.48 | High | 0.61 |
| Prepares instructional materials that enhance learning. | 4.41 | High | 0.65 |

Table 3

Frequency, Percentage, and Mean Distribution of the Participant's Assessment of Quality of Teaching in terms of Teacher's Methodology

| Range | Interpretation | Frequency | Percentage |
|-----------------------|----------------|------------------|--------------|
| 4.51-5.00 | Very High | 95 | 56.21 |
| 3.51-4.50 | High | 70 | 41.42 |
| 2.51-3.50 | Moderate | 4 | 2.37 |
| 1.51-2.50 | Low | 0 | |
| 1.00-1.50 | Very Low | 0 | |
| Total | | 169 | 100.0 |
| Overall Mean | | 4.54 | |
| Interpretation | | Very High | |
| SD | | 0.47 | |

| Specific Indicators | M | Interpretation | SD |
|--|------|----------------|------|
| <i>Our Teacher...</i> | | | |
| Uses teaching methods that encourage critical thinking and analysis. | 4.60 | Very High | 0.54 |
| Incorporates technology or multimedia effectively to enhance learning. | 4.49 | Very High | 0.59 |
| Provides opportunities for group discussions or collaborative activities. | 4.59 | Very High | 0.54 |
| Frequently uses questions to check for understanding. | 4.58 | Very High | 0.57 |
| Uses assessment techniques (like quizzes or reflections) that help reinforce learning. | 4.54 | Very High | 0.58 |
| Encourages me to ask questions and participate actively. | 4.54 | Very High | 0.57 |
| Actively involves students in the learning process. | 4.54 | Very High | 0.53 |

| | | | |
|---|------|-----------|------|
| Uses diverse or varied teaching methods that address different learning styles. | 4.52 | Very High | 0.58 |
| Adapts teaching methods to help all students understand the material. | 4.51 | Very High | 0.55 |
| Uses teaching methods that helps me retain information and perform well academically. | 4.50 | High | 0.56 |

Table 4

Frequency, Percentage, and Mean Distribution of the participant's assessment of the quality of teaching in terms of clarity of teacher's feedback

| Range | Interpretation | Frequency | Percentage |
|-----------------------|----------------|-------------|--------------|
| 4.51-5.00 | Very High | 80 | 47.34 |
| 3.51-4.50 | High | 84 | 49.70 |
| 2.51-3.50 | Moderate | 5 | 2.96 |
| 1.51-2.50 | Low | 0 | 0.00 |
| 1.00-1.50 | Very Low | 0 | 0.00 |
| Total | | 169 | 100.0 |
| Overall Mean | | 4.43 | |
| Interpretation | | High | |
| SD | | 0.49 | |

| Specific Indicators | M | Interpretation | SD |
|--|------|----------------|------|
| The feedback that I received includes clear suggestions for improvement. | 4.53 | Very High | 0.56 |
| I find the feedback relevant to my learning objectives. | 4.50 | High | 0.55 |
| Feedback provides specific examples that clarify my mistakes. | 4.49 | High | 0.54 |
| The language used in the feedback is clear and direct. | 4.48 | High | 0.57 |
| The feedback I receive from my teacher is easy to understand. | 4.47 | High | 0.61 |
| I can readily identify areas of improvement in the feedback given. | 4.44 | High | 0.59 |
| The feedback points out my strengths as well as areas for improvement. | 4.43 | High | 0.61 |
| I feel confident implementing the suggestions provided in the feedback. | 4.41 | High | 0.61 |

| | | | |
|--|------|------|------|
| Feedback is concise and doesn't include unnecessary information. | 4.34 | High | 0.74 |
| I understand the feedback without needing further explanation. | 4.19 | High | 0.82 |

Table 5

Frequency, Percentage, and Mean Distribution of the participant's assessment of the quality of teaching in terms of timelines of teacher's feedback

| Range | Interpretation | Frequency | Percentage |
|-----------------------|----------------|-------------|--------------|
| 4.51-5.00 | Very High | 69 | 40.83 |
| 3.51-4.50 | High | 91 | 53.85 |
| 2.51-3.50 | Moderate | 9 | 5.33 |
| 1.51-2.50 | Low | 0 | 0.00 |
| 1.00-1.50 | Very Low | 0 | 0.00 |
| Total | | 169 | 100.0 |
| Overall Mean | | 4.36 | |
| Interpretation | | High | |
| SD | | 0.49 | |

| Specific Indicators | M | Interpretation | SD |
|--|------|----------------|------|
| Timely feedback helps me stay motivated and engaged in my learning. | 4.44 | High | 0.58 |
| Feedback is provided within a timeframe that supports my learning. | 4.41 | High | 0.60 |
| Feedback is given when it is still relevant to my current studies. | 4.40 | High | 0.59 |
| I receive feedback on time to improve my future performance. | 4.40 | High | 0.61 |
| I feel that feedback is timely enough to positively impact my performance. | 4.38 | High | 0.59 |
| Timely feedback allows me to address my weaknesses effectively. | 4.38 | High | 0.63 |
| Feedback is provided promptly after each assignment or activity. | 4.37 | High | 0.59 |
| I receive feedback before moving on to new topics. | 4.33 | High | 0.67 |

| | | | |
|--|------|------|------|
| I find feedback is given consistently within a reasonable timeframe. | 4.31 | High | 0.62 |
| Delays in feedback affect my ability to learn and improve. | 4.18 | High | 0.71 |

Table 6

Summary Table of Quality of Teaching

| Dimensions of Quality Teaching | Mean | Interpretation | SD |
|---------------------------------------|-------------|-----------------------|-------------|
| Teachers Preparation | 4.50 | High | 0.49 |
| Teachers Methodology | 4.53 | High | 0.47 |
| Teachers feedback | 4.38 | High | 0.47 |
| Timelines | 4.36 | High | 0.49 |
| Clarity | 4.43 | High | 0.49 |
| Overall Total Quality Teaching | 4.47 | High | 0.44 |

Table 7

Frequency, Percentage, and Mean Distribution of the Participant's Assessment of their Self-regulation Skills in terms of Emotional Self-regulation

| Range | Interpretation | Frequency | Percentage |
|-----------------------|-----------------------|------------------|-------------------|
| 4.51-5.00 | Very High | 42 | 24.85 |
| 3.51-4.50 | High | 101 | 59.76 |
| 2.51-3.50 | Moderate | 24 | 14.20 |
| 1.51-2.50 | Low | 2 | 1.18 |
| 1.00-1.50 | Very Low | 0 | 0.00 |
| Total | | 169 | 100.0 |
| Overall Mean | | 4.09 | |
| Interpretation | | High | |
| SD | | 0.58 | |

| Specific Indicators | M | Interpretation | SD |
|--|----------|-----------------------|-----------|
| I stay resilient and emotionally balanced when facing academic challenges. | 4.20 | High | 0.64 |
| I maintain a positive attitude even when academic work feels difficult or demanding. | 4.18 | High | 0.68 |

| | | | |
|--|------|------|------|
| I am able to manage my emotions when I receive critical feedback on my academic work. | 4.17 | High | 0.73 |
| I avoid letting personal issues interfere with my academic performance. | 4.15 | High | 0.74 |
| I can keep my emotions, to stay productive while studying. | 4.15 | High | 0.73 |
| I manage my anxiety effectively during classroom presentations or participation. | 4.08 | High | 0.73 |
| I am able to handle unexpected setbacks in my academic work without losing motivation. | 4.08 | High | 0.70 |
| I can control feelings of stress when preparing for exams or assessments. | 4.04 | High | 0.75 |
| I remain focused even when feeling overwhelmed by academic responsibilities. | 3.96 | High | 0.76 |
| I can stay calm when I feel frustrated with challenging academic tasks. | 3.94 | High | 0.78 |

Table 8

Frequency, Percentage, and Mean Distribution of the Participant's Assessment of their Self-regulation Skills in terms of Behavioral Self-regulation

| Range | Interpretation | Frequency | Percentage |
|--------------|-----------------------|------------------|-------------------|
| 4.51-5.00 | Very High | 49 | 28.99 |
| 3.51-4.50 | High | 99 | 58.58 |
| 2.51-3.50 | Moderate | 20 | 11.83 |
| 1.51-2.50 | Low | 1 | 0.59 |
| 1.00-1.50 | Very Low | 0 | |
| | Total | 169 | 100.0 |
| | Overall Mean | | 4.19 |
| | Interpretation | | High |
| | SD | | 0.56 |

| Specific Indicators | M | Interpretation | SD |
|--|----------|-----------------------|-----------|
| I can adapt my study habits based on my academic performance feedback. | 4.31 | High | 0.65 |
| I actively seek help or resources when I encounter academic difficulties. | 4.30 | High | 0.71 |
| I avoid skipping classes even when I feel disinterested in the subject. | 4.30 | High | 0.74 |
| I am persistent in my studies, even when the material is challenging. | 4.24 | High | 0.68 |
| I monitor my academic progress and adjust my efforts as needed. | 4.24 | High | 0.67 |
| I plan to ensure I complete my work, even when I feel unmotivated. | 4.17 | High | 0.69 |
| I can organize my study schedule to manage my time effectively. | 4.17 | High | 0.74 |
| I consistently follow through with my academic goals. | 4.13 | High | 0.70 |
| I complete my academic tasks on time, even when I have other distractions. | 4.10 | High | 0.71 |
| I avoid the temptation to delay on tasks or projects. | 3.99 | High | 0.79 |

Table 9

Summary Table of Self-Regulation

| Dimensions | Mean | Interpretation | SD |
|----------------------------|-------------|-----------------------|-------------|
| Emotional Self-Regulation | 4.09 | High | 0.57 |
| Behavioral Self-Regulation | 4.19 | High | 0.55 |
| Overall Total | 4.14 | High | 0.53 |

Table 10

Results of the Association between Spearman's Peer Feedback, Quality of Teaching and Self-Regulation

| | | Peer feedback | Quality of Teaching | | | | | Total Quality teaching |
|------------------------|-------------------------|---------------|---------------------|-------------|-------------------|---------|------------|------------------------|
| | | | Preparation | Methodology | Teachers feedback | Clarity | Timeliness | |
| Emotional SR | Correlation Coefficient | .472** | .433** | .436** | .557* | .559** | .502** | .549* |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| Behavioral SR | Correlation Coefficient | .582** | .574** | .556** | .647* | .619** | .619** | .672* |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 |
| Self Regulation skills | Correlation Coefficient | .547** | .528** | .515** | .619* | .604** | .576** | .632* |
| | Sig. (2-tailed) | .000 | .000 | .000 | .000 | .000 | .000 | .000 |

DISCUSSION

Research Question 1: What is the participants' assessment of peer feedback?

Table 1 presents data on participants' perceptions of peer feedback, examining its clarity, and meaningfulness. The overall mean score of 4.32 indicates that participants generally perceived peer feedback as highly effective. The standard deviation (SD = 0.45) suggests a relatively low dispersion of responses, signifying strong agreement among participants regarding their positive perception. Notably, many of the participants endorsed peer feedback, with 59.76 percent providing high ratings and 36.09 percent assigning the

highest rating. In contrast, only 4.14 percent rated it as moderate. The predominance of high and very high ratings reflects a strong and positive consensus on the value of peer evaluations.

The participants highly rated three features of peer feedback: *"Feedback that I received from my peers includes clear suggestions for improvement"* (M=4.44) while *"I find the feedback relevant to my learning objectives"* received M = 4.43, and *"Feedback provides specific examples that clarify my mistakes"* achieved M = 4.40. Student assessments demonstrate an appreciation towards feedback which combines constructive elements with relevance to their academic targets and shows concrete examples for better comprehension. Participants showed consistent attitudes according to the standard deviations that ranged from 0.56 to 0.61 which indicates the homogeneity of their responses.

Various studies in academic literature show that constructive peer feedback holds considerable importance. Carless (2022) indicates that feedback must be detailed, actionable and related to learning targets to produce maximum results. Williams (2023) support feedback's purpose to advance student self-improvement through delivering structured and clear directions that transcend simple error detection. The research results match the identified perspectives because students appreciate feedback that detects their errors in addition to offering specific productive direction for development.

The three indicators ranked highest by participants in the study were *"The feedback points out my strengths as well as areas to improve"* (M = 4.40), *"I feel confident implementing the suggestions provided in the feedback"* (M = 4.34) and *"I can readily identify areas of improvement in the feedback given"* (M = 4.34). These aspects maintain a high rating level however their slightly reduced means hint at possible improvement potential. Study participants demonstrated moderate range in their responses regarding feedback helpfulness as indicated by standard deviation levels spanning from 0.54 to 0.63 because some students demonstrated difficulty in both understanding and applying the received feedback.

Students who struggle with converting feedback into practical steps might explain why specific satisfaction ratings received lower assessments from participants. According to Panadero et al. (2019), there is a need to provide clarity in feedback delivery and receiver ability to understand feedback meaningfully for effective feedback exchange. Extra training on self-assessment with goal-setting instruction could be provided to students who lack confidence in implementing peer feedback to achieve its maximum potential.

The high ratings obtained from all indicators demonstrate peer feedback produces effective results within this learning environment Carless (2022). The educators may expand their feedback delivery guidelines to enhance their ability to give fair assessments that combine positive attributes with developmental areas. The training of effective feedback implementation techniques should be included in the curriculum because it improves student confidence in feedback application and leads to enhanced learning results.

Research Question 2: What is the participants' assessment of the quality of teaching in terms of:

- 2.1. teacher's preparation;**
- 2.2. teacher's methodology and;**
- 2.3. teacher's feedback in terms of:**
 - 2.3.1. Clarity of feedback**
 - 2.3.2. Timeliness of feedback?**

Table 2 reflects the frequency, percentage, and mean distribution of participants' assessment of quality of teaching in terms of teacher's preparation. As a whole, the participants evaluated their teachers' preparation at a very high level as indicated in the overall mean score of 4.51 with a standard deviation (SD) of 0.48. Students agreed that their teachers showed commendable preparation skills as supported by more than half (54.44%), claiming a very good teachers' preparation skill.

Students ranked preparing realistic examples for lesson examples (M=4.61) as the highest-rated indicator, followed by preparation providing academic success confidence to learners (M=4.59) and lastly identifying learning mistakes for feedback improvement (M = 4.57). The evaluations show that applying real-life concepts to classroom education while actively addressing student errors requires close attention. The consistent responses displayed through standard deviations between 0.55 and 0.56 demonstrate that students have an agreement about the effectiveness of such teacher preparation methods.

Educational literature documents the importance of teaching that applies real-life examples. Teacher effectiveness relies on practical lesson examples that enhance student learning and focus through concrete examples, according to Darling-Hammond et al. (2020). Lipsch-Wijnen et al. (2019) declares that feedback-driven instruction serves the essential purpose of identifying student misunderstandings for correction, which leads to enhanced academic outcomes. The research data from this study matches existing viewpoints that emphasize both practical lesson examples and specific feedback in educational plans.

Students rated the *preparation of instructional materials for enhancing learning with the lowest mean score (M = 4.41)*. Similarly, the lowest ratings were given to the *teacher's organization of content and understanding of the subject matter, both receiving a mean score of (M = 4.48)*. Although these indicators reflect a high performance, the relatively lower ratings suggest areas for potential improvement. The standard deviation values, ranging from 0.60 to 0.65, indicate slight variability in responses, suggesting that while many students recognize these areas as strengths, some believe they require further enhancement.

The somewhat lower ratings might stem from irregularities in instructional resources alongside material organization problems. Deep subject knowledge alongside the talent to organize material clearly defines effective teaching, according to Simonsmeier et al. (2020). Students face difficulties engaging with the lesson because poorly organized or

unprepared instructional materials make it hard for them to follow the instruction. The enhancement of student perception toward teaching quality can be achieved through better alignment of lesson design with appropriate material preparation techniques.

The data further reveal that students rated teacher preparation as efficient based on their responses because none of them believe teachers are less than prepared. Student responses indicated high consistency based on the overall mean standard deviation, which remained at 0.48. Student achievement and their learning confidence stand higher in classrooms of properly trained teachers, as researchers Lipsch-Wijnen et al. (2019) previously documented. Student feedback demonstrates a considerable respect for teachers who make classes meaningful by using practical examples alongside structured feedback practices and enhance student academic self-confidence. The ratings regarding content organization and instructional material preparation received slightly lower marks than other evaluation areas. Studies need to research the effects different instructional material qualities have on student educational outcomes.

Table 3 shows the participants' evaluation of teaching quality regarding instructors' methodologies through their assessment results. The teaching methods employed by teachers received "*Very High*" marks from students, as shown in the overall mean of 4.54. A standard deviation of 0.47 signifies homogeneity of responses indicating that participants widely agreed that the teaching methods being used demonstrated effective rating.

Students rated three teaching strategies among the specific indicators as "*Uses teaching methods that encourage critical thinking and analysis*" (M = 4.60), along with "*Provides opportunities for group discussions or collaborative activities*" (M = 4.59) and "*Frequently uses questions to check for understanding*" (M = 4.58). Students place the highest importance on teaching methods that both deepen learning engagement and create opportunities for student-to-student interaction.

The importance of the study's findings is supported by the research of Johnson et al. (2019), espousing that group learning functions as an essential feature of student-centered education because it helps students maintain their acquired material and build connections with others. The authors further contended that teachers resort to frequent questioning in their classes, and this practice matches the principles of Socratic pedagogy that enhances student understanding and self-awareness abilities Chin et al. (2021).

The three lowest-ranked sub-processes maintained "*Very High or High*" status according to students even though their mean scores (4.49, 4.50, and 4.54) and standard deviations (0.59, 0.56, and 0.58) indicate a generally high and solid performance rating. Students rated "*Incorporates technology or multimedia effectively to enhance learning,*" "*Teaching methods used help me retain information and perform well academically,*" and "*Uses assessment techniques (like quizzes or reflections) that help reinforce learning.*"

Although students generally appreciate technology integration, they have indicated through lower ratings that there exists potential to improve the way integration occurs.

Educational institutions strongly need technology to make both learner involvement and customized teaching methods possible. The findings in Wang et al. (2024) show that technology will produce its best outcomes when pedagogical principles blend with instructional delivery.

Moreover, students held mostly positive evaluations regarding teaching methodology since 56.21 percent reported "Very High" ratings and 41.42 percent identified it as "High." The evaluation results show that students have an entirely positive perception of teaching effectiveness because not one person selected the "Low" or "Very Low" options. The reported results match previous studies, which demonstrate that adaptive and student-engaging teaching strategies lead to better educational outcomes combined with satisfied students (Darling-Hammond et al., 2020).

Student assessments together with technological integration represent two target areas for improvement based on received perception of exceptionally high teaching methodology quality. By implementing innovative instructional strategies and an adaptive teaching framework, the school can maintain student engagement as well as learning outcomes.

Table 4 shows participants' assessment of teacher feedback clarity. The students consider their teacher feedback to be "High" based on an overall 4.43 mean score, which shows that students believe they receive understandable feedback. Participants displayed a similar understanding of feedback clarity since the standard deviation of 0.49 indicates similarity of responses.

The specific feedback clarity indicators which reached the highest marks among participants are "The feedback that I received includes clear suggestions for improvement" (M = 4.53, SD = 0.56), "I find the feedback relevant to my learning objectives" (M = 4.50, SD = 0.55) and "Feedback provides specific examples that clarify my mistakes" (M = 4.49, SD = 0.54). Students place high importance on feedback when it includes constructive guidance aimed at achieving goals through specific demonstration examples. Students learn better when feedback helps them improve and suits their educational goals, as described in Lipsch-Wijnen et al. (2019). Student performance improves when feedback provides concrete examples, according to Wisniewski et al. (2020).

Students rated the three lowest indicators such as "High" but the ratings are lower than the rest with "I understand the feedback without needing further explanation" (M = 4.19) and "Feedback is concise and doesn't include unnecessary information" (M = 4.34) and "I feel confident implementing the suggestions provided in the feedback" (M = 4.41). Students mostly comprehend feedback from teachers but require occasional clarification on these particular indicators according to their decreased ratings. Few students rated feedback with conciseness because certain feedback contains additional details that could benefit from more efficient clarification. A total of 47.34 percent of students evaluated the clarity of feedback at "Very High" while 49.70 percent gave a rating of "High" according to the frequency distribution results. Students understand and benefit from their

teachers' feedback since ratings for "Low" or "Very Low" are missing from the available data. Students need transparent feedback to find out their skills and weaknesses so their learning development becomes better.

Several student responses vary regarding their independence in understanding feedback without further clarification, as indicated by high standard deviations in this indicator (SD = 0.82). However, this variability might suggest that certain students need supplemental educational support to understand those teacher evaluations. The implementation of interactive feedback sessions or personalized feedback methods should help students understand and develop confident use of feedback (Carless, 2019). Standards of teachers' feedback remain positive, but the data indicate that further development is needed to allow all students to understand and put feedback into practice by themselves without needing clarification.

Table 5 presents the frequency that students give a mean rating of 4.36 towards teacher feedback timeliness, which translates to "High." Most students indicate their teachers give feedback at appropriate times, which helps their learning.

Analysis of the standard deviation (SD) at 0.49 reveals a small dispersion in student perceptions, therefore, students tend to agree about this aspect of teaching quality. Participation data indicated that students rated the timeliness of feedback as "Very High" (40.83%) or "High" (53.85%), making up almost 94.68 percent of the total responses and showing a "Moderate" rank for only 5.33 percent. All survey participants held positive views about feedback timing in their learning setting since they did not select either "Low" or "Very Low" options.

Students highly valued timely feedback since it promotes both learning motivation and engagement (M = 4.44), while feedback timing supports their academic process (M = 4.41) until they can use it to enhance subsequent performance (M = 4.40). Student enjoyment of their academic journey and better academic results closely depend on receiving prompt feedback, according to these study findings. Students learn best and stay engaged when feedback arrives at the proper time (Lipsch-Wijnen et al.) because this enables them to make needed adjustments quickly.

Students further rated three indicators with scores at the "High" level yet positioned them as the lowest ranked measures out of the seven indicated areas. They evaluated "Delays in feedback affect my ability to learn and improve" (M = 4.18), "I find feedback is given consistently within a reasonable timeframe" (M = 4.31), and "I receive feedback before moving on to new topics" (M = 4.33) as the least effective aspects. Student feedback timing is generally satisfactory, but delivery consistency seems to vary occasionally according to the high mean values and moderate standard deviations in these metrics. The research done by Carless and Boud (2022) supports that consistent feedback delivery is crucial because students need immediate and regular feedback to integrate new information efficiently. The research data show similar patterns because some pupils encountered delayed feedback intermittently before moving between subjects.

Zimmerman's (2020) self-regulation theory supports feedback as an essential feature of self-directed learning since students can monitor their progress through it to modify their approach effectively. Learners who receive feedback right after their work perform better at assessing their performance and making required adjustments to prevent future misconception solidification. According to pedagogical standards, the provision of immediate and consistent feedback serves as a core factor that supports optimal student learning.

A standardized feedback system operated by educators should give students proper constructive feedback before moving onto new educational material. The efficiency of feedback mechanisms improves when digital platforms and automated assessment tools are used as suggested in the study of Ajjawi and Boud (2020). Teaching practice becomes more effective when formative feedback methods, including peer feedback and self-assessment, join teacher feedback to reduce time delays between assessment and feedback delivery (Winstone & Nash, 2021).

Table 6 presents the mean, standard deviation, and interpretation of participants' perceptions regarding the dimensions of quality teaching, revealing an overall mean of 4.47, interpreted as high. Among the specific dimensions, teachers' methodology received the highest rating ($M = 4.53$, $SD = 0.47$), followed by teachers' preparation ($M = 4.50$, $SD = 0.49$) and teachers' feedback ($M = 4.38$, $SD = 0.47$), all categorized as high. These findings highlight that while all aspects of quality teaching are well-regarded, instructional methods are perceived as the most effective component. This aligns with Shulman's (1987) framework on pedagogical content knowledge, which underscores the importance of effective teaching strategies in fostering student engagement and learning outcomes.

Additionally, the significance of teacher preparation supports literature suggesting that well-prepared educators demonstrate higher efficacy in classroom management and instructional delivery (Darling-Hammond, 2021). Although teacher feedback received the lowest rating, its high classification suggests that students still value the role of constructive feedback in learning, it emphasizes feedback as a critical driver of student achievement. The overall high perception of quality teaching suggests that educators exhibit strong competencies in lesson planning, instructional strategies, and student engagement, though further enhancement in feedback mechanisms could strengthen the overall teaching-learning process.

Research Question 3: What is the participants' assessment of their self-regulation skills in terms of:

- 3.1. emotional self-regulation and;**
- 3.2. behavioral self-regulation?**

Table 7 demonstrates students' evaluations regarding their emotional regulation abilities when learning. The study participants scored their emotional self-regulation at 4.09 on average which is "High", with 0.58 being the standard deviation, which shows they view their capabilities positively.

Almost 60 percent of the participants (59.76%) who evaluated their self-regulation rated it at high levels when compared to other participants who scored their ability at very high. The participants rated self-regulation at moderate levels (14.20%) and rated it as low (1.18%) rarely. Most students show impressive emotional managing abilities in academic settings according to Zimmerman (2020) because it enables them to sustain their performance and motivation.

Students evaluated their ability to remain resilient and emotionally composed under academic challenges as the most significant among all indicators ($M = 4.20$). They also found maintaining a positive attitude despite challenging academic work conditions ($M = 4.18$) and the management of emotions upon receiving academic feedback ($M = 4.17$). The study's findings demonstrate good resilience, together with strong optimism and efficient feedback management skills among the participants. Self-regulated learners, according to Bandura (2021), continue to push through academic challenges since they demonstrate emotional resilience that drives their academic success. Schunk and Di Benedetto (2022) explain that students who effectively regulate themselves show resilience through positive thinking in the face of academic struggles, resulting in higher educational engagement and performance.

Despite being rated as high, the lowest three indicators suggest areas where students have somewhat greater challenge in performing these tasks. The most challenging indicator for students is their ability to stay calm when they feel frustrated with challenging academic tasks, which scored a mean rating of 3.94. The research data demonstrate that students accomplish emotional regulation effectively however, frustration, together with elevated workloads and exam-related distress, create more demanding situations. The research by Pekrun et al. (2023) shows that academic-emotion-driven anxiety and frustration deeply affect cognitive engagement alongside learning performance, so students need better coping systems to succeed.

Some students demonstrate solid emotional self-regulation ability based on the moderate standard deviations, which range between 0.64 and 0.78. Self-regulation exists as one skill that evolves through time and interacts with personal traits and outside support (Pintrich, 2021).

While completing higher levels of academics, students stand to gain from mindfulness training with stress management workshops and peer mentoring programs aimed to build their controlled mental states during stressful moments.

The study demonstrates the necessity of creating academic spaces that support self-regulation growth in students. Dweck and Yeager (2020) show that students who receive thoughtful academic feedback tend to build adaptive coping techniques along with growth-oriented learning resilience.

The research findings demonstrate that students show solid emotional self-regulation competencies, especially in showing resilience and being optimistic and dealing with feedback effectively. The ability to overcome frustration and maintain focus when under

pressure creates medium-level challenges for students along with their responses to exam stress.

The participants evaluated their behavioral self-regulation capabilities through the data shown in **Table 8**. A more than half of participants (58.58 %) demonstrated extensive capabilities in academic self-regulation according to the mean score of 4.19 and standard deviation of 0.56, which positions within the "High" category. Among the participants, the largest group (58.58%) believed their self-regulation skills to be "High" followed by those who scored their self-regulation skills as "Very High" (28.99%).

Students rated the ability to adapt study practices according to academic feedback as the most important indicator (M = 4.31) among the ten specific indicators. Close behind came the statements "*I actively seek help or resources when I encounter academic difficulties*" (M = 4.30) and "*I avoid skipping classes even when I feel disinterested in the subject*" (M = 4.30). The findings indicate that students have solid adaptability skills and show readiness to obtain help in addition to demonstrated class attendance dedication that scientists connect with academic success and persistence. According to Efklides, & Schwartz, (2024), students who actively modify their study approaches and search for support modules will obtain superior academic results.

Students ranked the three least important indicators as "I avoid the temptation to delay on tasks or projects" (M = 3.99); "*I complete my academic tasks on time even with distractions*" (M = 4.10); and "*I consistently follow through with my academic goals*" (M = 4.13). The "High" category rank indicates that these scores identify students who experience difficulty in delaying tasks and developing continuous academic commitment. Made changes to treat procrastination and lack of commitment, including the implementation of structured scheduling and goal-setting according to research by Azevedo et al. (2023).

The measurement of standard deviation reveals moderate student-to-student variation between 0.65 and 0.79 because most participants exhibit strong self-regulation skills but present differences in their consistent behavior application. According to Schunk and DiBenedetto (2021), self-regulation operates as a trainable skill rather than an unchangeable personality attribute because students benefit from specific improvement methods, including self-monitoring protocols and official evaluation systems.

The data further show that participants demonstrated strong self-regulation abilities mainly in adaptability and resource-seeking and class attendance domains. Small problems exist regarding delay habits and regular task execution among students. Students achieve better academic success when they receive structured intervention programs alongside digital learning tools and improved metacognitive strategies for improving their self-regulation abilities.

Table 9 reflects the summary table of Self-regulation, revealing an overall mean of 4.14, interpreted as high. Among the dimensions, behavioral self-regulation received the

highest rating ($M = 4.19$, $SD = 0.55$), followed by emotional self-regulation ($M = 4.09$, $SD = 0.57$), both classified as high.

These results indicate that participants generally exhibit strong self-regulatory abilities in managing their actions and emotions. High behavioral self-regulation suggests that individuals can effectively control impulses, adhere to goals, and exhibit discipline in their actions, supporting research by Zimmerman (2000), who highlights the role of self-regulation in goal-directed behaviors and academic success.

Emotional self-regulation, while also rated high, reflects individuals' ability to manage stress, frustration, and emotional responses, aligning with the findings of Gore (2021), who emphasizes the importance of emotional control in overall well-being and adaptive functioning. Although both dimensions received high ratings, behavioral self-regulation being slightly higher suggests that participants may find it easier to control their external actions than to regulate internal emotional responses.

These findings reinforce the significance of self-regulation as a crucial skill in personal and academic success, highlighting the need for continued support in emotional self-regulation strategies to further enhance resilience and well-being.

Research Question 4: Are the participant's assessment of peer feedback and quality of teaching significantly associated with self-regulation?

Ho1: There is no significant association between the participants' assessment of peer feedback, quality of teaching, and their self-regulation.

Table 10 presents the results of Spearman's Rho correlation examining the relationship between participants' assessment of peer feedback and quality of teaching with self-regulation skills. The analysis explores how peer feedback, instructional preparation, teaching methodology, content clarity, timeliness, and teacher feedback correlate with emotional self-regulation, behavioral self-regulation, and overall self-regulation skills. Given the significance values ($p = .000$ for all correlations), which are below the 0.05 threshold, the null hypothesis is rejected, the findings indicate that participants who received feedback and rated the quality of teaching as high also demonstrated strong self-regulation skills. This suggests that effective teacher feedback, combined with high-quality teaching practices, plays a crucial role in enhancing students' ability to manage and direct their own learning.

The interplay between structured feedback and perceived teaching quality supports the development of essential self-regulation strategies among students, ultimately contributing to their academic success and professional growth. The correlation coefficients for emotional self-regulation range from .433 to .559, indicating a moderate positive correlation with peer feedback and quality of teaching components.

The highest correlation is found between content clarity (.559) and teachers' feedback (.557), suggesting that clear instruction and constructive feedback enhance students'

ability to manage emotions in learning. This finding aligns with Zimmerman (2002), who emphasized that self-regulated learners rely on structured feedback and clear instruction to enhance emotional control during learning tasks.

Behavioral self-regulation shows stronger correlations, ranging from .556 to .672. The highest correlations are observed with teacher feedback (.647) and total quality of teaching (.672), suggesting that students who receive structured feedback and quality instruction are more likely to develop better learning behaviors, such as time management and task persistence. This supports the findings of Efklides, and Schwartz, (2024), who highlighted the role of teacher feedback in helping students develop self-regulated behaviors by reinforcing learning strategies and accountability. Feedback from teachers stands as one of the essential elements which drives student achievement in learning. Students who maintain self-regulation skills actively search for feedback which they use constructively according to Hattie and Timperley (2020). Students who exhibit self-regulation practices adopt metacognitive methods such as reflection and goal-establishment according to Panadero et al. (2020) which makes them more receptive to teacher feedback. Self-regulated learners according to Nicol & Macfarlane-Dick (2020) utilize feedback for development.

Moreover, students who effectively control their actions exhibit superior learning process engagement leading to better teaching quality assessments according to Schunk and DiBenetto (2020). Fong et al., (2023) showed how self-regulated students demonstrate improved motivation along with enhanced classroom participation so their learning sessions become more engaging. Hagger et al. (2020) explained that behavioral regulation enables students to enhance their concentration while managing distractions thereby creating a better learning experience.

Overall self-regulation skills demonstrate significant positive correlations with all indicators, ranging from .515 to .632. The strongest relationships are observed with content clarity (.604) and teacher feedback (.619), reinforcing the importance of structured, well-explained lessons in enhancing students' ability to plan, monitor, and regulate their learning processes. These results align with Schunk and Zimmerman's (1994) self-regulation theory, which posits that clear instructional guidance and timely feedback strengthen students' metacognitive regulation and motivation.

The findings suggest that peer feedback and quality of teaching play a crucial role in shaping students' self-regulation skills. Among the teaching indicators, teacher feedback, content clarity, and overall quality of teaching exhibit the strongest correlations, emphasizing the importance of these factors in fostering self-regulated learning behaviors. Educators should prioritize timely and constructive feedback, enhance content clarity, and implement engaging instructional methods to strengthen students' ability to regulate their learning effectively.

Conclusions

The findings of this study align with the principles of Self-Regulated Learning Theory (Zimmerman, 2002) and Vygotsky's Social Constructivist Theory (1978), which

emphasize the role of interaction, feedback, and instructional quality in shaping students' learning behaviors. The significant positive correlation between peer feedback, quality teaching, and self-regulation skills suggests that when students actively engage in evaluating their peers' work and receive structured, high-quality instruction, they develop better self-regulation skills—particularly in behavioral aspects.

This reinforces the notion that an effective learning environment, characterized by well-prepared teachers, sound methodology, and timely feedback, fosters students' ability to manage their learning processes. Additionally, the strong link between behavioral self-regulation and teaching quality support the idea that structured classroom experiences and constructive feedback mechanisms contribute to the development of self-discipline and learning autonomy among students.

Moreover, future research may incorporate objective measures of self-regulation, such as behavioral observations or performance-based assessments, alongside self-reports. A longitudinal design to examine how the relationship between teaching quality, peer feedback, and self-regulation develops over time, providing deeper insights into the long-term effects of instructional strategies on students' learning behaviors.

Recommendations

Based on the findings and conclusion of this study, several key strategies are recommended to enhance self-regulation, improve teaching quality, and optimize feedback mechanisms in academic settings.

1. That Administrators of Teacher Education Program

1.1 may add self-regulation education programs to their academic curriculum because this will develop stronger emotional management and behavior command among students.

1.2 consider training teaching staff to offer prompt and comprehensible feedback to students as a required teaching practice.

2. That Educators

2.1 may intensify peer feedback between students, which will increase engagement and the self-regulatory abilities of students.

2.2 promote adaptive teaching strategies to accommodate students with different self-regulation capacities.

3. That Further Researchers

3.1 may expand studies on Self-Regulation for teacher education students with incorporating objective measures of self-regulation, such as behavioral observations or performance-based assessments, alongside self-reports.

Compliance with Ethical Standards

In line with the ethical principles outlined in the Belmont Report, as cited by Amdur and Bankert (2021), the researcher adhered to certain protocols and procedures throughout the study. Ethical clearance from the research Ethics Committee was sought. Before engaging in the study, all participants were fully informed as to the intent and purpose of the study and were oriented that they were not obliged to be involved and that they could withdraw from the study at any time with no repercussions.

Confidentiality was also observed at every stage by replacing the participant's name and information with an identification number. In addition, the confidentiality of data was upheld, ensuring that any information collected was secured.

Ethical considerations were adhered to, including the participants' right to privacy and anonymity. The rights of the participants were respected and enshrined in the principles of informed consent, non-exploitation, and risk-benefit analysis as espoused by institutional review boards (IRBs) for the use of participants' responses (Creswell, 2014; Flick, 2018).

The data were, thus, collated and organized using SPSS statistical software to generate the findings of the study.

Acknowledgments

The researcher sincerely extends his deepest gratitude to all individuals and institutions who contributed to the successful completion of this research study.

First and foremost, heartfelt appreciation is extended to Dr. Judith C. Chavez, his research mentor, for her unwavering support, invaluable guidance, and encouragement throughout this academic journey.

Profound gratitude is also expressed to the esteemed panel members: Dr. Revina O. Mendoza, TW 1 Professor; Dr. Miguela B. Napiere, TW 2 Professor; Dr. Maria Alona A. Galendez, and Dr. Kriscentti Exzur P. Barcelona, for their insightful feedback, constructive criticism, and expertise, which significantly enhanced the quality of this study. Additionally, the researcher acknowledges Dr. Cyril C. Chavez for providing the necessary statistical data, which played a crucial role in the study's analysis.

Special appreciation is extended to Ms. Doris Maisa for her continuous updates and assistance in preparing for the research presentation, ensuring that all requirements were met efficiently. The researcher also expresses gratitude to the Lourdes College Research Ethics Committee (LC-REC), led by Dr. Kurt D. Casas, MA, LPT, for their thorough review and approval of this study, ensuring its adherence to ethical research standards.

Sincere gratitude is also extended to Dr. Victoria N. Estroga for her encouragement and motivation, which served as a driving force in the completion of the researcher's graduate studies. This study would not have been possible without the cooperation of the BEED students of Initao College, whose participation in data gathering provided the essential foundation for this research.

Finally, the researcher extends heartfelt gratitude to family, friends, and colleagues for their unwavering support, patience, and encouragement throughout this academic endeavor. Their belief in the researcher's capabilities has been a profound source of strength and inspiration.

REFERENCES

- Adams, E. K., Nathan, A., George, P., Trost, S. G., Schipperijn, J., & Christian, H. (2024). Physical activity-related practices and psychosocial factors of childcare educators: A latent profile analysis. *Children*, 11(4), 390. <https://doi.org/10.3390/children11040390>
- Ajjawi, R., Kent, F., Broadbent, J., Tai, J. H., Bearman, M., & Boud, D. (2021). Feedback that works: a realist review of feedback interventions for written tasks. *Studies in Higher Education*, 47(7), 1343–1356. <https://doi.org/10.1080/03075079.2021.1894115>
- Amdur, R. O. B. E. R. T., and ELIZABETH A. Bankert. "The consent process and document." *Institutional Review Board Member Handbook*. 3rd ed. Sudbury, MA: Jones and Bartlett Publishers 55 (2011).
- Azevedo, R., Mudrick, N. V., Taub, M., & Bradbury, A. E. (2023). Self-Regulation in Computer-Assisted learning systems. In Cambridge University Press eBooks (pp. 587–618).
- Bandura, A. (1991). Social cognitive theory of self-regulation. *Organizational Behavior and Human Decision Processes*, 50(2), 248–287. [https://doi.org/10.1016/0749-5978\(91\)90022-L](https://doi.org/10.1016/0749-5978(91)90022-L)
- BMC Public Health. (2025, March 12). BioMed Central. <https://bmcpublichealth.biomedcentral.com/>
- Carless, D. (2022). Feedback for student learning in higher education. In Elsevier eBooks (pp. 623–629). <https://doi.org/10.1016/b978-0-12-818630-5.14066-7>
- Chin, C., Wong, W. P. M., Cham, T., Thong, J. Z., & Ling, J. P. (2023). Exploring the usage intention of AI-powered devices in smart homes among millennials and zillennials: the moderating role of trust. *Young Consumers Insight and Ideas for Responsible Marketers*, 25(1), 1–27. <https://doi.org/10.1108/yc-05-2023-1752>
- Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Sage. <https://www.researchgate.net/publication/332246566>
- Cumming, M. M., Zelazo, P. D., Smith, S. W., & Flores, H. R. (2022). Self-regulation and executive function. In Routledge eBooks (pp. 285–298). <https://doi.org/10.4324/9781003156857-24>
- Darling-Hammond, L. (2016). Research on teaching and teacher education and its influences on policy and practice. *Educational Researcher*, 45(2), 83–91. <https://doi.org/10.3102/0013189x16639597>
- Darling-Hammond, L., & Cook-Harvey, C. M. (n.d.). *Educating the whole child: Improving school climate to support student success*. <https://eric.ed.gov/?id=ED606462>
- Darling-Hammond, L. (2020). Accountability in teacher education. *Action in Teacher Education*, 42(1), 60–71. <https://doi.org/10.1080/01626620.2019.1704464>

- Efklides, A., & Schwartz, B. L. (2024). Revisiting the metacognitive and affective model of Self-Regulated Learning: Origins, development, and future directions. *Educational Psychology Review*, 36(2). <https://doi.org/10.1007/s10648-024-09896-9>
- Flick, U. (2017). *The SAGE Handbook of Qualitative Data Collection*. Flick, Uwe. - SAGE Publications Ltd - Torrossa. <https://www.torrossa.com/en/resources/an/5018779#page=556>
- Fong, C. J., Gonzales, C., Cox, C. H., & Shinn, H. B. (2021). Academic help-seeking and achievement of postsecondary students: A meta-analytic investigation. *Journal of Educational Psychology*, 115(1), 1–21. <https://doi.org/10.1037/edu0000725>
- Gore, J. M., Miller, A., Fray, L., Harris, J., & Prieto, E. (2021). Improving student achievement through professional development: Results from a randomised controlled trial of Quality Teaching Rounds. *Teaching and Teacher Education*, 101, Article 103297. <https://doi.org/10.1016/j.tate.2021.103297>
- Hagger, M. S. (2024). Psychological determinants of health behavior. *Annual Review of Psychology*. <https://doi.org/10.1146/annurev-psych-020124-114222>
- Hattie, J., & Timperley, H. (2020). The power of feedback. *Review of Educational Research*, 77(1), 81–112. <https://doi.org/10.3102/003465430298487>
- Johnson, S. J., Willis, S. M., & Evans, J. (2019). An examination of stressors, strain, and resilience in academic and non-academic U.K. university job roles. *International Journal of Stress Management*, 26(2), 162–172. <https://doi.org/10.1037/str0000096>
- Lipsch-Wijnen, I., & Dirkx, K. (2022). A case study of the use of the Hattie and Timperley feedback model on written feedback in thesis examination in higher education. *Cogent Education*, 9(1). <https://doi.org/10.1080/2331186x.2022.2082089>
- Nicol, D. J., & Macfarlane-Dick, D. (2020). Formative assessment and self-regulated learning: a model and seven principles of good feedback practice. *Studies in Higher Education*, 31(2), 199–218. <https://doi.org/10.1080/03075070600572090>
- Panadero, E., Alqassab, M., Ruiz, J. F., & Ocampo, J. C. (2023). A systematic review on peer assessment: Intrapersonal and interpersonal factors. *Assessment & Evaluation in Higher Education*, 48(8), 1053–1075. <https://doi.org/10.1080/02602938.2023.2164884>
- Panadero, E., Jonsson, A., Pinedo, L., & Fernández-Castilla, B. (2023). Effects of rubrics on academic performance, self-regulated learning, and self-efficacy: A meta-analytic review. *Educational Psychology Review*, 35(4). <https://doi.org/10.1007/s10648-023-09823-4>
- Pekrun, R. (2023). Control-Value Theory: from achievement emotion to a general theory of human emotions. *Educational Psychology Review*, 36(3). <https://doi.org/10.1007/s10648-024-09909-7>
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33–40. <https://rhartshorne.com/fall-2012/eme6507>
- Pintrich, P. R., Anderman, E. M., & Klobucar, C. (1994). Intraindividual differences in motivation and cognition in students with and without learning disabilities. *Journal*

- of Learning Disabilities, 27(6), 360–370.
<https://doi.org/10.1177/002221949402700603>
- Power, J. R., & Tanner, D. (2023). Peer assessment, self-assessment, and resultant feedback: An examination of feasibility and reliability. *European Journal of Engineering Education*, 48(4), 615–628.
<https://doi.org/10.1080/03043797.2023.2185769>
- Rodríguez, S., González-Suárez, R., Vieites, T., Piñeiro, I., & Díaz-Freire, F. M. (2020). Self-regulation and students' well-being: A systematic review 2010–2020. *Frontiers in Psychology*, 11, 543912. <https://doi.org/10.3389/fpsyg.2020.543912>
- Schunk, D. H., & DiBenedetto, M. K. (2020). Self-efficacy and human motivation. In *Advances in Motivation Science* (Vol. 7, pp. 153–179).
<https://doi.org/10.1016/bs.adms.2020.10.001>
- Schunk, D. H., & Zimmerman, B. J. (2022). Self-regulation in education. In *Routledge eBooks* (pp. 305–314). <https://doi.org/10.4324/9780203763353-13>
- Shulman, L. (1987). Knowledge and teaching: Foundations of the new reform. *Harvard Educational Review*, 57(1), 1–23.
<https://doi.org/10.17763/haer.57.1.j463w79r56455411>
- Simonsmeier, B. A., Peiffer, H., Flaig, M., & Schneider, M. (2020). Peer feedback improves students' academic Self-Concept in higher education. *Research in Higher Education*, 61(6), 706–724. <https://doi.org/10.1007/s11162-020-09591-y>
- Smith, B., Jiang, X., & Peters, R. (2024). The effectiveness of Duolingo in developing receptive and productive language knowledge and proficiency. *ScholarSpace*.
<https://scholarspace.manoa.hawaii.edu/items/140c6a0c-0035-4c87-b678-a0d74dd53de3>
- Tan, J. S. H., Chen, W., Su, J., & Su, G. (2023). The mechanism and effect of class-wide peer feedback on conceptual knowledge improvement: Does different feedback type matter? *International Journal of Computer-Supported Collaborative Learning*, 18(3), 393–424. <https://doi.org/10.1007/s11412-023-09390-4>
- Wang, M.-T., Kiuru, N., Degol, J. L., & Salmela-Aro, K. (2018). Friends, academic achievement, and school engagement during adolescence: A social network approach to peer influence and selection effects. *Learning and Instruction*, 58, 148–160. <https://doi.org/10.1016/j.learninstruc.2018.06.003>
- Wang, J., Wang, B., Liu, D., Zhou, Y., Xing, X., Wang, X., & Gao, W. (2024). Video feedback combined with peer role-playing: a method to improve the teaching effect of medical undergraduates. *BMC Medical Education*, 24(1). <https://doi.org/10.1186/s12909-024-05040-x>
- Williams, A. (2024). Delivering effective student feedback in higher education: An evaluation of the challenges and best practice. *International Journal of Research in Education and Science*, 10(2), 473–501. <https://doi.org/10.46328/ijres.3404>
- Winstone, N. E., & Nash, R. A. (2024). An exploratory field study of students' memory for written feedback comments. *Assessment in Education Principles Policy and Practice*, 31(3–4), 189–203. <https://doi.org/10.1080/0969594x.2024.2367029>
- Wisniewski, B., Zierer, K., & Hattie, J. (2020). The Power of Feedback Revisited: A Meta-Analysis of Educational Feedback Research. *Frontiers in Psychology*, 10. <https://doi.org/10.3389/fpsyg.2019.03087>

- Wu, Y., & Schunn, C. D. (2023). Passive, active, and constructive engagement with peer feedback: A revised model of learning from peer feedback. *Contemporary Educational Psychology*, 102, Article 102160. <https://doi.org/10.1016/j.cedpsych.2023.102160>
- Yeager, D. S., & Dweck, C. S. (2020). What can be learned from growth mindset controversies? *American Psychologist*, 75(9), 1269–1284. <https://doi.org/10.1037/amp0000794>
- Zeichner, K. M., Darling-Hammond, L., Berman, A. I., Dong, D., & Sykes, G. (Eds.). (n.d.). Evaluating and improving teacher preparation programs: Consensus report. <https://eric.ed.gov/?id=ED661483>
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64–70. https://doi.org/10.1207/s15430421tip4102_2
- Zimmerman, B. J. (2008). Investigating self-regulation and motivation: Historical background, methodological developments, and future prospects. *American Educational Research Journal*, 45(1), 166–183. <https://doi.org/10.3102/0002831207312909>

APA Citation:

Patlunag, J. P., & Chavez, J. C. (2025). PEER FEEDBACK AND QUALITY OF TEACHING: IMPLICATIONS ON TEACHER EDUCATION STUDENTS' SELF-REGULATION. *Ignatian International Journal for Multidisciplinary Research*, 3(4), 1057–1084. <https://doi.org/10.5281/zenodo.15282700>

junar.patlunag@lccdo.edu.ph
junarpatlunag1998@gmail.com
judith.chavez@lccdo.edu.ph