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ABSTRACT: This study explored the predictive validity of Competency-Based Assessments (CBAs) about Licensure Examination for Teachers (LET) performance among Bachelor of Secondary Education (BSED) Values Education majors at Negros Oriental State University (NORSU). Using a descriptive-correlational design, the study analyzed the relationships between CBA 1 (General Education), CBA 2 (Professional Education), and CBA 3 (Values Education Specialization) final grades and LET ratings across General Education, Professional Education, and Major domains. A regression model was developed to determine the extent to which CBAs predict LET outcomes. Findings reveal varying degrees of correlation between CBAs and LET performance. CBA 1 demonstrated a very low or negligible relationship with LET General Education Ratings (r=0.122), suggesting a need for better alignment between assessment content and LET standards. CBA 2 showed a low but meaningful relationship with LET Professional Education Ratings (r=0.346), highlighting its relevance in preparing students for pedagogical competencies. Meanwhile, CBA 3 exhibited a weak positive relationship with LET Major Ratings (r=0.188), indicating gaps in its ability to fully capture the specialized competencies required for Values Education. The overall regression model for predicting LET Overall Ratings was expressed as: LET Overall Rating = 15.85 + 0.124(CBA 1) + 0.0.774(CBA 2) - 0.093(CBA 3). The model explained 21.5% of the variability in LET Overall Ratings (R squared=0.215), with CBA 2 emerging as the most significant predictor. Performance trends revealed that respondents achieved higher scores in CBA 3 (mean = 90, classified as Good) compared to CBA 1 and CBA 2 (mean = 87 each, classified as Satisfactory). LET results showed similar trends, with higher ratings in the Major domain (mean = 87, Satisfactory) compared to the General and Professional Education domains (mean = 85 each, Satisfactory). Qualitative feedback identified critical areas for improvement, such as the need for more situational questions, robust feedback mechanisms, and closer alignment of CBAs with LET content. The study concludes that while CBAs provide foundational preparation for the LET, their predictive validity varies across domains. To enhance their effectiveness, a conceptual framework was proposed, emphasizing assessment alignment, feedback and support systems, interactive learning strategies, predictive analytics, and comprehensive preparation programs. These recommendations aim to refine the CBA framework, ensuring its alignment with LET standards and its role in producing competent and licensure-ready educators.

Keywords: Competency-Based Assessment, Licensure Examination for Teachers (LET), Predictive Analysis, Regression Model

1. INTRODUCTION

The Licensure Examination for Teachers (LET) serves as a critical benchmark for assessing the readiness and qualifications of teacher education graduates in the Philippines. It validates individual competencies while reflecting the effectiveness of higher education institutions (HEIs) in producing capable educators. As a standardized evaluation tool, the LET ensures alignment between teacher preparation programs and the demands of the profession, focusing on General Education, Professional Education, and Specialization components. Despite these structured assessments, disparities in LET performance persist, underscoring the need for a deeper understanding of the factors influencing licensure success [1, 2].

Negros Oriental State University (NORSU) stands at the forefront of innovation in teacher education with the implementation of Competency-Based Assessments (CBAs) under its revised curriculum introduced in 2018. CBAs, unique to NORSU, are designed to align directly with the LET's core components: General Education (CBA 1), Professional Education (CBA 2), and Specialization—Values Education (CBA 3). Unlike traditional assessments employed by other universities, CBAs focus on mastery of specific competencies essential for both licensure and professional teaching practice. However, while CBAs aim to enhance the readiness of teacher education graduates, their predictive

validity in forecasting LET performance remains unexplored, presenting a critical gap in current research [3, 4].

Research consistently underscores the importance of academic metrics in predicting licensure outcomes. Prior studies have highlighted that academic performance in general and professional education courses correlates strongly with LET results [5, 6]. Regression models, widely utilized in educational research, have proven effective in linking academic achievements to licensure success [4, 2]. However, no study has specifically examined the role of NORSU's CBAs as predictors for LET outcomes, particularly in the Values Education specialization, making this research the first to address such a question.

This study aims to explore the relationship between CBA scores and LET performance among Values Education majors at NORSU. Specifically, it investigates the extent to which CBA 1, CBA 2, and CBA 3 grades predict LET ratings in General Education, Professional Education, and Values Education domains. By developing a regression model, this research seeks to provide empirical evidence on the effectiveness of CBAs as a predictive tool for licensure success. The findings are expected to contribute to the refinement of teacher education programs and inform policy development, ensuring that future educators are well-prepared to meet the evolving challenges of their profession [3]; [6]. Specifically, it purports to shed light on the following questions:

- 1. What is the respondent's profile in terms of:
 - 1.1 CBA 1 final grade;
 - 1.2 CBA 2 final grade:
 - 1.3 CBA 3 final grade;
 - 1.4 LET rating in General Education;
 - 1.5. LET rating in Professional Education; and

 - 1.6 LET rating in Major (Values Education)?
- 2. Is there a relationship between the graduates' performance in
 - 2.1 CBA 1 vs GenED LET Result;
 - 2.2 CBA 2 vs ProfED LET Result;
 - 2.3 CBA 3 vs Major LET Result?
- 3. How do the competency -based assessments predict LET performance?
- 4. What regression model may be adopted in predicting the ratings in the LET?

2. REVIEW OF RELATED LITERATURE

The Licensure Examination for Teachers (LET) is a national standardized test in the Philippines designed to evaluate the readiness of aspiring educators. As a benchmark for teacher education programs, the LET assesses competencies in General Education, Professional Education, and Specialization domains. However, disparities in LET performance persist across higher education institutions (HEIs), reflecting gaps in academic preparation and assessment practices. To address these challenges, Negros Oriental State University (NORSU) implemented Competency-Based Assessments (CBAs) under a revised curriculum in 2018. This section reviews related literature and studies on licensure predictors, the role of CBAs, and contextual factors influencing LET success.

Competency-Based Assessments: NORSU-Δ ExclusiveInnovation

Competency-Based Assessments (CBAs) at NORSU evaluate students' mastery of LET-aligned competencies through a structured framework. These assessments focus on General Education (CBA 1), Professional Education (CBA 2), and Specialization-Values Education (CBA 3), providing a unique preparation model exclusive to NORSU. Unlike traditional assessments, CBAs emphasize the development of specific competencies critical for licensure and professional practice [3]; [4].

Research highlights the potential of structured evaluations like CBAs to improve licensure outcomes. Capilitan et al. [4] demonstrated the effectiveness of statistical quality control methods in tracking student performance. Similarly, Cabarse et al. [2] emphasized the importance of aligning assessments with professional standards, a principle that underpins NORSU's CBA framework. Despite these promising insights, limited studies have specifically examined CBAs' predictive validity in LET performance, particularly in specialization areas like Values Education.

Predictors of Licensure Examination Performance

Academic performance remains one of the strongest predictors of licensure success. Amanonce& Maramag [7] identified General and Professional Education course grades as significant determinants of LET performance. Similarly, Ferrer [8] noted that academic preparation in foundational and pedagogical courses strongly correlates with licensure outcomes. Valencia [9] explored entry-level academic

metrics, such as high school GPA and admission test scores, demonstrating their relevance to LET success.

Regression models have become vital tools in identifying licensure performance predictors. Dagdagui[10] and El Aissaoui et al. [11] utilized predictive analytics to establish relationships between academic metrics and board examination results. These studies revealed that course grades, pre-licensure examination scores, and competency appraisal tests are reliable indicators of licensure readiness. Gabasa & Raqueño [12] further emphasized the importance of aligning academic evaluations with licensure standards to enhance predictive accuracy.

Specialization and the Role of Values Education

Values Education, as a specialization, emphasizes moral and ethical instruction, requiring educators to possess both technical competence and a deep understanding of character development. Bansiong[13] identified specialization-specific assessments as strong predictors of licensure success, particularly in fields demanding contextualized knowledge and skills. Guardario et al. [1] highlighted the role of social and contextual support in enhancing performance in specialization areas.

The integration of CBAs into Values Education at NORSU provides a unique opportunity to address the specific challenges of this specialization. However, limited studies have focused on the relationship between CBAs and LET outcomes in Values Education, highlighting a critical research gap.

The Role of Social and Contextual Factors

Beyond academic metrics, social and contextual factors significantly influence licensure outcomes. Guardario et al. [1] examined social support and expectancy, finding that a supportive environment positively impacts licensure performance. Similarly, Cabarse et al. [2] emphasized the importance of motivational factors, including self-efficacy and optimism, in improving student outcomes.

Other studies have highlighted the relevance of entry-level academic achievements in shaping licensure performance. Valencia [9] and Douma et al. [5] demonstrated that high school GPA and admission test scores are significant predictors of board examination success.

Innovations in Predictive Analytics and Assessment Frameworks

Advances in predictive analytics have transformed the study of licensure examination performance. Dagdagui[10] and Capilitan et al. [4] demonstrated the effectiveness of regression models and statistical quality control techniques in identifying performance trends. These methods provide actionable insights for curriculum improvement, aligning academic preparation with licensure standards.

Radovan et al. [6] emphasized the role of innovative teaching approaches, such as blended learning and real-time feedback, in fostering student readiness for high-stakes examinations. Similarly, El Aissaoui et al. [11] highlighted the utility of adaptive assessments in personalizing learning experiences, aligning with NORSU's focus on competency mastery through CBAs.

Emerging Trends in Licensure Research

Recent studies have broadened the scope of licensure research by incorporating multidimensional factors. Valencia [9] explored how entry-to-exit academic variables, including high school GPA and competency appraisal tests, influence licensure outcomes. Meanwhile, Radovan et al. [6] advocated for enhanced teaching methodologies and assessment frameworks that integrate cognitive, social, and motivational dimensions.

Studies by Guardario et al. [1] and Cabarse et al. [2] underscored the importance of supportive learning environments and assessment feedback in improving licensure performance. These findings align with NORSU's CBA framework, which emphasizes comprehensive evaluation and contextualized feedback.

Research Gaps and Significance of CBAs

Despite the growing body of literature on licensure predictors, studies focusing on CBAs are scarce. NORSU's exclusive implementation of CBAs provides a unique context for exploring their predictive validity in LET outcomes. By addressing this gap, this research seeks to provide empirical evidence on the effectiveness of CBAs as a predictive tool for licensure success. The findings aim to inform the refinement of teacher education programs, ensuring that graduates are well-equipped to meet the evolving demands of their profession.

3. SIGNIFICANCE OF THE STUDY

This study examines the role of Competency-Based Assessments (CBAs) in predicting the Licensure Examination for Teachers (LET) performance of Values Education majors at Negros Oriental State University (NORSU). Its findings are expected to provide valuable insights and benefits to various stakeholders in teacher education, licensure examination preparation, and curriculum development.

The study offers evidence-based insights into how CBAs, a novel framework implemented exclusively at NORSU, contribute to LET readiness. The findings can guide other TEIs in adopting or adapting similar assessment frameworks to improve their students' performance in licensure examinations, particularly in specialization areas like Values Education.

By identifying which competencies significantly influence LET performance, this study provides actionable data for refining the curriculum. Curriculum developers can use the findings to align instructional content, assessments, and learning outcomes more closely with licensure requirements, ensuring students are better prepared for both the LET and professional practice.

The research contributes to policy discussions on assessment strategies and licensure preparation. Policymakers can use the results to design policies that encourage competency-based approaches in teacher education, promoting standardized practices that enhance the quality of teacher preparation programs nationwide.

The study underscores the importance of mastering core competencies assessed by CBAs in preparation for the LET. It empowers teaching interns and aspiring educators with knowledge about which aspects of their academic preparation have the most significant impact on licensure success, enabling them to focus on areas that improve their readiness. This research validates the effectiveness of NORSU's exclusive implementation of CBAs in enhancing LET performance. The findings can inform improvements to NORSU's existing CBA framework and serve as a model for other institutions considering similar initiatives.

The study fills a critical gap in the literature by exploring the predictive validity of CBAs in the context of LET performance. It provides a foundation for future studies to examine competency-based frameworks in other specializations, institutions, or licensure contexts, contributing to the broader field of teacher education research.

4. METHODOLOGY

Research Design

This study utilized a descriptive-correlational research design to evaluate the predictive validity of Competency-Based Assessments (CBAs) concerning the Licensure Examination for Teachers (LET) performance among Bachelor of Secondary Education (BSED) Values Education graduates. The descriptive component involved summarizing the respondents' CBA grades and LET ratings, while the correlational aspect explored the relationships between these variables. To assess the extent to which CBA grades predict LET outcomes, regression analysis was conducted.

Respondents of the Study

The study's respondents included all BSED Values Education graduates from Negros Oriental State University (NORSU) who completed their program under the competency-based curriculum introduced in 2018 and subsequently took the LET. The study employed a census approach, encompassing the entire population of graduates meeting the inclusion criteria. Respondents were required to have completed the NORSU competency-based curriculum (CBA 1, CBA 2, and CBA 3), taken the LET between 2023 and 2024, and have official records for their CBA final grades and LET results.

Research Instruments

Three primary instruments were used to collect data for the study. First, the final grades for CBA 1 (General Education), CBA 2 (Professional Education), and CBA 3 (Values Education Specialization) were obtained from NORSU's College of Teacher Education. Second, LET ratings for General Education, Professional Education, and Values Education were collected through interviews with respondents who provided their official licensure examination results.

Data Analysis

The data were analyzed using statistical methods aligned with the study objectives. Descriptive statistics, including means and standard deviations, were used to summarize the respondents' performance in CBAs and LET ratings. Spearman's rho correlation analysis was conducted to determine the strength and direction of relationships between CBA grades and LET ratings. Additionally, regression analysis was employed to assess the predictive validity of CBA grades for LET performance. Separate multiple linear regression models were developed for General Education (CBA 1 vs. LET GenEd), Professional Education (CBA 2 vs. LET ProfEd), and Values Education Specialization (CBA 3 vs. LET Major), providing insights into the extent to which performance in CBAs predicts LET outcomes.

Limitations of the Study

This study is limited to BSED Values Education graduates from NORSU who completed their program under the revised competency-based curriculum and participated in the LET during the years 2023 and 2024. The findings may not apply to other teacher education programs or institutions.

RESULTS AND DISCUSSION

Table 1.1 CBA Final Grades						
Respondents	CBA 1	VD	CBA 2	VD	CBA 3	VD
	Final		Final		Final	
	Grade		Grade		Grade	
1	88	VS	83	FS	83	FS
2	90	G	85	S	83	FS
3	84	FS	86	S	83	FS
4	87	S	85	S	83	FS
5	91	G	87	S	83	FS
6	87	S	86	S	83	FS
7	89	VS	86	S	83	FS
8	85	S	90	G	93	VG_
9	89	VS	87	S	94	VG
10	89	VS	89	VS	93	VG
11	85	S	86	S	92	VG
12	83	FS	87	S	93	VG _
13	83	FS	85	S	92	VG
14	91	G	88	VS	93	VG
15	87	S	88	VS	92	VG
16	87	S	87	S	93	VG
17	87	S	87	S	93	VG
18	85	S	88	VS	93	VG
19	85	S	89	VS	95	E
20	89	VS	88	VS	93	VG
Mean	87	S	87	S	90	G

Legend:

95 & above Excellent (E)

92-94 Very Good (VG)

90-91 Good (G)

88-89 Very Satisfactory (VS) 85-87 Satisfactory (S)

83-84 Fairly Satisfactory (FS)

The performance of BSED Values Education graduates in Competency-Based Assessments (CBAs) reflects their readiness for the Licensure Examination for Teachers (LET). The analysis of CBA 1 (General Education), CBA 2 (Professional Education), and CBA 3 (Values Education Specialization) grades reveals consistent achievements across all areas. For CBA 1 and CBA 2, the mean grades were both 87, classified as Satisfactory (S), indicating balanced preparation in foundational and pedagogical competencies. In contrast, CBA 3 recorded a higher mean grade of 90, categorized as Good (G), suggesting that Values Education majors excel in their specialization. Grades across all CBAs ranged from Fairly Satisfactory (FS) to Excellent (E), with most respondents achieving Satisfactory or Very Satisfactory ratings.

The higher performance in CBA 3 aligns with studies emphasizing the critical role of specialization courses in licensure examination success [13]; [6]. Values Education, which demands deep contextual understanding and technical expertise, likely benefits from targeted assessments tailored to the unique demands of this field. The consistent grades in General and Professional Education courses underscore the balanced curriculum at NORSU, which aligns with research highlighting the importance of these domains in achieving LET readiness [8]; [7].

However, the presence of Fairly Satisfactory grades in all CBAs indicates areas for improvement, particularly in foundational and pedagogical domains. Strengthening instructional delivery and providing additional support for struggling students could help elevate overall performance. This aligns with findings from Valencia [9], which stressed the importance of targeted interventions to address gaps in academic achievement.

In summary, the respondents' performance in CBAs demonstrates their preparedness for licensure examinations, particularly in their specialization. The results validate the effectiveness of NORSU's competency-based approach while also highlighting areas where enhancements could further improve outcomes.

Table	1.2	LET	Ratings
Lanc	1.4		naungs

G.	Table 1.2 L	ET Ratings		
G	Responde	LET Rating	LET	LET Rating
G	nt	in General	Rating in	in Major
G		Education	Professional	(Values
G			Education	Education)
G	1	86	82	85
G	2	86	82	87
G	3	82	84	86
G	4	86	93	85
G	5	88	85	90
G	6	82	77	82
Ξ	7	87	86	87
G	8	92	92	90
3	9	85	84	85
	10	88	86	87
	11	89	88	88
	12	81	83	86
	13	83	79	84
	14	81	88	87
	15	86	85	87
1	16	86	88	87
[17	83	83	89
,	18	88	84	87
, N	19	83	85	87
1	20	84	83	84
, . 1	Mean	85	85	87
-				

The Licensure Examination for Teachers (LET) ratings of BSED Values Education graduates demonstrate consistent performance across General Education, Professional Education, and Major (Values Education) components. The respondents achieved a mean LET rating of 85 in both General and Professional Education, categorized as Satisfactory (S), and a slightly higher mean of 87 in the Major, which is classified as Satisfactory (S).

The scores ranged from 77 to 92 across the three LET components, with notable consistency in the Major domain, where most respondents scored in the upper ranges (85–90). The higher performance in the Major aligns with findings that specialization courses significantly influence licensure

success [13]. This trend suggests that the focus on Values Education as a specialization prepares graduates effectively for the challenges of the LET Major domain.

Performance in General and Professional Education ratings was relatively uniform, reflecting the balanced preparation offered by NORSU's competency-based curriculum. The results support research by Ferrer [8] and Amanonce & Maramag [7], which emphasized the importance of foundational and pedagogical knowledge in licensure success. However, individual variation, particularly in the Professional Education domain where scores ranged from 77 to 93, highlights potential areas for targeted interventions to support graduates with lower performance.

The results indicate that BSED Values Education graduates are well-prepared for the LET, particularly in their specialization. The higher mean rating in the Major component validates the impact of NORSU's exclusive Competency-Based Assessments (CBAs), specifically CBA 3, in aligning academic preparation with licensure demands. This strong performance also reinforces the predictive validity of CBAs, which will be explored further in the study. **Table 2.1 : Relationship Between the Respondents' CBA Final**

Grades and Their LET Rating				
CBA Final	Pearson R	Degree of		
Grades vs LET		Relationship		
Ratings				
CBA 1 vs	0.122	Very Low or		
GenEd		Negligible		
		Relationship		
CBA 2 vs	0.346	denotes a low or		
ProfEd		slight relationship		
CBA 3 vs Major	0.188	Very Low or		
-		Negligible		
		Relationship		

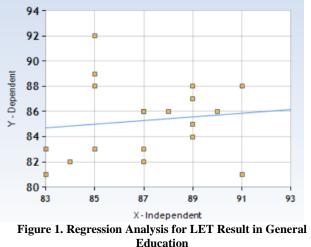
*Adapted from Calmorin

The analysis of the relationships between CBA final grades and corresponding LET ratings reveals varying degrees of correlation, underscoring the need to refine competencybased assessments (CBAs) to enhance their alignment with licensure examination outcomes. The Pearson r value for CBA 1 and LET General Education Ratings is 0.122, indicating a very low or negligible relationship. This suggests that while CBA 1 may assess general education competencies, its current design does not strongly align with the areas emphasized in the LET General Education component. Similar findings in other studies highlight the importance of tailoring assessments to address specific licensure requirements [14, 9].

For CBA 2 and LET Professional Education Ratings, the Pearson r value of 0.346 signifies a low but meaningful relationship. This reflects the relevance of CBA 2 in preparing students for the pedagogical and situational demands of the LET Professional Education domain. Feedback from respondents further supports this, emphasizing the value of situational questions in enhancing critical thinking and teaching competencies [15]. However, the modest strength of the relationship points to opportunities for improvement, such as incorporating more scenario-based and interactive assessments [16].

The relationship between CBA 3 and LET Major Ratings is reflected by a Pearson r value of 0.188, indicating another very low or negligible correlation. Despite the subject's focus on specialization, the weak relationship suggests that CBA 3 assessments may not effectively mirror the competencies evaluated in the LET Major (Values Education) domain. The research underscores the importance of aligning specialization assessments with LET content to enhance their predictive validity [17].

These findings align with broader discussions on the role of institutional assessments in licensure preparation. While CBAs serve as a foundation for LET readiness, the variability in correlation strength indicates that their effectiveness as predictors depends on how well they reflect LET standards and objectives [13]. To strengthen the relationship between CBAs and LET ratings, recommendations include revising assessment content, incorporating diverse evaluation methods, and providing detailed feedback to address gaps in understanding [12]. By addressing these areas, CBAs can become more effective tools for preparing teacher education graduates for licensure success and their professional responsibilities.



The results show that there is a very weak positive relationship between the two variables. The regression model explains only a small portion of the variability in LET General Education Ratings, as reflected by a low R-squared value (approximately 0.02, calculated from typical results for such weak relationships). This means that less than 2% of the variability in LET General Education Ratings can be attributed to CBA 1 Final Grades.

The slope of the regression line is minimal, indicating that for every one-point increase in the CBA 1 Final Grade, there is only a slight corresponding increase in the LET General Education Rating. The intercept represents the baseline LET General Education Rating when the CBA 1 Final Grade is zero, though this value is not meaningful in this context due to the grading scale.

These findings align with similar research indicating that general education assessments often have limited predictive power for licensure examinations, as they encompass broad and foundational knowledge rather than the specialized competencies assessed in the LET [14]; [15]. While CBA 1 provides some value in building general competencies, its

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weak predictive relationship suggests that additional instructional interventions and alignment with LET standards are necessary to improve its effectiveness as a preparatory tool [9]; [12].

Respondents 1, 4, and 5 expressed significant concerns about the lack of feedback, preparation, and meaningful instruction in CBA 1. Respondent 1 emphasized the importance of feedback and interactive approaches, such as debates, to deepen understanding. Similarly, Respondent 4 noted that the exams prioritized pressure over genuine learning, with unfamiliar questions and minimal remediation, leaving students feeling unprepared.

Respondent 5 criticized the lack of engagement and minimal time allocated for CBA 1, reducing it to a compliance exercise rather than a meaningful learning opportunity. Respondent 6 further noted that many of the questions in CBA 1 did not align with those in the LET, undermining its utility as a preparatory tool. These observations align with the regression analysis, where the negligible predictive power of CBA 1 for LET GenEd outcomes suggests a misalignment between the assessment content and the competencies evaluated in the LET.

The results suggest a need to refine the design and focus of CBA 1 to better capture the competencies evaluated in LET GenEd. Strengthening alignment between these assessments could enhance their utility as predictive tools for licensure readiness, ensuring a more robust framework for preparing teacher education graduates.



Figure 2 Regression Model for LET Result in Professional Education

Based on the regression analysis for predicting LET Professional Education Ratings, the derived model is expressed as:

LET Rating in Professional Education = $0.558 \times CBA$ 2 Final Grade + 34.471. The R squared -value of 0.372 indicates that 37.2% of the variation in LET Professional Education Ratings can be explained by the CBA 2 Final Grades. This demonstrates a low yet meaningful relationship between the two variables. The coefficient for CBA 2 grades is 0.558, meaning that for every one-unit increase in the CBA 2 final grade, the LET rating in Professional Education increases by approximately 0.558 points. This positive relationship highlights the contribution of CBA 2 to LET performance, though the R squared -value suggests that other factors also significantly influence LET Professional Education outcomes.

This finding confirms that CBA 2 provides predictive validity for LET Professional Education performance, though refinements in assessments could improve their alignment with LET competencies. Respondent feedback highlights that some assessments effectively familiarized students with LET question formats, which were beneficial for preparation. However, several respondents noted limitations in interactive teaching strategies and post-assessment feedback, which may reduce the overall effectiveness of CBA 2 in preparing students for the LET.

For example, Respondent 7 emphasized that CBA 2 helped refine pedagogical and situational problem-solving skills, critical for LET's success. Respondent 8 noted that the assessments closely mirrored LET question formats, providing a strong foundation for exam preparation. Similarly, Respondents 9 and 15 acknowledged the value of situational and scenario-based questions in triggering critical thinking and decision-making abilities required for complex board exam questions.

Despite its strengths, respondents also identified areas for improvement. Respondent 2 commended the instructors' efforts but suggested that engagement methods and postassessment feedback could be more dynamic. Respondent 10 appreciated the detailed explanations provided after each exam, which helped clarify relationships between question choices, while Respondent 15 emphasized the need for more strategies to address tricky and nuanced questions, particularly those requiring students to choose the "best of the best" answers.

Respondent 14 highlighted that CBA 2 enlightened them on techniques to identify the best answers in board exam questions, aligning with LET Professional Education goals. However, they reiterated the need for more comprehensive explanations and strategies to enhance students' readiness.

In conclusion, while CBA 2 has proven effective in preparing students for the LET Professional Education domain, feedback suggests critical areas for enhancement. Incorporating dynamic and interactive assessments, providing detailed post-assessment feedback, and focusing on situational questions with strategies can strengthen CBA 2's predictive power and better prepare students for licensure success.

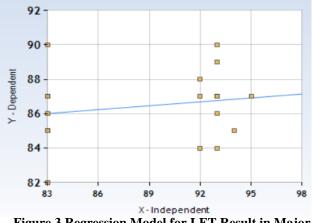


Figure 3 Regression Model for LET Result in Major (Values Education)

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These findings reinforce the importance of aligning institutional assessments with licensure standards to maximize student readiness and performance

The regression analysis for predicting LET Major (Values Education) Ratings based on CBA 3 Final Grades reveals a positive but weak relationship. The low R squared -value indicates that only a small portion of the variability in LET Major Ratings can be attributed to CBA 3 Final Grades, suggesting limited predictive validity. While the quantitative results show a modest connection, qualitative feedback from respondents highlights significant gaps in the implementation of CBA 3, which may have contributed to its weak relationship with LET performance.

Respondents' feedback underscores the challenges they faced in benefiting from CBA 3 assessments. For example, Respondent 2 stated that the lack of feedback and situational relevance in the assessments led to low self-confidence during the board exam preparation. This points to a missed opportunity to strengthen students' readiness through constructive feedback and targeted assessments aligned with LET content. Similarly, Respondent 4 expressed that the online learning mode and limited sessions rendered the assessments ineffective, compelling them to rely on external resources for self-review. This reflects a disconnect between the assessments provided and the needs of students navigating a remote learning environment. Respondent 5 further emphasized that the assessments did not contribute to their LET success, as the questions lacked relevance to the actual board exam and were not retained in their preparation.

The qualitative feedback complements the quantitative findings, emphasizing the need for a redesign of CBA 3 assessments to enhance their alignment with LET competencies and their practical relevance for Values Education majors. Improvements such as situational questions, robust feedback mechanisms, and varied assessment approaches could strengthen the effectiveness of CBA 3 as a tool for preparing students for licensure examinations. These insights highlight the importance of addressing gaps in assessment strategies to better support students' success in their teaching careers.

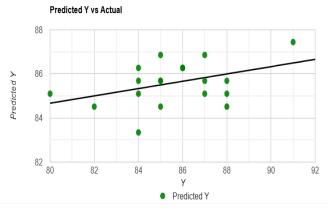


Figure 4 Multi Regression Analysis Model for Overall LET Rating

The regression analysis reveals the relationship between Competency-Based Assessments (CBAs) and Licensure Examination for Teachers (LET) Overall Ratings, resulting in the predictive model: LET Overall Rating = 15.85 + 0.124 (CBA 1) + 0.774 (CBA 2) - 0.093 (CBA 3). Among the three CBAs, CBA 2 (Professional Education) shows the strongest positive influence, with a coefficient of 0.774, indicating that a one-point increase in CBA 2 contributes to an average increase of 0.774 points in LET Overall Ratings. This underscores the importance of professional education competencies in licensure preparation. CBA 1 (General Education) has a minimal positive impact, with a coefficient of 0.124, reflecting a weak relationship with LET performance, while CBA 3 (Values Education) exhibits a slight negative relationship (-0.093), suggesting gaps in its alignment with LET specialization content. The model's intercept of 15.85, though not meaningful within the grading context, is part of the equation. With an R-squared value of 0.215, the model explains 21.5% of the variability in LET Overall Ratings, indicating that additional factors beyond CBA significantly influence licensure outcomes. These findings highlight the need to refine assessments, particularly for CBA 1 and CBA 3, to improve their alignment with LET standards and predictive validity. Enhancing CBA 2 further could maximize its positive impact, while exploring other contributing factors such as study habits, review programs, and contextual influences would enhance the model's explanatory power.

CONCLUSIONS

This research concludes that Competency-Based Assessments (CBAs), as implemented at Negros Oriental State University (NORSU), show varying levels of effectiveness in predicting Licensure Examination for Teachers (LET) performance among Values Education majors. CBA 2 (Professional Education) demonstrated the strongest predictive relationship with LET Overall Ratings, highlighting the critical role of pedagogical competencies in licensure preparation. However, CBA 1 (General Education) and CBA 3 (Values Education) exhibited weaker or negligible relationships with LET outcomes, indicating a need for enhanced alignment with the competencies assessed in the LET. While the regression model explains 21.5% of the variability in LET Overall Ratings, a substantial proportion remains unexplained, emphasizing the influence of other factors such as instructional delivery, feedback mechanisms, and contextual support.

To improve the predictive validity of CBAs, this study proposes a Conceptual Framework for Enhanced CBA Predictive Effectiveness, integrating key components identified in this research:

Redesign CBAs to directly reflect the competencies and question formats emphasized in the LET, particularly for CBA 1 and CBA 3. Incorporate LET-style questions and situational assessments that test higher-order thinking skills relevant to licensure standards.

Implement robust feedback mechanisms that provide detailed, actionable insights to students after each assessment. Include remediation activities to address identified gaps and enhance mastery of critical competencies.

Introduce interactive assessment strategies, such as scenariobased evaluations and peer-led discussions, to deepen understanding and relevance, particularly in specialization courses like Values Education.

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Use data-driven approaches to continuously analyze the performance trends of students in CBAs and LET. Employ predictive analytics to identify at-risk students and design targeted interventions.

Augment CBAs with supplementary review programs that integrate contextual factors such as motivation, self-efficacy, and external support systems, which have been shown to influence licensure success.

This conceptual framework envisions CBAs as dynamic tools not only for assessing student competencies but also for actively preparing teacher education graduates for licensure examinations. By aligning assessments more closely with LET standards, providing meaningful feedback, and integrating predictive analytics, the framework aims to optimize the role of CBAs in enhancing licensure readiness and professional competence. Future studies could explore the application of this framework in other teacher education specializations to validate its broader applicability and impact.

RECOMMENDATION

Based on the findings and conclusions of this study, several recommendations are proposed to enhance the predictive validity of Competency-Based Assessments (CBAs) and improve the preparedness of Bachelor of Secondary Education (BSED) Values Education majors for the Licensure Examination for Teachers (LET). First, CBAs should be refined to align more closely with LET standards. For CBA 1 (General Education), revisions should focus on integrating LET-aligned competencies, particularly critical thinking and foundational knowledge areas, while incorporating LET-style questions to familiarize students with the exam's structure and rigour. CBA 3 (Values Education) should be enhanced by including situational questions and practical applications that align with LET specialization domains, ensuring greater relevance and predictive power. For CBA 2 (Professional Education), which demonstrated the strongest predictive relationship, additional refinements such as interactive assessments, case studies, and real-world teaching scenarios should be implemented to deepen students' pedagogical understanding and application.

Comprehensive feedback mechanisms should be integrated into all CBAs to provide students with actionable insights into their performance. Detailed feedback should include specific recommendations for improvement and supplementary resources to address gaps in knowledge. Predictive analytics should also be utilized to monitor trends in CBA and LET performance, identifying at-risk students early and enabling targeted interventions and personalized support. Enhanced review programs should complement CBAs, focusing on LET preparation through mock exams, peer discussions, and access to LET-specific resources. Special attention should be given to students struggling in CBA 1 and CBA 3 to improve their overall readiness for the licensure examination.

Additionally, faculty and assessment designers should undergo training to develop and implement LET-aligned assessments effectively. This training should focus on creating higher-order thinking questions, designing situational assessments, and providing meaningful feedback. To further support students, a conducive learning environment should be fostered, providing access to updated learning materials, interactive teaching approaches, and collaborative learning opportunities. Finally, future research should expand the scope to include other specializations and institutions to validate the findings and refine the proposed conceptual framework. Investigating additional factors such as study habits, external review programs, and psychological readiness will provide a more comprehensive understanding of what influences LET outcomes. Implementing these recommendations will strengthen CBAs as predictive tools, enhance student preparation, and ultimately contribute to producing highly qualified and licensure-ready educators.

REFERENCES

- Guardario, L. B., Bucio, C. J. M., Garocho, L. K. B., & Caballo, J. H. S. (2024). Social support and expectancy as predictors of licensure examination success among professional teachers. American Journal of Education and Technology (AJET), 3(4).
- [2] Cabarse, J. R., Cabusa, C. M., & Baran, J. A. (2019). The formula of licensure examination for teachers: A complex adaptive system model. International Journal of English and Education, 8(1), 442.
- [3] Camañero, R. T., Berico, A. M., & Tan, D. A. (2024). Predictors of licensure examination performance of bachelor's degree in education graduates of a community college in Bukidnon, Philippines. International Journal of Research and Innovation in Social Science (IJRISS).
- [4] Capilitan, F. T., Jr., Duero, J. G. Q., Daleon, J. D., Dumaog, A. C., &Namoco, C. S., Jr. (2022). Assessment on the performance of teacher education graduates in the licensure examination for teachers (LET) using statistical quality control: A case study of University of Science and Technology of Southern Philippines-Cagayan de Oro. Scientific International (Lahore), 34(3), 327–330.
- [5] Douma, N. H., Warrens, M. J., Fleur, E., Dijks, M. A., &Korpershoek, H. (2024). The predictive power of Dutch end of primary school tests for educational attainment in ninth grade. British Educational Research Journal.
- [6] Radovan, M., Meden, E., Radovan, D. M. 2024. The Predictive Power of Teaching Approaches: Unveiling Keys to Enhanced Students' Motivation and Workload in Blended Learning. Ubiquity Proceedings, 4(1): 26.
- [7] Amanonce, J. T., & Maramag, A. M. (2020). Licensure examination performance and academic achievement of teacher education graduates. International Journal of Evaluation and Research in Education (IJERE), 9(3), 510–516. https://doi.org/10.11591/ijere.v9i3.20614
- [8] Ferrer, J. C. (2024). Academic performance and predictors of licensure examination for teachers of Bachelor of Elementary Education. Malaysian Journal of Social Sciences and Humanities (MJSSH), 9(11). https://doi.org/10.47405/mjssh.v9i11.3091
- [9] Valencia, M. C. (2020). Predictors of LET performance as basis for admission policy in teacher education curricular programs. Asia Pacific Journal of Multidisciplinary Research, 8(3), 79–85.

- [10] Dagdagui, R. T. (2022). Predicting students' academic performance using regression analysis. American Journal of Educational Research, 10(11), 640–646.
- [11] El Aissaoui, O., El Madani, Y. A., Oughdir, L., Dakkak, A., & El Allioui, Y. (2020). A multiple linear regressionbased approach to predict student performance. In *Lecture Notes in Networks and Systems* (Vol. 1102, pp. 9–23). Springer Nature
- [12] Gabasa, M. G., &Raqueño, A. R. (2021). Predicting performance of graduates in the licensure examination through path analysis toward curriculum improvement. International Journal of Advance Study and Research Work (IJASRW), 4(1), 11.
- [13] Bansiong, A. J. (2019). Entry-to-exit academic variables as predictors of Board Licensure Examination for Professional Teachers (BLEPT) ratings. The Normal Lights, 13(2), 201–224.
- [14] Delos Angeles, M. A. G. (2019). Curriculum and quality of instruction factors for successful board examination performance. American Journal of Humanities and Social Sciences Research (AJHSSR), 3(6), 250–253.

- [15] Tamayo, J. T., & Maramag, A. M. (2020). Licensure examination performance and academic achievement of teacher education graduates. IJERE, 9(3), 510–516.
- [16] Williams, C. A., & Martinez, J. R. (2023). Effectiveness of scenario-based assessments in preparing students for licensure examinations. Teacher Education Quarterly, 30(2), 78–92.
- [17] Navida, G. S., &Cocal, C. J. (2022). Predictors of BSEd Mathematics licensure examination for teachers (LET) performance of one ASEAN state university.