Improving Licensure Exam Performance: The Impact of In-House Review Sessions for NDMU Pre-Service Teachers

Skezeer John Paz[1], Ma. Magdalena Cobrador[2] and John Paul Pendon[3]

Abstract
This study investigated the impact of In-house Licensure Examination for Teachers review sessions on the performance of pre-service teachers at Notre Dame of Marbel University. Employing a quantitative descriptive-correlational research design, the research analyzed the pre-test, post-test, and the Notre Dame Educational Association mock board test results to determine the efficacy of the review sessions in improving the licensure examination success of the pre-service teachers. The findings showed significant improvements in the performance of the pre-service teachers following the review sessions. Furthermore, the strong correlations between performance in the review sessions and mock board test results indicate that the review sessions serve as an effective preparatory tool for the actual licensure examination. This study underscores the importance of structured in-house review programs in enhancing the readiness of pre-service teachers for licensure examinations.

Keywords: in-house LET review, pre-service teachers, teacher education, licensure examination, educational enhancement programs

Introduction

Quality education can never be underrated. For any Teacher Education Institution (TEI) in the Philippines, quality education that translates to competent, effective, and efficient teachers is truly paramount. One manifestation of such quality is passing the Licensure Examination for Teachers (LET) which is one of TEI's ultimate goals for its graduates. Doing so would prepare such graduates to enter the teaching profession as Beginning Teachers especially with the Department of Education (DepEd). To achieve this, most if not all of these institutions or colleges and universities would offer enhancement programs or review sessions to their graduating students. In fact, that a school or university employs enhancement or intervention programs to prepare students for the actual board exam is noteworthy. Results of Limin's (2019) study showed that student-teacher participants liking the idea of the inclusion of an enhancement review program ranked first.

Student performance during the LET review and consequently through the assessment and or exam itself is an indicator of a teacher education enhancement program's ability to adequately prepare future teachers for passing the LET. Findings in the study of Dotado-Maderazo and Ercia (2017) indicated that mock board written proficiency examination and the theoretical phase of the Dentist Licensure Examination had a highly significant relationship in the outcome of the dentist board examinations.

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[1] Corresponding author, Notre Dame of Marbel University, PHILIPPINES, sjbpaz@ndmu.edu.ph, ORCID: 0009-0008-3106-5831
[2] Notre Dame of Marbel University, PHILIPPINES, mmfcobrador@ndmu.edu.ph, ORCID: 0009-0005-5198-0074
[3] Notre Dame of Marbel University, PHILIPPINES, jpspendon@ndmu.edu.ph, ORCID: 0009-0005-5123-9884

The Licensure Examination for Teachers (LET) for the secondary level covers three components: General Education (20%), Professional Education (40%), and Specialization (40%). For the elementary level, the final rating is determined by combining the 40% weight from General Education and the 60% weight from Professional Education. In both levels, test takers must earn a minimum weighted average of 75% to pass the examination.

The success of Pre-Service Teachers (PSTs) on this LET after their graduation is of equal importance for Notre Dame of Marbel University as well. Besides, having enhancement or intervention programs apart from its retention policies to improve board exam results speaks again of how NDMU puts premium to quality in relation to its graduates' board performance. Because of this, the College of Education of NDMU, aside from following the minimum requirements stipulated in the Commission on Higher Education (CHED) memorandum orders, has included program enhancements for its three education programs, namely: Bachelor of Elementary Education (BEED), Bachelor of Secondary Education (BSEd), and Bachelor of Physical Education (BPEd). One of these program enhancements is the in-house LET review for General Education, Professional Education, and Major or Specialization subjects or content areas. The General Education topics are incorporated into their Field Study subjects during the first semester, while the Professional Education and Major subjects are incorporated into the Practice Teaching subject during the second semester. There are midterm and final examinations for each of both the general education and professional education topics and the major subjects during the course of the review, results of which are incorporated in the students' grades in the subjects mentioned.

Likewise, another program enhancement is NDMU's participation in the Mock Board Examinations for Education administered by the Notre Dame Education Association (NDEA) to its member schools every year. All fourth-year students or PSTs are required to take the exam especially on the General Education and Professional Education. Data on NDEA Mock board exam results are readily available for use as they are communicated to the institution soon after its conduct. In fact, Gibbons, Isdore, Le, and McCloskey (2023) saw the importance of evaluating outcomes of preparatory activities due to their impact on faculty and students.

The general aim of this study was to examine the impact of the in-house LET review sessions on the pre-test and post-test performance in the in-house LET review and the performance on the NDEA mock board of NDMU pre-service teachers. The researchers see the utmost relevance of looking into these as a basis to further enhance NDMU-CED's existing LET review, which will consequently help students prepare themselves for the actual board exam and establish high standard of excellence of teacher education in this part of the country.

Aim of the Study

This study aimed to determine the impact of in-house LET review sessions on the performance of NDMU pre-service teachers. Specifically, the following research questions were formulated to this aim:

1. What is the performance of the pre-service teachers in the following?
a. in-house LET review pre-test
b. in-house LET review posttest
c. NDEA mock board test

2. Is there a significant difference in the performance of the pre-service teachers of the different programs in the following?
a. in-house LET review
b. NDEA mock board test

3. Is there a significant difference in the pre-tests and posttests performance of the pre-service teachers in the in-house LET review?

4. Is there a significant relationship between the performance of the pre-service teachers in the in-house LET review and the NDEA mock board tests?

Methodology

This section outlines the methodology employed in the study, giving detailed discussions on the research design, respondents, locale, research instruments, data analysis, and data gathering procedures.

Research Design

This study employed a quantitative descriptive-correlational research design to examine the impact of in-house LET review sessions on the performance of pre-service teachers at NDMU. The descriptive component of this research design involved collecting quantitative data on the performance of pre-service teachers across three key assessment measures: the in-house LET review pre-test, the in-house LET review post-test, and the NDEA mock board test. This data provided a comprehensive overview of their performance and highlighted any areas of strength or weakness. On the other hand, the correlational aspect of this study was aimed at identifying the relationships between the various performance metrics. The study explored whether improvements in in-house LET review scores were associated with better performance on the NDEA mock board test. Additionally, it also investigated the differences in performance among pre-service teachers from the different academic programs.

Setting of the Study

The study is conducted at Notre Dame of Marbel University (NDMU), a distinguished institution located in Koronadal City, South Cotabato, Philippines. NDMU is renowned for its commitment to academic excellence and comprehensive teacher training programs. As one of the leading universities in the region and being recognized as the Center of Development (COD) for Teacher Education in the Philippines, NDMU provides a conducive environment for higher learning, characterized by modern facilities, experienced faculty, and a supportive educational community. The university offers a diverse range of education programs, including Elementary Education, Physical Education, and Secondary Education with various specializations. This diverse academic environment makes NDMU an ideal setting for investigating the impact of in-house LET review sessions on pre-service teacher performance, providing valuable insights into the effectiveness of these programs in preparing future educators.

Participants of the Study

The participants of this study were the pre-service teachers enrolled in various education programs at NDMU during the academic year 2022-2023. Specifically, of the 104 participants, 15 were registered on the Bachelor in Elementary Education (BEED), 28 on the Bachelor in Physical Education (BPED), and 61 on the Bachelor in Secondary Education (BSED) programs, with specializations in English, Filipino, Mathematics, Science, Social Studies, and Religious Education. By employing the total enumeration method, this study includes all eligible pre-service teachers from these programs, ensuring that the entire population of interest is comprehensively represented. This approach provides a thorough and accurate assessment of the impact of in-house LET review sessions on the performance of these pre-service teachers, eliminating potential sampling biases and enhancing the reliability of the study's findings.

Research Instrument

The primary research instruments employed in this study were the pre-test and post-test examinations in General Education and Professional Education, which are integral components of the standardized Licensure Examination for Teachers (LET) in the Philippines. These exams underwent validity and reliability testing to ensure their accuracy and consistency in measuring the knowledge and competencies required for prospective teachers. Specifically, the Cronbach's alpha values for the General Education and Professional Education exams were 0.80 and 0.81, respectively, indicating high internal consistency and reliability. Furthermore, content experts rated the exams as highly acceptable,

as evidenced by an Aiken's V coefficient of 0.76, underscoring their content validity and alignment with the competencies required for prospective teachers. The General Education test encompasses a broad range of subjects, including Readings in the Philippine History (SSP 112), Mathematics in the Modern World (MST 111), Ethics (SSP 114), Science, Technology and Society MST 112, Intensive Grammar (Engl 103), Wika, Kultura, at Lipunan (Fil 1), Environmental Science (MSTE 111), Purposive Communication (AH 111), Great Books (AHE 111), The Contemporary World (SSP 113), Gender and Society (SSPE 111), Art Appreciation (AH 112), Understanding the Self (SSP 111), Rizal's Life, Work's and Writings (SocSci 143), designed to evaluate the foundational knowledge essential for teaching. Meanwhile, the Professional Education test focuses on the pedagogy, covering topics such as Facilitating Learner-Centered Teaching/Principles of Teaching and Learning 1 and 2 (EDPCK 101), Assessment in Learning 1 and 2 (EDPCK 102 and 103), The Teacher and the School Curriculum (EDPCK 105), Technology for Teaching and Learning 1 and 2 (EDTTL 1/EDPCK 104 and EDTTL 2), Building and Enhancing New Literacies Across the Curriculum (EDPCK 106), The Child and Adolescent Learners and Learning Principles (EDFTC 101), The Teaching Profession (EDFTC 102), The Teacher and the Community, School Culture, and Organizational Leadership (EDFTC 103), Foundation of Special and Inclusive Education (EDFTC 105). These comprehensive tests aim to assess both the theoretical knowledge and practical teaching skills of pre-service teachers. The NDEA mock board Test further supplemented these instruments, providing a simulated exam environment to gauge the preparedness and performance of the pre-service teachers. This multi-faceted approach ensured a thorough evaluation of the impact of the in-house LET review sessions on the participants' readiness for the actual licensure examination.

Data Collection Procedure

The data collection procedure for this study followed a structured and sequential approach, aligned with the research paradigm. Initially, pre-service teachers at NDMU were administered a pre-test covering both General Education and Professional Education topics, derived from the standardized Licensure Examination for Teachers (LET) in the Philippines. These pre-tests served as a baseline measure of the participants' initial knowledge and skills.

Following the pre-test, the in-house LET review sessions commenced, held every Saturday for the entire day, and occasionally on Sundays, spanning the entire academic year. The review schedule was systematically divided into two major components: General Education in the first semester and Professional Education in the second semester. The General Education review sessions included subjects providing a comprehensive foundation essential for teaching. The second semester focused on Professional Education, covering teaching principles, educational technology, curriculum development, and student assessment strategies.

Upon completion of each component of the review sessions, participants were given a posttest (mirroring the pre-test) to measure the knowledge they had acquired. This posttest was conducted at the end of each semester, thereby assessing the immediate impact of the review sessions on their performance.

In addition to the pre-test and posttest evaluations, the study also incorporated the NDEA mock board test results. Unlike the pre-tests and post-tests, the NDEA mock board test was independently administered by the Notre Dame Educational Association (NDEA) towards the end of the second semester. The researchers utilized these mock test results to further analyze the performance and readiness of the pre-service teachers for the actual licensure examination.

Throughout the data collection process, all tests were administered in a controlled environment to ensure consistency and reliability. The collected data from pre-tests, post-tests, and the NDEA mock board test were then systematically recorded and analyzed to evaluate the effectiveness of the in-house LET review sessions on the performance of the pre-service teachers. This comprehensive data gathering

procedure allowed for a thorough assessment of the knowledge progression and overall preparedness of the participants for the licensure exam.

Data Analysis Procedure

The data analysis for this study was meticulously designed to address the specific research questions, utilizing a combination of descriptive and inferential statistical methods. Initially, descriptive statistics such as means and standard deviations were calculated to summarize the performance of pre-service teachers in the in-house LET review pre-tests and post-tests, as well as the NDEA mock board test. This provided a foundational understanding of the general performance trends and variability within the dataset.

To determine if there was a significant difference in the performance of the pre-service teachers across different programs in both the in-house LET review and the NDEA mock board test, an Analysis of Variance (ANOVA) was employed. This statistical method was chosen because it allows for the comparison of means across multiple groups, identifying whether any observed differences in performance were statistically significant. Moreover, the paired sample t-test was used to compare the pre-test and posttest scores of the pre-service teachers in the in-house LET review. This test specifically assesses whether there is a significant difference between the two sets of scores for the same group of participants, thereby evaluating the effectiveness of the review sessions in enhancing their knowledge and skills. Furthermore, to explore the relationship between the performance in the in-house LET review and the NDEA mock board test, Pearson correlation analysis was conducted. This analysis helped to determine the strength and direction of the relationship between the scores in these different assessments, providing insights into how well performance in the review sessions predicted performance in the mock board test. It is worth noting that important preliminary tests such as testing the normality and homogeneity of variances were done to ensure that important assumptions for parametric tests were satisfied. The Shapiro-Wilk test was conducted to assess the normality of the distributions, while Levene's test was used to evaluate the homogeneity of variances. The results indicated that all the required assumptions were satisfied for both normality and homogeneity across the test scores in the General Education and Professional Education categories. This includes data from the pre-tests, posttests, and NDEA mock board tests.

The data collected were processed using Microsoft Excel and the Jamovi statistical software to ensure accuracy and efficiency in the analysis. Results from these analyses were then interpreted in the context of the research questions. For instance, the significant differences identified through ANOVA and t-tests highlighted the impact of the in-house LET review sessions on different groups and over time. The correlation analysis provided evidence of the predictive validity of the in-house LET review sessions for the NDEA mock board test performance.

Findings

This section presents the findings of the study, meticulously analyzing the impact of the in-house LET review sessions on the performance of NDMU pre-service teachers. Initially, descriptive statistics are used to outline the PST's performance (in both General Education and Professional Education) in the pre-tests, posttests, and NDEA mock board test scores. Following this, inferential statistical analyses, including paired sample t-tests, ANOVA, and Pearson correlation, are presented to examine significant differences and relationships within the data.

Performance of the Pre-Service Teachers

The performance of pre-service teachers in General Education was evaluated through pre-test and posttest assessments, as summarized in Table 1. This includes information on programs, courses, sample sizes, means, and standard deviations.

Table 1.
Pre-test and Posttest Results of Pre-Service Teachers in General Education

Test	Program	Course	N	Mean	SD
Pre-test	Elementary Education	BEED	15	71.93	8.83
	Physical Education	BPED	28	69.32	7.56
	Secondary Education	BSED	61	79.79	10.04
		BSED-Engl	33	80.15	8.47
		BSED-Fil	12	80.08	14.47
		BSED-Math	3	78.33	8.08
		BSED-RE	4	68.50	7.94
		BSED-Sci	3	88.00	10.54
		BSED-SS	6	81.33	5.72
Posttest	Elementary Education	BEED	15	76.47	10.08
	Physical Education	BPED	28	71.61	14.65
	Secondary Education	BSED	61	93.49	14.80
		BSED-Engl	33	87.76	10.53
		BSED-Fil	12	109.83	16.72
		BSED-Math	3	97.67	6.43
		BSED-RE	4	84.25	8.26
		BSED-Sci	3	112.00	2.65
		BSED-SS	6	87.17	7.33

In the pre-test, significant variability was observed across programs. Specifically, the elementary education program displayed a mean score of 71.93 (SD = 8.83), followed by the physical education program with a mean of 69.32 (SD = 7.56), and the secondary education program with a mean of 79.79 (SD = 10.04). Within the secondary education program, there was further divergence, with BSED Science scoring the highest mean of 88.00 (SD = 10.54) and BSED Religious Education the lowest mean of 68.50 (SD = 7.94), indicating differing levels of initial proficiency.

Table 2.
Pre-test and Posttest Results of Pre-Service Teachers in Professional Education

Test	Program	Course	N	Mean	SD
Pre-test	Elementary Education	BEED	15	80.20	13.02
	Physical Education	BPED	28	79.79	9.78
	Secondary Education	BSED	61	87.16	8.97
		BSED-Engl	33	88.09	7.53
		BSED-Fil	12	84.50	11.12
		BSED-Math	3	87.00	16.37
		BSED-RE	4	82.00	7.53
		BSED-Sci	3	93.00	10.44
		BSED-SS	6	88.00	8.94
Posttest	Elementary Education	BEED	15	84.47	10.15
	Physical Education	BPED	28	82.89	10.49
	Secondary Education	BSED	61	96.00	9.73
		BSED-Engl	33	95.33	9.20
		BSED-Fil	12	100.58	10.97
		BSED-Math	3	94.00	16.09
		BSED-RE	4	91.50	8.58
		BSED-Sci	3	97.33	9.81
		BSED-SS	6	93.83	7.99

Following the implementation of the review program, notable improvements were observed in posttest scores across all programs and courses. The elementary education program recorded an increase to a mean of 76.47 (SD = 10.08), while the physical education program increased to a mean of 71.61 (SD = 14.65). Most strikingly, the secondary education program exhibited a substantial improvement, reaching a mean of 93.49 (SD = 14.80). Within the secondary education program, BSED Science displayed the highest posttest mean of 112.00 (SD = 2.65), while BSED Religious Education showed the lowest posttest mean of 84.25 (SD = 8.26).

On the other hand, Table 2 shows the performance of the pre-service teachers in the pre-test and posttest in Professional Education. Accordingly, the Professional Education pre-test revealed variations in mean scores across different programs, with the elementary education program scoring a mean of 80.20 (SD = 13.02), the physical education program scoring a mean of 79.79 (SD = 9.78), and the secondary education program scoring a mean of 87.16 (SD = 8.97). Within the secondary education program, BSED Science exhibited the highest mean score of 93.00 (SD = 10.44), while BSED Religious Education displayed the lowest mean score of 82.00 (SD = 7.53), indicating differences in initial proficiency levels.

Following the implementation of the review program, the Professional Education posttest results showed improvements in mean scores across all programs. The elementary education program increased to a mean of 84.47 (SD = 10.15), the physical education program increased to a mean of 82.89 (SD = 10.49), and the secondary education program increased to a mean of 96.00 (SD = 9.73). Within the secondary education program, BSED Filipino exhibited the highest posttest mean of 93.00 (SD = 10.58), while BSED Religious Education maintained the lowest posttest mean of 91.50 (SD = 10.97).

Table 3.
Mock Board Test Results of Pre-Service Teachers

Component	Program	Course	N	Mean	SD
General Education	Elementary Education	BEED	15	60.80	8.96
	Physical Education	BPED	28	62.32	8.97
	Secondary Education	BSED	61	71.56	8.59
		BSED-Engl	33	72.30	7.69
		BSED-Fil	12	69.83	10.87
		BSED-Math	3	68.33	3.06
		BSED-RE	4	63.75	6.13
		BSED-Sci	3	76.00	10.54
		BSED-SS	6	75.50	8.96
Professional Education	Elementary Education	BEED	15	81.67	11.21
	Physical Education	BPED	28	78.68	10.78
	Secondary Education	BSED	61	89.61	9.28
		BSED-Engl	33	89.64	9.15
		BSED-Fil	12	89.42	10.69
		BSED-Math	3	90.00	2.65
		BSED-RE	4	87.50	10.66
		BSED-Sci	3	97.33	10.79
		BSED-SS	6	87.17	8.98

Table 3 shows the performance of the pre-service teachers in the NDEA mock board exam for both the General Education and the Professional Education including the information on programs, courses, sample sizes, means, as well as standard deviations. The results indicate notable differences in mean scores across programs in both general and Professional Education contexts. In General Education, the

elementary education program exhibited a mean score of 60.80 (SD = 8.96), while the physical education program scored slightly higher with a mean of 62.32 (SD = 8.97). Conversely, the secondary education program demonstrated a higher mean score of 71.56 (SD = 8.59). Within the secondary education program, BSED Science displayed the highest mean score of 76.00 (SD = 10.54), while BSED Religious Education showed the lowest mean score of 63.75 (SD = 6.13), indicating varying levels of initial proficiency among courses.

Meanwhile, in Professional Education, improvements in mean scores were observed across all programs. Specifically, the elementary education program increased to a mean of 81.67 (SD = 11.21), the physical education program rose to a mean of 78.68 (SD = 10.78), and the secondary education program showed the highest increase, reaching a mean of 89.61 (SD = 9.28). Within the secondary education program, BSED Science demonstrated the highest posttest mean of 97.33 (SD = 10.79), while BSED Social Science displayed the lowest mean of 87.17 (SD = 8.98).

Difference in the Performance of the Pre-Service Teachers

A One-Way Analysis of Variance (ANOVA) was conducted to assess the significance of differences in posttest performance among pre-service teachers in the in-house LET review, categorized by program. Table 4 presents the performance metrics, including sample sizes, means, standard deviations, degrees of freedom, and corresponding statistical values for both Professional Education and General Education components.

Table 4.
Difference of Performances of Pre-Service Teachers on Their Posttest When Grouped Per Program

Component	Program	N	Mean	SD	df1	df2	F	p-value	Interpretation
General Education	Elementary Education	15	76.47	10.08	2	101	26.07	<.001	Significant Difference
	Physical Education	28	71.61	14.65					
	Secondary Education	61	93.49	14.80					
Professional Education	Elementary Education	15	84.47	10.15	2	101	20.03	<.001	Significant Difference
	Physical Education	28	82.89	10.49					
	Secondary Education	61	96.00	9.73					

In the General Education component, the analysis revealed a significant difference in posttest performance, F(2,101) = 26.07, p < .001. Subsequent Tukey post hoc tests indicated that pre-service teachers enrolled in the secondary education program (M = 93.49, SD = 14.80) achieved significantly higher mean scores compared to those in both the elementary education program (M = 76.47, SD = 10.08) and the physical education program (M = 71.61, SD = 14.65). However, no significant difference in performance was found between the elementary education and physical education programs.

In contrast, within the Professional Education component, a significant difference in posttest performance was also observed, F(2,101) = 20.03, p < .001. Post hoc analyses revealed that pre-service teachers in the secondary education program (M = 96.00, SD = 9.73) exhibited significantly higher mean scores compared to those in both the elementary education program (M = 84.47, SD = 10.15) and the physical education program (M = 82.89, SD = 10.49). Similarly, no significant difference in performance was found between the elementary education and physical education programs.

Meanwhile, a One-Way Analysis of Variance (ANOVA) was also conducted to examine potential differences in the performance of pre-service teachers in their mock board test across various programs. Table 5 presents a detailed overview of the performance metrics, including sample sizes, means, standard deviations, degrees of freedom, and statistical values for both Professional Education and General Education components.

Table 5.
Difference of Performances of Pre-Service Teachers on the mock board When Grouped Per Program

Component	Program	N	Mean	SD	df1	df2	F	p-value	Interpretation
General Education	Elementary Education	15	60.80	8.96	2	101	15.87	<.001	Significant Difference
	Physical Education	28	62.32	8.97					
	Secondary Education	61	71.56	8.59					
Professional Education	Elementary Education	15	81.67	11.21	2	101	12.81	<.001	Significant Difference
	Physical Education	28	78.68	10.78					
	Secondary Education	61	89.61	9.28					

In General Education, the ANOVA revealed a significant difference in performance, $F(2,101) = 15.87$, $p < .001$. Post hoc analyses using the Tukey method also indicated that pre-service teachers in the secondary education program (M = 71.56, SD = 8.59) exhibited significantly higher mean scores compared to those in both the elementary education program (M = 60.80, SD = 8.96) and the physical education program (M = 62.32, SD = 8.97). Once again, no significant difference in performance was observed between the elementary education and physical education programs.

Similarly, in Professional Education, the ANOVA revealed a significant difference in performance, $F(2,101) = 12.81$, $p < .001$. Subsequent Tukey post hoc analyses indicated that pre-service teachers enrolled in the secondary education program (M = 89.61, SD = 9.28) achieved significantly higher mean scores compared to those in both the elementary education program (M = 81.67, SD = 11.21) and the physical education program (M = 78.68, SD = 10.78). However, no significant difference in performance was found between the elementary education and physical education programs.

Difference in the In-house LET Review
A Dependent Samples t-Test was conducted to examine whether there is a significant difference in the pre-test and posttest performance of pre-service teachers in the in-house LET review. Table 6 provides a comprehensive overview of the performance metrics, including sample sizes, means, standard deviations, degrees of freedom, and statistical values for both General Education and Professional Education contexts.

In General Education, the analysis revealed that the performance of pre-service teachers in the posttest (M = 85.14, SD = 17.31) was significantly higher than their performance in the pre-test (M = 75.84, SD = 10.36), $t(103) = 7.11$, $p < .001$. Similarly, in Professional Education, the results indicated that the performance of pre-service teachers in the posttest (M = 90.81, SD = 11.70) was significantly higher than their performance in the pre-test (M = 84.17, SD = 10.38), $t(103) = 7.61$, $p < .001$.

Table 6.
Pre-test and Posttest Scores of the Pre-service Teachers in the In-house LET Review

Component	Test	Mean	N	SD	Mean Difference	t	df	p-value	Interpre.
General Education	Pre-test	75.84	104	10.36	9.31	7.11	103	<.001	Significant Difference
	Posttest	85.14	104	17.31					
Professional Education	Pre-test	84.17	104	10.38	6.63	7.61	103	<.001	Significant Difference
	Posttest	90.81	104	11.70					

Relationship Between the Performance of the Pre-Service Teachers in the in-house LET Review and mock board test

A Pearson correlation test was employed to explore the relationship between the performance of pre-service teachers in the in-house LET review and the NDEA mock board test. Table 7 provides detailed information on sample sizes, means, standard deviations, and statistical values for both General Education and Professional Education components.

Table 7.
The Pearson-r Correlation Test Results for the in-house LET Review and Mock Board Test Scores of the Pre-service Teachers

Component	Assessment	Mean	N	SD	r	p-value	Interpretation
General Education	In-House LET Review	75.84	104	10.36	0.58	<.001	Moderate Positive Correlation
	Mock Board	67.52	104	9.93			
Professional Education	In-House LET Review	90.81	104	11.70	0.72	<.001	High Positive Correlation
	Mock Board	85.82	104	11.07			

In General Education, the results revealed a significant and moderately positive correlation between the in-house LET review (M = 75.84, SD = 10.36) and the mock board test (M = 67.52, SD = 9.93) of pre-service teachers, r(104) = .58, p < .001. This indicates that in the General Education domain, higher scores in the in-house LET review correspond to higher scores in the mock board test.

Similarly, in Professional Education, a significant and highly positive correlation was observed between the in-house LET review (M = 90.81, SD = 11.70) and the mock board test (M = 85.82, SD = 11.07) of pre-service teachers, r(104) = .72, p < .001. This suggests that in the Professional Education context, higher scores in the in-house LET review are strongly associated with higher scores in the mock board test.

Discussion

The findings of this study highlight the significant impact of in-house LET review sessions on the pre-test and posttest performance of pre-service teachers at NDMU, as well as their performance on the NDEA mock board test. The corroborate relate some existing literature and provide a deeper understanding of the effectiveness of structured review programs.

The analysis of pre-test scores revealed significant variability across different educational programs. Such results are in line with previous research by Smith and Johnson (2019) who noted students of different teacher education programs had different levels of readiness. Hattie (2009) stressed the need to consider baseline competencies when designing educational interventions, which is corroborated by the present study's findings. Furthermore, this comparative performance shows how

curriculum quality and instructional techniques impact preparedness for certification exams (Brown, 2018).

Following the implementation of the review program, the analysis revealed substantial improvements in the posttest scores across various programs, as indicated by the mean scores. These results show that there was an overall increase in student performance indicating that structured review sessions improve the reviewee's understanding and proficiency. This agrees with the findings of Colicol et al., (2022) who pointed out that "in-house reviews" had positive effects on LETs performances. Also, Dela Fuente (2021) acknowledges that review subjects significantly affect LET Physical Sciences, while Suriio (2017) observed significant improvements in posttest scores compared to pre-test scores, indicating the effectiveness of departmental review sessions in boosting exam performance. The structured nature of these sessions, which includes comprehensive content review, practice tests, and feedback, is crucial in preparing students for certification exams (Hedges & Olkin, 2014).

The study also examined the relationship between in-house LET review performance and NDEA mock board test results. A significant and moderately positive correlation was found in General Education, and a high positive correlation in Professional Education. These findings underscore the importance of the in-house LET review program in predicting pre-service teachers' performance on the NDEA mock board test and the actual LET in general. The positive correlations observed in both General Education and Professional Education components highlight the program's effectiveness in preparing pre-service teachers for licensure examinations. These findings are consistent with prior studies indicating that prediction of course outcomes from preparatory programs may be forecasted through such practices (Mukhopadhyay & Roy, 2018). Additionally, they are consistent with Cabutotan (2018), who identified a positive correlation between in-house review sessions and licensure examination performance, recommending continuous improvement in instruction and intensive review sessions to adequately prepare LET takers. Furthermore, the results underscore the critical role of targeted interventions in enhancing teacher preparation and readiness for licensure examinations (Darling-Hammond et al., 2017). Additionally, Lee (2020) found a strong correlation between students' performance in review sessions and their scores on mock board tests, suggesting that structured review sessions are effective in preparing students for the actual licensure exams. This study confirms Lee's findings, showing a similar pattern where participants in in-house LET review sessions demonstrated significant improvements in both pre-test and posttest scores. These improvements were attributed to the structured content review, practice tests, and feedback mechanisms provided in these programs, which enhance students' understanding and retention of the material (Green & Miller, 2017).

Conclusion

The in-house LET review sessions has significantly improved the performance of pre-service teachers in both General Education and Professional Education components. These improvements show that targeted review interventions can boost knowledge and skills for pre-service teachers in their respective fields. Notably, pre-service teachers obtained higher scores in Professional Education than General Education; however, there was a significant improvement from pre-test to posttest indicating the positive impact of the review program.

On the other hand, the mean score variations across various academic programs underscore the significance of understanding baseline competencies and introducing interventions. The review program's differential impact among various programs suggests a need for program-specific evaluations and interventions to optimize educational outcomes. Specifically, BSED students outperformed those in BPED and BEED programs, whose performances did not significantly differ.

The positive correlations between the in-house LET review and the NDEA mock board test scores confirm the predictive validity of the review program in preparing pre-service teachers for licensure examinations. There is also moderate positive correlation in General Education and a high positive

correlation in Professional Education, indicating that improvements in review program scores are associated with better mock board performance.

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