PREDICTIVE VALIDITY OF MULTIDIMENSIONAL ADMISSION CRITERIA FOR ACADEMIC ACHIEVEMENT IN TEACHER EDUCATION: EVIDENCE FROM BSED MATHEMATICS STUDENTS AT NORSU

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ABSTRACT: *Admission policies play a critical role in identifying applicants with the greatest potential for academic success in teacher education. However, limited institutional evidence exists regarding the predictive validity of multidimensional admission criteria in forecasting students' academic performance. This study examined the predictive validity of the admission criteria implemented by Negros Oriental State University (NORSU) for Bachelor of Secondary Education major in Mathematics (BSEd Mathematics) students. Specifically, it investigated the relationships among the NORSU Online Admission Test (NOAT), Scholastic Aptitude Test for Teachers (SATT), Senior High School (SHS) grades, interview scores, demonstration teaching scores, and essay writing scores and students' academic performance in General Education, Professional Education, Specialization, and cumulative Grade Point Average. A mixed-methods predictive-correlational design was employed, integrating descriptive statistics, Pearson product-moment correlation, multiple linear regression, and thematic analysis of qualitative responses from students and faculty members. The findings revealed that admission criteria exhibited varying levels of predictive validity across year levels and academic domains. Among the admission variables, the Scholastic Aptitude Test for Teachers (SATT) consistently emerged as the strongest predictor of academic performance, while the predictive contributions of the NORSU Online Admission Test (NOAT) and Senior High School grades differed across cohorts. Qualitative findings further emphasized the value of integrating cognitive and non-cognitive admission measures in identifying academically prepared and professionally competent teacher education students. The study provides empirical support for a multidimensional, evidence-based admission framework and offers policy implications for strengthening admission practices, improving student success, and enhancing quality assurance in teacher education programs.*

Keywords: admission criteria, academic performance, predictive validity, teacher education, evidence-based admission policy.

1. INTRODUCTION

Teacher quality is widely recognized as one of the strongest determinants of educational quality and student achievement. This is particularly evident in mathematics education, where teachers are expected to develop learners' conceptual understanding, analytical reasoning, and problem-solving abilities. Consequently, improving teacher education has become a global priority, with increasing attention given not only to curriculum and instruction but also to admission systems that identify applicants with the greatest potential to become competent educators. Effective admission policies enable teacher education institutions to select candidates who possess the academic ability, professional dispositions, and readiness necessary for successful completion of teacher preparation programs and eventual entry into the teaching profession.

International organizations continue to advocate for evidence-based teacher recruitment and preparation policies. The United Nations Educational, Scientific and Cultural Organization (UNESCO) [1] emphasizes that equitable and data-driven admission systems are essential for strengthening teacher quality and ensuring that teacher education institutions admit applicants who demonstrate both academic competence and professional commitment. Similarly, the World Bank [2] identifies teacher quality as one of the most effective strategies for addressing the global learning crisis, arguing that improving educational outcomes begins with strengthening the quality of individuals entering teacher education programs.

The importance of strengthening teacher preparation is equally evident in the Philippine context. Results of the 2024 Functional Literacy, Education, and Mass Media Survey (FLEMMS) revealed that approximately 18.9 million Filipinos aged 10 to 64 remain functionally illiterate despite possessing basic literacy skills. This finding highlights persistent concerns regarding educational quality and learning outcomes across the country. Recognizing these challenges, the Teacher Education Council (TEC) [3] has called for reforms in teacher education, emphasizing that future teachers should demonstrate strong academic competence, professional readiness, and teaching potential before entering teacher education programs. These developments underscore the importance of continuously evaluating institutional admission policies to ensure that teacher education programs admit students who are most likely to succeed academically and professionally.

Admission systems in higher education have evolved considerably over the past decades. Rather than relying exclusively on standardized entrance examinations, many institutions now employ multidimensional admission frameworks that integrate both cognitive and non-cognitive indicators of student success. Traditional measures such as high school academic performance and standardized admission tests consistently demonstrate substantial predictive value for college achievement. Bansiong and Balagtey [4] reported that High School Grade Point Average (HSGPA) and standardized aptitude test scores significantly predicted both college academic performance and licensure examination outcomes among teacher education graduates. Likewise, Christmann et al. [5] found that combining high school GPA and standardized admission test scores produced stronger predictions of academic achievement among preservice mathematics teachers than either measure used independently.

Recent evidence continues to support the predictive value of admission measures. Roman and Roman [6] found that although senior high school academic performance reflects students' readiness for teacher education, high academic performance alone does not necessarily translate into high qualifying examination scores. Similarly, Chaparro-Cruz et al. [7] demonstrated that entrance examination scores significantly predicted both academic achievement and student retention, highlighting the role of admission policies in promoting long-term educational success. These findings suggest that multiple admission indicators should be evaluated collectively to obtain a more comprehensive assessment of applicants' readiness for higher education.

Beyond academic indicators, contemporary teacher education literature increasingly recognizes the importance of non-cognitive characteristics in predicting student success. Professional dispositions, communication skills, teaching aptitude, and reflective thinking are considered essential attributes of effective teachers and may not be adequately captured through standardized examinations alone. Studies on teacher education admissions have shown that interviews, demonstration teaching, and writing assessments provide complementary information regarding applicants' professional competence and readiness for classroom practice. Consequently, multidimensional admission systems that integrate cognitive and non-cognitive measures have been recommended to improve the selection of future teachers.

Consistent with these developments, Negros Oriental State University (NORSU) adopted a multidimensional admission framework for its Bachelor of Secondary Education major in Mathematics program. Applicants are evaluated using the NORSU Online Admission Test (NOAT), the Scholastic Aptitude Test for Teachers (SATT), Senior High School (SHS) grades, structured interviews, demonstration teaching, and essay writing assessments. Taken together, these admission measures are intended to evaluate applicants' academic preparedness, communication competence, teaching aptitude, and overall readiness for teacher education.

Despite the increasing adoption of multidimensional admission systems, empirical evidence regarding the predictive validity of these admission components remains limited, particularly within Philippine state universities and mathematics teacher education programs. Existing studies have largely examined individual admission variables such as high school GPA or standardized entrance examinations, whereas relatively few investigations have evaluated the combined predictive influence of multiple cognitive and non-cognitive admission criteria on subsequent academic performance. Furthermore, limited evidence exists regarding whether these admission measures differ in their predictive ability across General Education, Professional Education, and Mathematics specialization courses. Consequently, teacher education institutions have limited empirical guidance in determining which admission measures most effectively identify applicants with the highest probability of academic success.

Addressing this gap, the present study examined the predictive validity of the admission criteria employed by Negros Oriental State University for the Bachelor of Secondary Education major in Mathematics program. Specifically, the study described students' admission profiles based on the NORSU Online Admission Test (NOAT), Scholastic Aptitude Test for Teachers (SATT), Senior High School grades, interview scores, demonstration teaching scores, and essay writing scores. It also examined students' academic performance in General Education, Professional Education, Mathematics specialization courses, and cumulative Grade Point Average. Furthermore, the study determined the extent to which these admission variables predicted academic performance, developed a regression model for predicting academic success, explored the perspectives of students and faculty members regarding the effectiveness of the existing admission policy, and formulated recommendations for strengthening admission practices and academic support in the Bachelor of Secondary Education major in Mathematics program.

Accordingly, this study was guided by the following research questions:

1. What are the admission profiles of Bachelor of Secondary Education major in Mathematics students in terms of:
   - 1.1 NORSU Online Admission Test (NOAT) scores;
   - 1.2 Scholastic Aptitude Test for Teachers (SATT) scores;
   - 1.3 Senior High School (SHS) grades;
   - 1.4 interview scores;
   - 1.5 demonstration teaching scores; and
   - 1.6 essay writing scores?
2. What is the academic performance of the students in terms of:
   - 2.1 Grade Point Average (GPA) in General Education courses;
   - 2.2 Grade Point Average (GPA) in Professional Education courses;
   - 2.3 Grade Point Average (GPA) in Mathematics specialization courses; and
   - 2.4 cumulative Grade Point Average (GPA)?
3. Which admission criteria significantly predict students' academic performance in General Education, Professional Education, Mathematics specialization courses, and cumulative Grade Point Average?
4. What regression model best predicts the academic performance of Bachelor of Secondary Education major in Mathematics students?
5. What themes emerge from the perspectives of students and faculty members regarding the effectiveness of the current admission policy in predicting academic success?
6. Based on the findings, what recommendations can be proposed to strengthen the admission policy and academic support system of the Bachelor of Secondary Education major in Mathematics program?

2. REVIEW OF RELATED LITERATURE

Admission Systems in Teacher Education

Admission systems serve as the initial quality assurance mechanism of higher education institutions because they determine which applicants possess the academic ability, professional dispositions, and readiness required to complete a degree program successfully. In teacher education, admission policies assume an even greater significance because they influence the quality of future teachers who are expected to develop learners' knowledge, skills, values, and competencies. Consequently, many universities worldwide have shifted from traditional admission practices toward evidence-based selection systems that integrate multiple cognitive and non-cognitive indicators to identify applicants with the highest probability of academic and professional success.

Teacher education institutions increasingly recognize that teacher quality begins long before classroom practice. Rather than focusing solely on curricular improvements, many institutions now emphasize selecting candidates with strong academic foundations and appropriate professional characteristics. Bansiong and Balagtey [4] argued that admission policies function as an important quality assurance mechanism because they regulate the entry of applicants who are more likely to complete teacher education programs successfully and perform well in professional licensure examinations. Their study demonstrated that admission variables, including High School Grade Point Average (HSGPA), admission examination scores, and standardized aptitude tests, were significantly associated with both college academic achievement and Licensure Examination for Teachers (LET) performance, emphasizing the long-term influence of admission decisions on teacher quality.

Recent international literature similarly supports strengthening admission systems through empirical evidence. Totoba [10] found that rigorous university admission practices were positively associated with students' academic performance among undergraduate students in Ethiopia. The study concluded that systematic admission procedures contribute to improved academic achievement by selecting applicants who demonstrate adequate preparedness for higher education. Likewise, Chaparro-Cruz et al. [7], in a longitudinal investigation involving more than 1,500 university students, reported that entrance examination scores predicted both academic performance and student retention. Their findings further demonstrated that discipline-specific admission criteria could reduce student dropout while maintaining equitable access to higher education, highlighting the importance of continuously evaluating admission systems through institutional evidence.

Within teacher education, admission policies have evolved considerably from relying exclusively on standardized examinations toward multidimensional frameworks that combine academic and non-academic measures. Roman and Roman [6] emphasized that teacher education programs commonly require satisfactory academic records together with qualifying examination performance before applicants are admitted. However, their findings also revealed that outstanding Senior High School academic performance does not necessarily correspond to equally strong qualifying examination results. This discrepancy suggests that no single admission criterion adequately represents students' readiness for teacher education and supports the use of multiple admission measures during applicant selection.

The growing emphasis on evidence-based admission policies is likewise reflected in predictive validity studies conducted across different countries and disciplines. Overall, these investigations indicate that effective admission systems should evaluate applicants' cognitive abilities, prior academic achievement, communication competence, and professional dispositions rather than relying on a single standardized examination. Such multidimensional approaches provide institutions with a more comprehensive understanding of applicants' potential for academic success while supporting institutional quality assurance initiatives.

Cognitive Admission Indicators as Predictors of Academic Success

Cognitive admission indicators remain the most widely used measures for predicting students' academic performance in higher education. These indicators typically include standardized admission examinations, scholastic aptitude tests, prior academic achievement, and other measures designed to assess students' readiness for university-level learning. Their widespread adoption is based on the assumption that previous academic achievement and demonstrated cognitive ability provide reliable estimates of future academic success.

Among cognitive indicators, prior academic achievement consistently emerges as one of the strongest predictors of college performance. Numerous studies have demonstrated that students who achieve higher academic performance during secondary education are more likely to perform well throughout their university studies. Bansiong and Balagtey [4] reported that High School Grade Point Average significantly predicted College Grade Point Average among teacher education students, while standardized aptitude examinations exhibited stronger predictive power for Licensure Examination for Teachers performance. Their findings suggest that prior academic achievement and standardized aptitude tests evaluate different dimensions of student readiness and should therefore be considered complementary rather than competing admission measures.

Similarly, Christmann et al. [5] investigated predictors of academic achievement among preservice mathematics teachers and found a significant positive relationship between High School Grade Point Average and College Grade Point Average. Students with stronger secondary school academic performance consistently achieved higher grades during their teacher education program, reinforcing previous evidence that prior academic achievement remains a stable indicator of future success in mathematics-related disciplines.

Several Philippine studies likewise support the predictive value of admission examinations and previous academic records. Dagdagui [11] employed multiple regression analysis to develop a predictive model of first-year academic performance using High School General Weighted Average, Senior High School strand, and admission ability test scores. The resulting regression model explained a substantial

proportion of variance in students' academic achievement, demonstrating that combining multiple cognitive admission variables provides stronger predictive accuracy than considering individual variables separately. Similarly, Laus [8] reported that pre-entry grades together with admission examination scores significantly predicted subsequent academic performance, with previous academic achievement emerging as the strongest individual predictor.

Recent international evidence likewise supports these findings. Chaparro-Cruz et al. [7] demonstrated that verbal reasoning and language examination scores consistently exhibited moderate positive relationships with university academic performance across multiple academic programs. Moreover, higher entrance examination scores were associated with lower dropout rates, indicating that admission examinations contribute not only to predicting academic achievement but also to improving student retention. Their findings support the continued use of standardized admission examinations as evidence-based tools for institutional decision-making while emphasizing that subject-specific admission criteria should be aligned with the academic requirements of individual programs.

Roman and Roman [6] further examined the relationship between Senior High School academic performance and teacher education qualifying examination scores among aspiring education students in the Philippines. Although participants generally demonstrated outstanding academic records during Senior High School, these achievements were not consistently reflected in their qualifying examination performance. The researchers concluded that prior academic achievement alone should not serve as the sole basis for admission decisions because academic readiness encompasses competencies beyond classroom grades. Their findings reinforce recommendations that higher education institutions adopt multidimensional admission frameworks integrating both previous academic achievement and standardized assessments.

Nevertheless, the predictive validity of standardized admission examinations varies across institutional and disciplinary contexts. Alamoudi et al. [12] reported only weak positive relationships between selected admission examinations and academic performance among health science students, suggesting that standardized examinations alone explain only a limited proportion of students' academic achievement. Likewise, Alkushi and Althewini [13] observed that although admission variables significantly predicted university performance, a considerable proportion of academic success remained attributable to other factors beyond admission criteria. These findings indicate that cognitive admission indicators provide valuable but incomplete information regarding students' future academic performance.

Taken as whole, the reviewed literature demonstrates that High School academic performance, standardized aptitude examinations, and admission test scores consistently exhibit moderate to strong predictive validity across different educational settings. However, their predictive strength varies according to institutional context, academic discipline, and the combination of admission variables employed. Consequently, recent literature increasingly recommends combining multiple cognitive indicators rather than relying exclusively on a single admission measure to improve the accuracy, fairness, and effectiveness of teacher education admission systems.

Non-Cognitive Admission Indicators and Professional Readiness

Although cognitive admission measures remain fundamental predictors of academic achievement, teacher education institutions increasingly recognize that successful teachers require competencies beyond academic ability alone. Effective teaching demands communication skills, interpersonal competence, ethical judgment, professional dispositions, instructional creativity, and reflective practice. These characteristics are not adequately captured through standardized examinations or prior academic performance, prompting many teacher education institutions to incorporate non-cognitive admission measures such as structured interviews, demonstration teaching, and essay writing into their admission processes.

Recent literature suggests that these non-cognitive indicators provide valuable insights into applicants' readiness for the teaching profession. Structured interviews, for example, assess communication skills, motivation, confidence, and professional commitment, while demonstration teaching evaluates instructional competence, classroom communication, and pedagogical potential. Essay writing, on the other hand, measures written communication, critical thinking, organization of ideas, and reflective ability. Together, these measures seek to complement cognitive admission criteria by providing a more holistic evaluation of prospective teacher education students.

Despite their increasing use, the predictive validity of non-cognitive admission measures remains inconsistent across studies. Lehane et al. [14] reported that conventional teacher education interviews demonstrate only modest predictive validity because interviewer subjectivity, inconsistent scoring procedures, and institutional bias may influence applicants' ratings. The authors argued that interviews should be supported by standardized evaluation rubrics and multiple assessors to improve reliability and fairness during the admission process. Similarly, Salingré and MacMath [15] examined the use of Multiple Mini Interviews (MMIs) in teacher education admissions and concluded that although MMIs effectively assess professional dispositions and interpersonal competencies, interviewer effects and contextual variability remain important concerns that require continuous refinement of admission procedures.

Evidence from predictive validity studies further suggests that non-cognitive measures contribute to admission decisions but may not independently explain long-term academic success. Cahapay and Toquero [17] reported that although communication skills, motivation, and professional behaviors assessed through admission procedures contribute to predicting licensure examination performance, cognitive admission measures remain stronger predictors of academic outcomes. Their findings support the complementary use of non-cognitive indicators rather than their replacement of academic admission criteria.

Similarly, Repayo *et al*. [18] investigated multiple predictors of Licensure Examination for Teachers (LET) performance among Bachelor of Secondary Education graduates. Their path analysis revealed that interview scores did not exert a direct influence on licensure examination performance, whereas prior academic achievement and college qualifying examination scores demonstrated stronger predictive effects. These findings suggest that while interviews remain valuable for evaluating applicants' professional dispositions and communication abilities, they may be insufficient as independent predictors of long-term academic achievement.

As a whole, the literature indicates that interviews, demonstration teaching, and essay writing provide important information regarding applicants' professional readiness and teaching potential. However, their predictive validity appears weaker and less consistent than traditional cognitive admission indicators. Consequently, contemporary teacher education literature increasingly recommends integrating cognitive and non-cognitive measures within a multidimensional admission framework to improve both the comprehensiveness and fairness of student selection.

Academic Performance in Teacher Education

Academic performance represents one of the most widely accepted indicators of student success in higher education. Within teacher education, academic achievement reflects students' mastery of theoretical knowledge, pedagogical competence, and disciplinary content, all of which contribute to professional preparation and eventual licensure examination performance. Consequently, Grade Point Average (GPA) remains one of the primary outcome measures employed in predictive validity studies involving teacher education admission systems.

Unlike many higher education programs, teacher education evaluates academic performance across multiple domains, including General Education, Professional Education, and specialization courses. These domains collectively measure students' general academic competencies, pedagogical knowledge, and discipline-specific expertise. Performance across these areas contributes to students' cumulative GPA and reflects their readiness for teaching practice and professional licensure.

Several studies consistently identify GPA as a reliable indicator of future professional success. Bansiong and Balagtey [4] found that College Grade Point Average significantly predicted Licensure Examination for Teachers performance among both Bachelor of Elementary Education and Bachelor of Secondary Education graduates. Similarly, Sipacio et al. [20] reported positive relationships between teacher education graduates' GPA, student teaching performance, and licensure examination outcomes. These findings demonstrate that sustained academic achievement throughout teacher education remains strongly associated with subsequent professional competence.

National evidence further supports the importance of academic performance in teacher education. Abao et al. [21], in a nationwide study involving beginning teachers across the Philippines, concluded that Grade Point Average, college preparation, and institutional support significantly contributed to graduates' Licensure Examination for Teachers performance. Their findings suggest that teacher education institutions capable of maintaining rigorous academic standards and effective student support systems are more likely to produce successful licensure examination passers.

Although cumulative GPA remains the most frequently reported measure of academic achievement, researchers increasingly recognize that students' performance may differ across curricular domains. Professional Education courses frequently emphasize pedagogical application, whereas specialization courses require deeper disciplinary knowledge and higher cognitive demands. Consequently, evaluating academic performance according to curricular components provides a more comprehensive understanding of students' strengths and learning needs than cumulative GPA alone.

Academic Performance in Mathematics Teacher Education

Academic success in mathematics teacher education presents unique challenges because mathematics requires abstract reasoning, analytical thinking, procedural fluency, and conceptual understanding. Consequently, mathematics teacher education programs frequently report greater variability in students' academic performance compared with other specializations. Researchers have therefore devoted considerable attention to identifying the factors that predict academic success in mathematics-related programs.

Several studies indicate that prior mathematical achievement strongly influences subsequent academic performance in teacher education. Christmann et al. [5] found that preservice mathematics teachers with higher secondary school mathematics achievement consistently demonstrated superior college academic performance. Their findings reinforce the importance of evaluating applicants' mathematical readiness before admission into mathematics teacher education programs.

Siva [19] likewise investigated the mathematics admission performance of aspiring teacher education students and reported generally low achievement in several fundamental mathematical competencies. The study identified weaknesses in basic mathematics concepts among incoming teacher education students and recommended implementing bridging programs and instructional interventions to improve mathematical preparedness before formal enrollment.

Recent predictive modeling studies further demonstrate that mathematics achievement depends on multiple interacting variables beyond prior academic ability. Sabanal et al. [22] developed a predictive model explaining students' performance in higher mathematics using multiple regression analysis. Their findings revealed that learning engagement, self-efficacy, instructional environment, and motivation collectively explained a substantial proportion of variance in mathematics achievement. Among these predictors, learning engagement emerged as the strongest determinant of higher mathematics performance, suggesting that cognitive readiness alone does not fully explain success in mathematics education.

In combination, these findings indicate that mathematics teacher education requires admission systems capable of identifying applicants with sufficient mathematical

preparation while simultaneously providing academic support for students requiring additional instructional assistance.

Predictive Models and Regression Analysis in Higher Education

The increasing availability of institutional data has contributed to the widespread application of predictive analytics in higher education. Multiple regression analysis has become one of the most frequently employed statistical techniques for examining the relationships between admission variables and subsequent academic performance because it allows researchers to determine the unique contribution of each predictor while controlling for the influence of other variables.

Educational researchers consistently report that regression models provide stronger evidence for admission policy development than simple correlation analyses because they simultaneously evaluate multiple predictors of academic success. Dagdagui [11] demonstrated that combining High School academic performance, Senior High School strand, and admission examination scores through multiple regression produced a highly predictive model of first-year academic achievement. Similarly, Chaparro-Cruz et al. [7] employed regression analyses to identify subject-specific admission variables associated with both academic performance and student retention, providing empirical support for discipline-specific admission policies.

Within teacher education, predictive modeling has increasingly informed institutional decision-making. Repayo et al. [18] utilized path analysis to investigate multiple predictors of Licensure Examination for Teachers performance, while Bansiong and Balagtey [4] demonstrated that combining High School GPA with standardized aptitude scores improved the prediction of academic and licensure outcomes. Similarly, Cahapay and Toquero [17] found that admission examination scores remained significant predictors of teacher education graduates' licensure examination performance, reinforcing the practical value of predictive modeling for evidence-based admission policy.

Despite these advances, most predictive validity studies have focused primarily on cumulative Grade Point Average or licensure examination performance. Comparatively fewer investigations have simultaneously examined multiple academic domains, including General Education, Professional Education, and specialization courses, while incorporating both cognitive and non-cognitive admission indicators within a single predictive framework. Consequently, additional institutional studies remain necessary to validate admission systems across diverse educational contexts and disciplinary programs.

Stakeholder Perspectives on the Effectiveness of Admission Policies

Although quantitative studies have consistently examined the predictive validity of admission criteria, qualitative investigations provide complementary insights into how admission policies are experienced by students, faculty members, and administrators. Understanding these perspectives is particularly important in teacher education because admission systems are expected not only to identify academically capable applicants but also to ensure that admitted students possess the commitment, professional disposition, and resilience required to complete a demanding professional program.

Students frequently associate effective admission policies with fairness, transparency, and alignment between admission requirements and the actual academic demands of the program. Roman and Roman [6] observed that many incoming teacher education students entered college with excellent Senior High School academic records but obtained considerably lower qualifying examination scores. The authors argued that this discrepancy may create uncertainty among applicants regarding the fairness of admission decisions and further emphasized the importance of using multiple indicators when evaluating readiness for teacher education. Their findings suggest that students perceive holistic admission systems as more representative of their overall capabilities than admission systems relying exclusively on academic grades or examination scores.

Faculty members likewise recognize that effective admission systems should reflect the competencies required throughout teacher education rather than simply measuring applicants' previous academic achievement. Studies examining teacher education admissions have emphasized that institutions should continuously validate locally developed admission instruments to ensure alignment with program learning outcomes. Repayo et al. [18] argued that although admission examinations remain useful screening tools, their predictive value should be evaluated regularly to determine whether they continue to identify students who eventually perform well academically and professionally. Such institutional validation strengthens the credibility of admission policies while promoting continuous quality improvement within teacher education programs.

Another recurring issue concerns students' program choice and academic motivation. Several studies have noted that students who enroll in academic programs that were not their preferred choices often demonstrate lower academic engagement and weaker persistence throughout their college studies. While admission criteria may successfully identify academically capable applicants, student motivation, commitment to the teaching profession, and alignment between personal interests and program requirements also contribute substantially to academic success. These observations highlight the importance of integrating academic advising, career guidance, and institutional support into admission and retention systems rather than viewing admission as an isolated institutional process.

Faculty perspectives similarly emphasize the need to balance academic rigor with equitable access. Standardized examinations remain valuable for identifying cognitive readiness, yet educators frequently acknowledge that communication skills, professional attitudes, ethical values, and teaching potential are equally important characteristics of successful future teachers. Consequently, multidimensional admission systems are increasingly viewed as more appropriate than single-test admission models because they provide a broader assessment of applicants' academic and professional readiness.

Overall, qualitative evidence suggests that effective admission policies extend beyond selecting students with high academic ability. Instead, they should facilitate the admission of applicants who demonstrate the knowledge, skills, dispositions, and commitment necessary to succeed academically and eventually contribute meaningfully to the teaching profession.

Research Gap

The literature consistently demonstrates that admission criteria play an important role in predicting students' academic achievement and professional success in teacher education. Across local and international studies, High School academic performance, standardized admission examinations, scholastic aptitude tests, and other cognitive indicators have shown moderate to strong predictive relationships with college Grade Point Average and Licensure Examination for Teachers performance. More recent investigations likewise recognize the complementary role of non-cognitive admission measures, including interviews and performance-based assessments, in evaluating applicants' professional readiness. Collectively, these findings support the growing adoption of multidimensional admission systems in higher education.

Despite these advances, several important gaps remain.

First, previous predictive validity studies have generally focused on individual admission variables, such as High School GPA, standardized admission examinations, or scholastic aptitude tests. Comparatively few investigations have examined the combined predictive influence of multiple cognitive and non-cognitive admission criteria within a single regression model. As teacher education institutions increasingly employ multidimensional admission systems, there remains a need to evaluate how these admission measures interact in predicting students' academic performance.

Second, the majority of existing studies have concentrated primarily on overall College Grade Point Average or Licensure Examination for Teachers performance as measures of student success. Relatively limited evidence is available regarding the predictive relationships between admission criteria and academic achievement across specific curricular domains, including General Education, Professional Education, and Mathematics specialization courses. Examining these academic domains separately may provide a more comprehensive understanding of how admission variables influence students' learning progression throughout teacher education.

Third, although multidimensional admission systems are increasingly implemented in Philippine higher education institutions, empirical validation of institution-specific admission frameworks remains limited. In particular, no published study has comprehensively evaluated the predictive validity of the admission framework employed by Negros Oriental State University for the Bachelor of Secondary Education major in Mathematics program, which includes the NORSU Online Admission Test (NOAT), Scholastic Aptitude Test for Teachers (SATT), Senior High School grades, interview scores, demonstration teaching scores, and essay writing assessments. Consequently, evidence remains insufficient regarding which admission measures most effectively predict academic success within this institutional context.

Finally, previous predictive validity studies have relied predominantly on quantitative approaches. Comparatively few investigations have integrated quantitative predictive modeling with qualitative exploration of students' and faculty members' perspectives regarding the effectiveness of existing admission policies. Incorporating stakeholder perspectives provides valuable contextual information that may explain quantitative findings and contribute to more comprehensive, evidence-based admission policy recommendations.

Addressing these gaps, the present study examined the predictive validity of the multidimensional admission criteria employed by Negros Oriental State University for its Bachelor of Secondary Education major in Mathematics program. Specifically, the study investigated the relationships between cognitive and non-cognitive admission variables and students' academic performance, developed a multiple regression model for predicting academic success, explored the perspectives of students and faculty members regarding the effectiveness of the existing admission policy, and proposed recommendations for strengthening admission practices and academic support systems within teacher education.

The reviewed literature demonstrates broad consensus that effective admission systems are fundamental to maintaining quality in teacher education. Previous studies consistently identify High School academic performance, standardized admission examinations, and scholastic aptitude tests as significant predictors of college academic achievement and licensure examination performance. At the same time, emerging evidence supports the inclusion of non-cognitive admission measures, including interviews, demonstration teaching, and written assessments, to evaluate applicants' professional dispositions and teaching potential.

The literature likewise highlights the growing application of predictive analytics and multiple regression models in evaluating admission policies and developing evidence-based institutional decision-making. Nevertheless, substantial variation exists regarding the predictive strength of individual admission variables across educational settings, academic disciplines, and institutional contexts. These inconsistencies reinforce the importance of conducting institution-specific predictive validity studies to ensure that admission systems remain aligned with program objectives and student success.

Taken together, the reviewed studies establish a strong theoretical and empirical foundation for the present investigation. By integrating cognitive and non-cognitive admission criteria, examining multiple dimensions of academic performance, employing quantitative and qualitative methods, and focusing specifically on Bachelor of Secondary Education major in Mathematics students at Negros Oriental State University, the present study extends existing literature and contributes evidence that may guide the continuous improvement of teacher education admission policies and academic support systems.

3. SIGNIFICANCE OF THE STUDY

This study was designed to examine the predictive validity of admission results on the academic performance of Bachelor of Secondary Education major in Mathematics students at Negros Oriental State University. The findings of the study provided valuable insights to various stakeholders:

College of Teacher Education (CTE) Administrators. The results of this study may assist CTE administrators in evaluating and enhancing the current admission framework. By identifying which admission components most strongly predict student success, the study may inform data-driven refinements to the selection process. The development of a regression model may also provide administrators with an evidence-based tool for improving admission strategies and ensuring the selection of candidates who are most likely to excel in the program.

Faculty Members. Faculty members may benefit from a deeper understanding of how admission results correlate with students' academic outcomes in Mathematics and education-related subjects. These insights may guide the design of targeted interventions, enrichment programs, and academic support strategies tailored to students' profiles. Furthermore, faculty members may use the study's findings to adjust instructional approaches and advising practices based on students' predicted academic trajectories.

Students. Current and prospective students may gain a clearer perspective on the importance of various admission components in predicting academic success. This awareness may encourage future applicants to focus on developing the competencies assessed during the admission process. Additionally, students already enrolled in the program may use the findings to better understand their academic standing and seek appropriate support when necessary.

NORSU CARE Center. The NORSU CARE Center may be provided with empirical evidence to refine the admission process. The results may highlight which admission measures should be strengthened, modified, or supplemented to improve the predictive power of the selection process. The proposed regression model may serve as a decision-support tool for future admissions.

Policymakers in Teacher Education. At a broader level, the study may inform policymakers involved in teacher education at the regional and national levels. Evidence-based recommendations derived from the findings may contribute to policy discussions on admission standards for teacher education programs, with the goal of raising the quality and preparedness of future educators, particularly in Mathematics.

Future Researchers. Future researchers in the fields of education, admissions, and educational psychology may use this study as a basis for further investigations. The methodology and findings may serve as references for studies exploring the predictive validity of admission criteria, the development of selection models, or longitudinal tracking of students' academic and professional success.

4. METHODOLOGY

This study examined the predictive validity of the admission criteria employed by Negros Oriental State University (NORSU) for the Bachelor of Secondary Education major in Mathematics (BSEd Mathematics) program. Specifically, the study described the admission profiles and academic performance of BSEd Mathematics students, determined the admission criteria that significantly predicted students' academic achievement, developed a regression model for predicting academic performance, explored the perspectives of students and faculty members regarding the effectiveness of the current admission policy, and formulated evidence-based recommendations for strengthening the University's admission framework. To accomplish these objectives, the study employed a mixed-methods approach that integrated quantitative analyses of institutional records with qualitative thematic analysis of stakeholder perspectives.

Research Design

The study employed a mixed-methods predictive-correlational research design. The quantitative component utilized descriptive, correlational, and predictive research designs to examine the relationships between admission criteria and students' academic performance. The descriptive design was used to summarize the admission profiles of students in terms of the NORSU Online Admission Test (NOAT), Scholastic Aptitude Test for Teachers (SATT), Senior High School (SHS) grades, interview scores, demonstration teaching scores, and essay writing scores. It was likewise used to describe students' academic performance based on their Grade Point Average (GPA) in General Education courses, Professional Education courses, Mathematics specialization courses, and cumulative GPA.

The correlational design determined the relationships between each admission criterion and the different indicators of academic performance. Pearson's Product-Moment Correlation was employed to determine the strength and direction of these relationships.

To determine which admission criteria significantly predicted students' academic achievement, the study employed predictive research using multiple linear regression analysis. Regression models were developed to determine the individual and combined contributions of the admission variables in predicting students' academic performance. Separate regression analyses were conducted for General Education GPA, Professional Education GPA, Mathematics specialization GPA, and cumulative GPA to identify differences in predictive validity across academic domains.

The qualitative component complemented the quantitative findings by exploring the perspectives of students and faculty members regarding the effectiveness of the University's admission policy. Open-ended responses were analyzed using Braun and Clarke's [23] thematic analysis framework to identify recurring patterns, experiences, and recommendations related to the admission process. The integration of quantitative and qualitative findings provided a more comprehensive understanding of the predictive validity of the University's admission system and strengthened the development of evidence-based policy recommendations.

Research Respondents

The study involved 58 Bachelor of Secondary Education major in Mathematics (BSEd Mathematics) students enrolled at the College of Teacher Education, Negros Oriental State University, Main Campus I. The respondents represented four academic cohorts corresponding to School Years 2021–2022, 2022–2023, 2023–2024, and 2024–2025. All participants had

successfully completed the University's admission process and had complete admission and academic records available for analysis.

A total enumeration technique was employed for the quantitative phase of the study. All officially enrolled BSEd Mathematics students who met the inclusion criteria were included in the analysis. Students with incomplete institutional records or those who had transferred to another institution before data collection were excluded.

Of the 91 students originally admitted across the four cohorts, 58 students remained enrolled and had complete records at the time of the study. Specifically, 21 of the 22 first-year students, 16 of the 17 second-year students, 15 of the 28 third-year students, and 6 of the 24 fourth-year students were included in the quantitative analysis. The reduction in the number of respondents across year levels was primarily due to student attrition resulting from shifting to other academic programs, transferring to other higher education institutions, taking temporary leaves of absence, or being dismissed from the program. These enrollment patterns further underscored the importance of examining the predictive validity of the University's admission criteria in relation to students' academic progression and persistence in the program.

For the qualitative phase, purposive sampling was employed to select participants who could provide rich and relevant information regarding the University's admission policy. The participants included selected faculty members from the College of Teacher Education who were directly involved in the admission screening and instruction of BSEd Mathematics students, as well as student respondents who voluntarily shared their experiences through open-ended questionnaires. Their perspectives provided valuable contextual insights into the effectiveness of the current admission policy and complemented the quantitative findings by explaining how various admission criteria influenced students' academic experiences and performance.

Research Environment

The study was conducted at the College of Teacher Education of Negros Oriental State University (NORSU), Main Campus I, located in Dumaguete City, Negros Oriental, Philippines. The College offers various teacher education programs, including the Bachelor of Secondary Education major in Mathematics, and maintains institutional records related to student admissions and academic performance.

The University's admission framework for the BSEd Mathematics program consists of multiple admission components designed to evaluate applicants' academic preparedness and teaching potential. These include the NORSU Online Admission Test (NOAT), the Scholastic Aptitude Test for Teachers (SATT), Senior High School grades, structured interviews, demonstration teaching, and essay writing assessments. Official records of these admission measures, together with students' academic performance, are maintained by the College of Teacher Education and served as the primary quantitative data source for the study.

The College also provided access to faculty members who actively participated in admission screening and instruction within the BSEd Mathematics program. Their professional experiences and observations contributed valuable qualitative insights regarding the strengths, limitations, and effectiveness of the existing admission policy.

Research Instrument

The study utilized both quantitative and qualitative data collection instruments to address the research objectives. For the quantitative component, documentary analysis was employed using official institutional records maintained by the College of Teacher Education of Negros Oriental State University. These records served as the primary source of data and included students' admission results, namely the NORSU Online Admission Test (NOAT) scores, Scholastic Aptitude Test for Teachers (SATT) scores, Senior High School (SHS) grades, interview scores, demonstration teaching scores, and essay writing scores. Students' academic performance was likewise obtained from official academic records, including their Grade Point Average (GPA) in General Education courses, Professional Education courses, Mathematics specialization courses, and cumulative GPA.

The qualitative component utilized two researcher-developed open-ended questionnaires administered through Google Forms. One questionnaire was intended for student respondents and elicited their experiences and perceptions regarding the University's admission process, particularly its fairness, relevance, and influence on their academic journey. The second questionnaire was administered to faculty members involved in admission screening and instruction within the BSEd Mathematics program. It gathered their perspectives regarding the effectiveness of the admission criteria in identifying academically prepared students and solicited recommendations for improving the University's admission policy.

The open-ended questionnaires were reviewed by experts in educational research and teacher education to ensure that the questions were aligned with the objectives of the study. The use of documentary records together with qualitative responses provided methodological triangulation that strengthened the credibility and comprehensiveness of the findings.

Data Gathering Procedure

The conduct of the study commenced with the submission of formal requests for permission to the University President and the Dean of the College of Teacher Education. Upon approval, coordination was made with the appropriate college offices to facilitate access to official admission and academic records of Bachelor of Secondary Education major in Mathematics students.

The quantitative data were collected through documentary analysis of institutional records. These records included students' NOAT scores, SATT scores, Senior High School grades, interview scores, demonstration teaching scores, essay writing scores, and academic performance records. The retrieved data were carefully reviewed for completeness, organized according to year level, and encoded into a database for statistical analysis.

Following the quantitative data collection, the qualitative phase of the study was conducted. Separate Google Forms containing open-ended questions were distributed electronically to student respondents and faculty members.

The student questionnaire explored their experiences during the admission process and their perceptions regarding its effectiveness in preparing them for the academic demands of the BSEd Mathematics program. The faculty questionnaire focused on their observations regarding the predictive value of the admission criteria and sought recommendations for strengthening the University's admission policy.

Participation in the qualitative phase was entirely voluntary. Participants were provided with a brief explanation of the purpose of the study, and only those who provided informed consent were included. Responses were collected electronically, downloaded, and organized for qualitative analysis.

After completing the data collection process, the quantitative and qualitative datasets were independently prepared for analysis. Quantitative data were subjected to descriptive and inferential statistical analyses, while qualitative responses were analyzed using Braun and Clarke's [23] thematic analysis framework. The findings from both components were subsequently integrated to facilitate comprehensive interpretation and support evidence-based recommendations for improving the University's admission system.

Ethical Considerations

The study adhered to the ethical principles governing research involving human participants. Prior to data collection, formal approval to conduct the study and access institutional records was obtained from the appropriate University authorities, including the Office of the University President and the Dean of the College of Teacher Education.

Participation in the qualitative phase of the study was voluntary. Student and faculty respondents were provided with an informed consent statement explaining the purpose of the research, the nature of their participation, the confidentiality of their responses, and their right to decline or withdraw from participation at any time without penalty. Only respondents who voluntarily provided their consent were included in the study.

Strict confidentiality was observed throughout the conduct of the research. Personally identifiable information was removed from all datasets before analysis, and all institutional records were treated as confidential documents. The collected data were stored securely and were accessed only by the researcher. Results were reported in aggregate form to ensure that individual respondents could not be identified.

The study likewise complied with the provisions of the Data Privacy Act of 2012 (Republic Act No. 10173) [26]. All information collected was used solely for academic research purposes and was handled in accordance with institutional policies on research ethics and data privacy.

The qualitative instruments were designed to elicit respondents' professional experiences and perceptions without exposing them to physical, psychological, or social harm. Throughout the study, the dignity, privacy, and welfare of all participants were respected.

Statistical Treatment of Data

The quantitative data were analyzed using both descriptive and inferential statistical techniques to address the objectives of the study. Statistical analyses were performed using the Statistical Package for the Social Sciences (SPSS) Version 30, with the level of significance set at $\alpha = .05$.

To describe the admission profiles of Bachelor of Secondary Education major in Mathematics students, descriptive statistics including the mean and standard deviation were computed for the NORSU Online Admission Test (NOAT), Scholastic Aptitude Test for Teachers (SATT), Senior High School (SHS) grades, interview scores, demonstration teaching scores, and essay writing scores. Similarly, descriptive statistics were used to summarize students' academic performance in terms of their Grade Point Average (GPA) in General Education courses, Professional Education courses, Mathematics specialization courses, and cumulative GPA.

To determine the relationships between the admission criteria and students' academic performance, Pearson's Product-Moment Correlation Coefficient (r) was employed. This statistical procedure measured the strength and direction of the linear relationships between each admission variable and the different indicators of academic performance.

To identify the admission criteria that significantly predicted academic performance, Multiple Linear Regression Analysis was employed. Regression models were developed to determine the individual and combined contributions of the admission variables in predicting students' Grade Point Average in General Education, Professional Education, Mathematics specialization courses, and cumulative GPA. Standardized regression coefficients, coefficients of determination (R^2), adjusted R^2 values, F-statistics, and significance values were examined to evaluate the predictive strength and overall fit of each regression model.

The assumptions underlying multiple linear regression, including normality, linearity, independence of errors, homoscedasticity, absence of multicollinearity, and the presence of influential observations, were examined prior to the conduct of the regression analyses to ensure the validity and reliability of the predictive models.

The qualitative data obtained from the open-ended questionnaires were analyzed using Braun and Clarke's [23] six-phase thematic analysis framework. The analysis began with familiarization through repeated reading of the responses, followed by systematic coding of meaningful statements. Related codes were subsequently grouped into broader categories to generate initial themes. These themes were reviewed, refined, and clearly defined before being organized into a coherent narrative that reflected the shared experiences and perspectives of the participants. Representative responses were incorporated to support the interpretation of each theme while maintaining participants' anonymity.

Finally, the quantitative and qualitative findings were integrated during the interpretation stage. Quantitative results identified the admission criteria that significantly predicted academic performance, whereas qualitative findings provided contextual explanations regarding the effectiveness, strengths, and limitations of the University's current admission policy. The integration of these findings facilitated

the development of evidence-based recommendations for strengthening the admission framework and academic support system of the Bachelor of Secondary Education major in Mathematics program.

RESULTS AND DISCUSSION

Table 1 Admission Profiles of Bachelor of Secondary Education Major in Mathematics Students

Admission Variable	First Year Mean (SD)	Second Year Mean (SD)	Third Year Mean (SD)	Fourth Year Mean (SD)	Interpretation
NORSU Online Admission Test (NOAT)	31.86 (6.42)	54.69 (5.64)	49.27 (6.19)	—	Slightly Below Average to Somewhat Above Average
Scholastic Aptitude Test for Teachers (SATT)	50.43 (6.52)	63.94 (6.57)	56.67 (7.38)	—	Moderate to Satisfactory
Senior High School (SHS) Grades	93.82 (2.13)	93.31 (2.11)	92.90 (1.79)	94.50 (1.76)	Outstanding
Interview (Standardized)	66.03 (30.10)	69.12 (19.47)	71.20 (26.92)	83.33 (15.06)	Fair to Very Satisfactory
Demonstration Teaching (Standardized)	68.65 (24.28)	73.96 (18.16)	76.39 (21.34)	90.00 (16.73)	Satisfactory to Excellent
Essay Writing (Standardized)	15.92 (9.39)	75.46 (17.29)	66.67 (20.93)	84.17 (14.97)	Poor to Very Satisfactory

Note. Fourth-year students did not take the NORSU Online Admission Test (NOAT) and the Scholastic Aptitude Test for Teachers (SATT) because these assessments were not administered during their admission year. Interview, demonstration teaching, and essay writing scores were standardized to ensure comparability across cohorts because different scoring rubrics were used during the admission process.

Table 1 presents the admission profiles of Bachelor of Secondary Education major in Mathematics (BSEd Mathematics) students based on the six components of the University's admission policy. Overall, the findings demonstrate that the respondents entered the program with strong prior academic achievement but varying levels of cognitive aptitude and professional competencies. This pattern suggests that applicants possessed diverse strengths upon admission, reinforcing the rationale for adopting a multidimensional admission framework rather than relying on a single selection criterion. The observed variability across admission measures is consistent with the Theory of Predictive Validity, which posits that different admission instruments capture distinct dimensions of student readiness and collectively provide a more comprehensive basis for predicting future academic performance.

Among the cognitive admission indicators, Senior High School (SHS) grades emerged as the most consistent measure across all cohorts. Mean SHS grades ranged from 92.90 to 94.50, all classified as Outstanding, with relatively small standard deviations indicating homogeneous academic performance prior to university admission. These findings suggest that the respondents generally demonstrated sustained academic excellence throughout secondary education. Similar results were reported by Bansiong and Balagtey [4], who identified High School Grade Point Average as one of the strongest predictors of college academic achievement and teacher licensure performance. Likewise, Dagdagui [11] concluded that prior academic achievement significantly contributes to explaining variations in students' academic performance, emphasizing that sustained scholastic performance provides a more stable indicator of college readiness than one-time admission examinations.

In contrast, the NORSU Online Admission Test (NOAT) and the Scholastic Aptitude Test for Teachers (SATT) showed greater variability across cohorts. Second-year students recorded the highest mean scores in both NOAT (M = 54.69, SD = 5.64) and SATT (M = 63.94, SD = 6.57), whereas first-year students obtained the lowest scores in both examinations. These findings indicate differences in cognitive preparedness among admitted students and suggest that standardized admission tests successfully differentiated applicants according to their reasoning ability and academic aptitude. Similar patterns have been reported by Laus [8], who observed substantial variability in admission examination performance among teacher education applicants because of differences in prior educational experiences. Maslang [9] likewise argued that aptitude tests reveal important differences in students' readiness for higher education and may complement previous academic achievement when evaluating applicants.

An important observation is that the fourth-year cohort did not complete the NOAT and SATT because these assessments were not yet implemented during their admission year. Consequently, direct comparisons between fourth-year students and the remaining cohorts should be interpreted cautiously. This methodological limitation illustrates the importance of maintaining consistent admission procedures across cohorts to facilitate institutional validation of admission tools and longitudinal evaluation of predictive validity. Consistency in admission practices is likewise essential for ensuring fairness among applicants and generating reliable institutional evidence to support policy decisions.

Performance-based admission measures also demonstrated meaningful variation across cohorts. Standardized interview scores increased from a Fair rating among first-year students to Very Satisfactory among fourth-year students, while demonstration teaching scores improved from Satisfactory to Excellent. These findings suggest that applicants differed substantially in communication skills, instructional confidence, and classroom readiness at the time of admission. The results support the work of Lehane, Lysaght, and O'Leary (2023), who argued that structured interviews and performance-based assessments provide valuable information regarding interpersonal competence, professional dispositions, and teaching potential that cannot be adequately measured through standardized cognitive examinations alone. Similarly, Salingré and MacMath [15] emphasized that interviews and teaching demonstrations allow teacher education institutions to evaluate qualities associated with effective teaching, including communication, reflective thinking, and professional judgment.

Essay-writing scores exhibited the greatest variability among the admission components. Fourth-year students obtained the highest standardized score, whereas first-year students recorded substantially lower performance. However, this difference should be interpreted cautiously because first-year applicants completed a mathematics diagnostic examination rather than the standard essay-writing assessment during admission. Despite this limitation, the generally satisfactory to very satisfactory performance observed among the remaining cohorts highlights the continuing importance of written communication in teacher education. Effective writing enables future mathematics teachers to articulate mathematical reasoning, prepare instructional materials, develop coherent lesson plans, and communicate complex concepts clearly. This interpretation is consistent with Lehane et al. [14], who recognized written communication as an essential professional competency that complements cognitive ability and pedagogical knowledge.

When considered together, the findings indicate that no single admission criterion sufficiently captures applicants' readiness for success in the BSEd Mathematics program. While SHS grades consistently reflected sustained academic achievement, NOAT and SATT measured cognitive readiness, and the interview, demonstration teaching, and essay-writing components assessed professional competencies that are equally important in teacher preparation. Similar conclusions were reached by Totoba [10], who advocated for evidence-based admission systems that integrate both cognitive and non-cognitive indicators to improve student selection and academic outcomes. Likewise, Repayo *et al.* [18] emphasized that multidimensional admission frameworks provide a more holistic assessment of applicants and strengthen institutional decision-making by recognizing that academic success results from the interaction of cognitive ability, prior achievement, communication skills, and professional dispositions.

From a policy perspective, these findings support the continued implementation of NORSU's multidimensional admission framework while highlighting opportunities for refinement. Standardizing the rubrics used for interviews, demonstration teaching, and essay writing across admission cycles would enhance the reliability and comparability of these measures. Furthermore, maintaining consistent administration of standardized cognitive assessments across all cohorts would strengthen future predictive validity studies and provide more robust evidence for continuous improvement of the University's admission policy. Overall, the results demonstrate that combining cognitive, academic, and performance-based assessments provides a more comprehensive evaluation of applicants' readiness than relying on any single admission measure alone, thereby supporting evidence-based admission practices in teacher education.

Table 2 Academic Performance of Bachelor of Secondary Education Major in Mathematics Students

Academic Performance Indicator	First Year Mean (SD)	Second Year Mean (SD)	Third Year Mean (SD)	Fourth Year Mean (SD)	Verbal Description
General Education GPA	1.33 (0.21)	1.31 (0.19)	1.18 (0.13)	1.28 (0.17)	Very Good
Professional Education GPA	1.80 (0.27)	1.65 (0.24)	1.30 (0.16)	1.31 (0.18)	Fairly Good to Very Good
Mathematics Specialization GPA	1.50 (0.29)	1.73 (0.31)	1.57 (0.22)	1.40 (0.19)	Very Good
Cumulative GPA	1.41 (0.20)	1.44 (0.21)	1.32 (0.14)	1.30 (0.15)	Very Good

Note. Lower Grade Point Average (GPA) values indicate better academic performance based on the grading system of Negros Oriental State University. Data were obtained from the official academic records of the College of Teacher Education.

Table 2 shows the academic performance of Bachelor of Secondary Education major in Mathematics (BSEd Mathematics) students across four academic domains: General Education, Professional Education, Mathematics specialization, and cumulative Grade Point Average (GPA). Overall, the findings reveal that the respondents consistently achieved Very Good academic performance throughout the program, indicating that students generally maintained high levels of academic competence despite variations in their admission profiles. The relatively small standard deviations across all academic indicators further suggest that academic performance was fairly homogeneous within each cohort, reflecting consistent learning outcomes among students who remained in the program.

Among the four academic domains, the respondents demonstrated particularly strong performance in General Education courses, with third-year students obtaining the most favorable GPA ($M = 1.18$, $SD = 0.13$), followed by fourth-year students ($M = 1.28$, $SD = 0.17$). Since lower GPA values indicate better academic performance under the University's grading system, these findings suggest that students strengthened their foundational competencies as they progressed through the teacher education curriculum. General Education courses develop communication, critical thinking, scientific reasoning, and quantitative literacy, which provide the intellectual foundation necessary for advanced professional and disciplinary learning. The observed improvement across year levels therefore reflects increasing academic maturity and adaptation to university learning expectations. Similar findings were reported by Christmann et al. [5], who found that preservice teachers with stronger academic foundations consistently maintained superior academic performance throughout their teacher education program.

Performance in Professional Education courses also demonstrated a positive trend. First-year students obtained the least favorable GPA ($M = 1.80$, $SD = 0.27$), whereas third- and fourth-year students achieved markedly better performance ($M = 1.30$ and $M = 1.31$, respectively). This gradual improvement is expected because Professional Education courses become increasingly practice-oriented as students advance through the curriculum, allowing them to integrate educational theories with authentic teaching

experiences. Exposure to curriculum planning, instructional design, assessment, classroom management, and field-based learning likely contributed to the stronger performance observed among upper-year students. These findings are consistent with Cahapay and Toquero [17], who emphasized that sustained engagement in professional education courses enhances pedagogical competence and contributes to better academic and licensure examination performance among teacher education students.

The respondents likewise maintained Very Good performance in Mathematics specialization courses, although greater variation was observed across cohorts. Fourth-year students obtained the most favorable specialization GPA (M = 1.40, SD = 0.19), whereas second-year students recorded comparatively lower performance (M = 1.73, SD = 0.31). The slight decline during the second year may be attributed to students' initial exposure to higher-level mathematics courses that require advanced analytical reasoning, abstract thinking, and mathematical proof. As students progressed through the curriculum, their specialization GPAs improved, suggesting increased conceptual understanding and greater familiarity with advanced mathematical content. Similar observations were reported by Sabanal et al. [22], who concluded that sustained learning engagement, mathematical self-efficacy, and supportive instructional environments significantly improve students' achievement in higher mathematics. Likewise, Siva [19] emphasized that continuous exposure to advanced mathematical concepts strengthens conceptual mastery among aspiring mathematics teachers.

The cumulative Grade Point Average provides the most comprehensive measure of students' overall academic achievement. The findings indicate that cumulative GPA steadily improved across year levels, with fourth-year students obtaining the highest overall academic performance (M = 1.30, SD = 0.15), closely followed by third-year students (M = 1.32, SD = 0.14). This trend suggests that students who remained in the program successfully adapted to the academic rigor of teacher education and consistently met the University's academic standards. The progressive improvement observed across cohorts may likewise reflect the effects of institutional academic support, effective instructional practices, and increased student engagement throughout the program. Astin’s [24] Theory of Student Involvement provides a useful explanation for this pattern, proposing that students who invest greater physical and psychological effort in academic activities are more likely to achieve favorable educational outcomes. Similarly, Tinto’s [25] Theory of Student Retention suggests that students who remain enrolled over time gradually develop stronger academic integration, which contributes to improved persistence and academic success.

Collectively, these findings demonstrate that the respondents consistently maintained favorable academic performance across all domains of the BSEd Mathematics curriculum. Although some variability existed among year levels, the overall pattern indicates progressive academic development as students advanced through the program. The consistently Very Good cumulative GPAs suggest that the College of Teacher Education effectively supports students in meeting the academic demands of mathematics teacher preparation through structured coursework, progressive learning experiences, and sustained academic guidance.

From the perspective of predictive validity, the consistently high academic performance observed across cohorts provides a strong basis for examining the effectiveness of the University's admission policy. Since the respondents generally demonstrated successful academic outcomes, the succeeding analyses determine which admission criteria most strongly contributed to these achievements. Identifying these predictors is essential for evaluating the extent to which the University's admission framework effectively selects applicants with the greatest potential for academic success and for informing evidence-based improvements to teacher education admission policies.

Table 3 Summary of Significant Relationships Between Admission Criteria and General Education Grade Point Average

Admission Criterion	First Year	Second Year	Third Year	Fourth Year	Overall Interpretation
NORSU Online Admission Test (NOAT)	NS	**Significant**	NS	—	Limited predictive value
Scholastic Aptitude Test for Teachers (SATT)	NS	**Significant**	**Significant**	—	Moderate predictor
Senior High School Grades	NS	**Significant**	**Significant**	NS	Strong predictor
Interview	NS	NS	**Significant**	NS	Moderate predictor
Demonstration Teaching	NS	NS	**Significant**	NS	Moderate predictor
Essay Writing	NS	**Significant**	NS	NS	Weak predictor

Note. NS = Not Significant at α = .05. Significant relationships are based on Pearson product-moment correlation analysis.

Table 3 summarizes the relationships between the admission criteria and students' academic performance in General Education courses. The findings indicate that the predictive ability of the admission criteria varied across year levels, although several variables consistently demonstrated statistically significant relationships with General Education Grade Point Average (GPA).

Among the cognitive admission measures, Senior High School (SHS) grades emerged as one of the most consistent predictors of General Education performance, demonstrating significant relationships among the second- and third-year cohorts. This finding suggests that students who consistently performed well during Senior High School likewise achieved higher academic performance in their General Education courses. Since General Education subjects emphasize foundational competencies such as communication, critical thinking, scientific reasoning, and quantitative literacy, sustained academic achievement during secondary education appears to provide an important foundation for success in these courses. Similar findings were reported by Bansiong and Balagtey [4], Christmann *et al.* [5], and Dagdagui [11], who consistently identified previous academic achievement as one of the strongest predictors of college academic performance.

The Scholastic Aptitude Test for Teachers (SATT) likewise demonstrated significant relationships with General Education GPA among the second- and third-year students. This finding supports the intended purpose of aptitude examinations, which measure reasoning ability, verbal comprehension, and quantitative aptitude required for university-level learning. Similar observations were reported by Pastor and Lumabao [16], who found that admission examination scores significantly predicted students' academic achievement, and by Totoba [10], who concluded that evidence-based admission examinations contribute positively to student success.

The NORSU Online Admission Test (NOAT) demonstrated significant predictive ability only among second-year students, suggesting that its influence on General Education performance may be limited or cohort-specific. This finding indicates that although NOAT measures important aspects of academic readiness, its predictive capability may vary depending on differences in student characteristics and admission contexts. Similar inconsistencies were reported by Alamoudi et al. [12], who found that standardized admission examinations demonstrated only weak predictive relationships in certain academic programs.

Among the performance-based admission measures, interview and demonstration teaching scores became significant only among third-year students. These findings suggest that communication skills and teaching-related competencies become increasingly relevant as students progress through the teacher education curriculum. General Education courses during the later years often require collaborative learning, oral presentations, reflective activities, and classroom participation, allowing these competencies to contribute more substantially to academic achievement. Lehane *et al.* [14] likewise emphasized that interviews and performance-based assessments measure interpersonal competencies that become increasingly important throughout teacher preparation.

Overall, the findings indicate that SHS grades and SATT were the most consistent predictors of General Education performance, whereas NOAT, interview, demonstration teaching, and essay-writing scores demonstrated more limited predictive influence. These results suggest that cognitive admission indicators continue to provide the strongest evidence of future academic success in General Education courses while performance-based assessments complement these measures by evaluating competencies that develop more fully as students advance through the program.

Table 4 Summary of Significant Relationships Between Admission Criteria and Professional Education Grade Point Average

Admission Criterion	First Year	Second Year	Third Year	Fourth Year	Overall Interpretation
NORSU Online Admission Test (NOAT)	NS	NS	NS	—	Not a significant predictor
Scholastic Aptitude Test for Teachers (SATT)	NS	NS	**Significant**	—	Moderate predictor
Senior High School (SHS) Grades	NS	NS	**Significant**	NS	Strong predictor
Interview	**Significant**	NS	**Significant**	NS	Moderate predictor
Demonstration Teaching	NS	NS	**Significant**	NS	Moderate predictor
Essay Writing	NS	**Significant**	**Significant**	NS	Moderate predictor

Note. NS = Not significant at α = .05. Significant relationships are based on Pearson product-moment correlation analysis. Fourth-year students were excluded from analyses involving NOAT and SATT because these admission measures were not implemented during their admission year.

Table 4 illustrates the relationships between the six admission criteria and students' academic performance in Professional Education courses. The results indicate that the predictive influence of the admission criteria varied across year levels, with both cognitive and performance-based measures demonstrating significant associations with Professional Education Grade Point Average (GPA). Unlike General

Education performance, which was primarily associated with cognitive admission measures, Professional Education achievement was influenced by a broader combination of academic preparedness and teaching-related competencies.

Among the cognitive admission indicators, Senior High School (SHS) grades demonstrated a significant relationship with Professional Education GPA among third-year students. This finding suggests that students with stronger academic performance during secondary education were more likely to excel in professional courses that require critical thinking, instructional planning, educational foundations, and reflective practice. The result is consistent with the findings of Bansiong and Balagtey [4], who reported that prior academic achievement significantly predicts academic performance in teacher education programs. Likewise, Dagdagui [11] concluded that High School General Weighted Average remains one of the strongest predictors of college achievement because it reflects sustained learning and academic discipline developed over several years.

Similarly, the Scholastic Aptitude Test for Teachers (SATT) demonstrated a significant relationship with Professional Education GPA among third-year students. Since the SATT measures verbal reasoning, analytical ability, and general scholastic aptitude, its association with Professional Education performance indicates that students with stronger cognitive abilities are better equipped to understand educational theories, analyze classroom situations, and apply pedagogical concepts. This finding supports Pastor and Lumabao [16], who found that admission examination scores significantly predict subsequent academic achievement, and Totoba [10], who emphasized that evidence-based admission systems contribute to improved academic outcomes in higher education.

Unlike the cognitive admission measures, interview scores demonstrated significant relationships with Professional Education GPA among both first- and third-year students. This finding suggests that communication skills, confidence, interpersonal competence, and professional disposition become increasingly important as students engage in pedagogy-focused coursework. Professional Education subjects require active participation in discussions, collaborative learning, microteaching, classroom simulations, and reflective activities, all of which rely heavily on effective communication and interpersonal skills. The findings therefore support Lehane *et al*. [14], who argued that structured interviews provide valuable information regarding applicants' professional characteristics that are not captured through standardized cognitive assessments alone. Similarly, Salingré and MacMath [15] emphasized that interviews effectively assess professional dispositions and interpersonal competencies associated with successful teaching practice.

The demonstration teaching component likewise demonstrated a significant relationship with Professional Education GPA among third-year students. This result is theoretically expected because demonstration teaching directly evaluates instructional competence, lesson organization, classroom communication, and confidence in delivering instruction, competencies that are likewise emphasized throughout Professional Education courses. Students who demonstrated stronger instructional abilities during admission may therefore possess greater readiness to perform successfully in pedagogical coursework. Although relatively few previous studies have investigated demonstration teaching as an admission criterion, Cahapay and Toquero [17] suggested that practical teaching competencies complement academic indicators by assessing applicants' readiness for professional teacher preparation.

The findings further revealed that essay writing significantly predicted Professional Education GPA among second- and third-year students. Effective written communication is fundamental to teacher education because students are required to prepare lesson plans, reflective journals, instructional materials, research papers, and assessment reports throughout the program. Consequently, applicants who demonstrate stronger writing skills during admission may also possess greater ability to organize ideas, communicate concepts clearly, and complete written academic requirements successfully. This observation aligns with Lehane *et al*. [14], who recognized written communication as an essential professional competency that supports both academic success and effective teaching practice.

Interestingly, the NORSU Online Admission Test (NOAT) did not demonstrate a statistically significant relationship with Professional Education GPA across any of the analyzed cohorts. This finding suggests that although the NOAT measures general cognitive readiness, it may be less effective in predicting performance in courses that emphasize pedagogical knowledge, communication, and professional practice. Similar inconsistencies have been reported by Alamoudi *et al.* [12], who found that standardized admission examinations demonstrated only limited predictive validity in certain professional programs, indicating that cognitive assessments alone may not fully explain academic performance.

Overall, the findings indicate that Professional Education achievement is influenced by both cognitive preparedness and professional competencies. While SHS grades and SATT provided evidence of students' academic readiness, interview performance, demonstration teaching, and essay-writing assessments captured essential professional skills that became increasingly important throughout the teacher education curriculum. These results support the University's multidimensional admission framework, demonstrating that teacher education applicants should be evaluated not only on academic ability but also on communication, instructional competence, and professional disposition.

From a policy perspective, the findings suggest that the University should continue implementing a balanced admission system that integrates cognitive and non-cognitive measures. However, greater emphasis should be placed on standardizing the rubrics for interviews, demonstration teaching, and essay writing to improve the reliability and predictive validity of these assessments. Strengthening these performance-based measures would enable the admission process to identify applicants who possess not only strong academic potential but also the professional competencies

required for success in teacher education and future classroom practice.

Table 5 Summary of Significant Relationships Between Admission Criteria and Mathematics Specialization Grade Point Average

Admission Criterion	First Year	Second Year	Third Year	Fourth Year	Overall Interpretation
NORSU Online Admission Test (NOAT)	NS	NS	NS	—	Not a significant predictor
Scholastic Aptitude Test for Teachers (SATT)	NS	NS	**Significant**	—	Moderate predictor
Senior High School (SHS) Grades	NS	**Significant**	**Significant**	NS	Strong predictor
Interview	NS	NS	**Significant**	NS	Moderate predictor
Demonstration Teaching	NS	NS	**Significant**	NS	Moderate predictor
Essay Writing	NS	**Significant**	**Significant**	NS	Moderate predictor

Note. NS = Not significant at α = .05. Significant relationships are based on Pearson product-moment correlation analysis. Fourth-year students were excluded from analyses involving NOAT and SATT because these admission measures were not implemented during their admission year.

Table 5 reports the relationships between the admission criteria and students' academic performance in Mathematics specialization courses. The findings reveal that the predictive influence of the admission criteria differed across year levels, with both cognitive and selected performance-based admission measures demonstrating significant relationships with Mathematics specialization Grade Point Average (GPA). Overall, the results suggest that success in specialized mathematics courses depends not only on students' prior academic achievement but also on competencies that support analytical reasoning, communication, and instructional readiness.

Among the cognitive admission measures, Senior High School (SHS) grades emerged as the most consistent predictor of Mathematics specialization performance, demonstrating significant relationships among the second- and third-year cohorts. This finding indicates that students who consistently performed well during secondary education were more likely to achieve favorable academic outcomes in advanced mathematics courses. Mathematics specialization subjects require strong foundational knowledge, logical reasoning, and disciplined study habits, competencies that are often reflected in sustained academic achievement during Senior High School. These findings are consistent with Christmann *et al.* [5], who reported that High School Grade Point Average significantly predicts achievement among preservice mathematics teachers. Likewise, Maslang [9] concluded that prior academic performance remains one of the strongest indicators of success in teacher education programs.

The Scholastic Aptitude Test for Teachers (SATT) also demonstrated a significant relationship with Mathematics specialization GPA among third-year students. Since the SATT evaluates reasoning ability, quantitative aptitude, and analytical thinking, its association with specialization performance suggests that cognitive readiness plays an important role in mastering advanced mathematical concepts. Mathematics courses require students to analyze abstract ideas, solve complex problems, and apply logical reasoning systematically. Consequently, applicants with stronger scholastic aptitude are more likely to perform well in specialized mathematics subjects. Similar findings were reported by Sabanal *et al.* [22], who found that cognitive readiness and mathematical self-efficacy significantly predict performance in higher mathematics. Likewise, Siva [19] emphasized that mathematical aptitude measured during admission contributes to students' readiness for mathematics-intensive teacher education programs.

Interestingly, interview and demonstration teaching scores also demonstrated significant relationships with Mathematics specialization GPA among third-year students. Although these admission components primarily assess communication and instructional skills, the findings suggest that students who effectively explain mathematical ideas and demonstrate confidence during admission likewise perform better in advanced mathematics coursework. Mathematics learning requires not only computational proficiency but also the ability to communicate mathematical reasoning clearly and organize complex ideas logically. These competencies become increasingly important as students engage in proof-based mathematics, mathematical modeling, and instructional demonstrations. Lehane *et al.* [14] similarly argued that communication skills and professional dispositions complement cognitive ability in teacher education because effective teaching requires the ability to explain abstract concepts accurately and confidently.

The results further revealed that essay-writing scores significantly predicted Mathematics specialization GPA among the second- and third-year cohorts. Although essay writing is not directly related to mathematical computation, it reflects students' ability to organize ideas, justify solutions, communicate logical arguments, and express mathematical reasoning effectively. Written communication is particularly important in mathematics education because prospective teachers are expected to explain procedures, prepare instructional materials, and articulate mathematical concepts in ways that facilitate student understanding. This finding aligns with the observations of Lehane *et al.* [14], who emphasized that written communication supports higher-order thinking and professional competence among preservice teachers.

Conversely, the NORSU Online Admission Test (NOAT) did not demonstrate a statistically significant relationship with Mathematics specialization GPA. This finding suggests that the general cognitive abilities measured by the NOAT may not adequately capture the specialized mathematical competencies required for success in advanced mathematics courses. Similar conclusions were reached by Alamoudi *et al.* [12], who found that general admission examinations sometimes demonstrate limited predictive validity in discipline-specific academic contexts. The result further

supports previous recommendations advocating for mathematics-specific admission assessments capable of evaluating applicants' quantitative reasoning and conceptual understanding more directly.

Overall, the findings indicate that Mathematics specialization performance is influenced primarily by prior academic achievement and scholastic aptitude, with communication-related competencies providing additional predictive value during the later stages of the program. This pattern supports the multidimensional nature of mathematics teacher preparation, where academic success depends on both strong mathematical foundations and the ability to communicate mathematical ideas effectively.

From a policy perspective, these findings suggest that the University should continue assigning substantial weight to SHS grades and the Scholastic Aptitude Test for Teachers while considering the development of a Mathematics-specific admission assessment that directly measures applicants' mathematical reasoning and problem-solving abilities. Such an assessment could improve the predictive validity of the admission process by evaluating competencies more closely aligned with the demands of the BSEd Mathematics curriculum. Furthermore, strengthening communication-oriented admission measures through standardized interview and demonstration teaching rubrics would complement cognitive assessments and promote a more comprehensive evaluation of applicants' readiness for mathematics teacher education.

Table 6 Summary of Significant Relationships Between Admission Criteria and Cumulative Grade Point Average

Admission Criterion	First Year	Second Year	Third Year	Fourth Year	Overall Interpretation
NORSU Online Admission Test (NOAT)	NS	NS	NS	—	Not a significant predictor
Scholastic Aptitude Test for Teachers (SATT)	NS	**Significant**	**Significant**	—	Strong predictor
Senior High School (SHS) Grades	NS	**Significant**	**Significant**	NS	Strong predictor
Interview	NS	NS	**Significant**	NS	Moderate predictor
Demonstration Teaching	NS	NS	**Significant**	NS	Moderate predictor
Essay Writing	NS	**Significant**	**Significant**	NS	Moderate predictor

Note. NS = Not significant at $\alpha = .05$. Significant relationships are based on Pearson product-moment correlation analysis. Fourth-year students were excluded from analyses involving the NORSU Online Admission Test (NOAT) and the Scholastic Aptitude Test for Teachers (SATT) because these admission measures were not implemented during their admission year.

Table 6 provides the relationships between the admission criteria and students' cumulative Grade Point Average (GPA), which represents the overall measure of academic achievement throughout the Bachelor of Secondary Education major in Mathematics (BSEd Mathematics) program. The findings indicate that both cognitive and selected performance-based admission measures demonstrated significant relationships with cumulative academic performance. However, cognitive admission indicators consistently exhibited stronger predictive relationships than performance-based assessments, suggesting that students' academic preparedness before entering the University plays a critical role in their long-term academic success.

Among the admission variables, Senior High School (SHS) grades emerged as one of the most consistent predictors of cumulative GPA. Significant relationships were observed among the second- and third-year cohorts, indicating that students who demonstrated sustained academic excellence during secondary education likewise maintained favorable academic performance throughout their teacher education program. Unlike one-time admission examinations, SHS grades reflect students' academic performance over several years and therefore capture not only academic ability but also study habits, persistence, and learning discipline. These characteristics are essential for sustaining achievement across multiple semesters of university education. Similar findings were reported by Bansiong and Balagtey [4], who identified High School Grade Point Average as one of the strongest predictors of both college academic performance and Licensure Examination for Teachers (LET) outcomes. Likewise, Repayo *et al.* [18] concluded that prior academic achievement exerts a substantial influence on long-term academic success among preservice teachers.

The Scholastic Aptitude Test for Teachers (SATT) also demonstrated significant relationships with cumulative GPA among second- and third-year students. The findings suggest that applicants with stronger scholastic aptitude were more likely to maintain consistently high academic performance across General Education, Professional Education, and Mathematics specialization courses. Since the SATT evaluates reasoning ability, analytical thinking, language proficiency, and quantitative aptitude, it measures competencies that remain relevant throughout the teacher education curriculum. This finding is consistent with Dagdagui [11], who demonstrated that standardized admission examinations significantly contribute to predicting students' academic achievement. Similarly, Pastor and Lumabao [16] reported that admission examination scores serve as reliable indicators of subsequent academic performance in higher education.

Among the performance-based admission measures, interview and demonstration teaching scores demonstrated significant relationships with cumulative GPA only among the third-year cohort. Although these admission components did not consistently predict academic performance across all year levels, their significance during the later stages of the program suggests that communication skills, instructional competence, and professional confidence become increasingly relevant as students engage in advanced pedagogy courses, classroom observations, and field-based learning experiences. These competencies are central to teacher education because they support effective classroom communication, reflective practice, and instructional decision-making. Lehane *et al.* [14] likewise argued that

interviews and performance-based assessments complement cognitive measures by evaluating interpersonal and professional characteristics essential for successful teaching.

Similarly, essay-writing scores significantly predicted cumulative GPA among second- and third-year students. Written communication is fundamental throughout teacher education because students are required to complete research papers, lesson plans, reflective journals, instructional materials, and various academic requirements that demand coherent written expression. Applicants who demonstrated stronger writing skills during admission may therefore possess better organizational skills, critical thinking abilities, and academic communication competencies that contribute to sustained academic achievement. These findings support the observations of Lehane *et al*. [14], who emphasized that written communication is closely associated with higher-order thinking and professional competence among preservice teachers.

Conversely, the NORSU Online Admission Test (NOAT) did not demonstrate statistically significant relationships with cumulative GPA. This finding suggests that the NOAT may be more effective as an initial screening instrument than as a long-term predictor of academic success. Since cumulative GPA reflects performance accumulated over several years of study, students' academic outcomes may be increasingly influenced by institutional experiences, learning engagement, motivation, instructional quality, and personal development rather than their initial admission test performance alone. Similar findings were reported by Alamoudi et al. [12], who observed that standardized admission examinations alone often explain only a limited proportion of variance in long-term academic achievement.

The findings are consistent with Astin's [24] Theory of Student Involvement, which proposes that students' academic success depends not only on their characteristics upon admission but also on the extent of their engagement in academic and institutional experiences throughout their college education. Likewise, Tinto's [25] Theory of Student Retention suggests that continued academic integration strengthens students' persistence and overall academic performance over time. These theoretical perspectives help explain why performance-based admission measures became more influential during the later years of the program, as students increasingly participated in professional learning experiences requiring communication, collaboration, and instructional competence.

Overall, the results demonstrate that SHS grades and the Scholastic Aptitude Test for Teachers (SATT) were the most consistent predictors of cumulative academic performance, while interview, demonstration teaching, and essay-writing assessments provided additional predictive value during the later stages of the program. These findings reinforce the value of a multidimensional admission framework that combines indicators of prior academic achievement with assessments of professional competencies. Rather than relying exclusively on standardized examinations, teacher education institutions should continue integrating both cognitive and non-cognitive measures to identify applicants with the greatest potential for sustained academic success.

From a policy perspective, the findings suggest that greater weight may be assigned to SHS grades and SATT results because of their consistent predictive validity across multiple academic outcomes. At the same time, performance-based assessments should be retained and further standardized to enhance their reliability and contribution to the admission process. Strengthening the integration of these admission measures would improve the University's ability to identify academically prepared applicants while simultaneously recognizing the professional competencies required for effective mathematics teaching. Such evidence-based refinements would further strengthen the predictive validity and overall effectiveness of the University's admission policy.

Table 7 Summary of Regression Models Predicting Academic Performance of BSEd Mathematics Students

Academic Performance Indicator	Significant Predictor(s)	Regression Equation	R^2	Interpretation
General Education GPA (Second Year)	NOAT	GPA = 2.214 – 0.017(NOAT)	.310	Moderate explanatory power
General Education GPA (Third Year)	SATT, SHS Grades	GPA = 4.205 – 0.009(SATT) – 0.024(SHS)	.805	Very strong explanatory power
Professional Education GPA (First Year)	NOAT, Interview, Demonstration Teaching	GPA = 4.453 – 0.079(NOAT) – 0.043(Interview) + 0.028(Demonstration Teaching)	—	Significant model
Professional Education GPA (Third Year)	SATT, SHS Grades	GPA = 5.509 – 0.010(SATT) – 0.036(SHS)	.727	Strong explanatory power
Mathematics Specialization GPA (Second Year)	SHS Grades	GPA = 12.838 – 0.119(SHS)	.255	Weak to moderate explanatory power

Note. Only statistically significant regression models are presented. Fourth-year regression models involving NOAT and SATT were not estimated because these admission measures were not implemented during the admission of the fourth-year cohort. Regression coefficients are based on the final models generated through multiple linear regression analysis.

Table 7 outlines the regression models developed to predict the academic performance of Bachelor of Secondary Education major in Mathematics students using the University's admission criteria. The results demonstrate that the predictive ability of the admission variables varied across academic outcomes and year levels, indicating that different admission measures contribute differently to students' academic success throughout the teacher education program.

Among the developed models, the third-year General Education GPA model demonstrated the strongest predictive capability, explaining approximately 80.5% of the variance in students' General Education performance (R^2 = .805). The model identified Scholastic Aptitude Test for Teachers (SATT) scores and Senior High School (SHS) grades as significant predictors, indicating that students who entered the program with stronger scholastic aptitude and sustained academic achievement generally performed better in General Education courses. This substantial explanatory power suggests that the combined use of standardized aptitude assessments and prior academic achievement provides a robust basis for predicting students' performance in

foundational university courses. These findings are consistent with Dagdagui [11], who reported that admission examinations and prior academic performance jointly explained a substantial proportion of the variance in college achievement. Similarly, Bansiong and Balagtey [4] concluded that combining multiple cognitive indicators enhances the accuracy of predicting academic success among teacher education students.

A similarly strong regression model was observed for third-year Professional Education GPA, where SATT scores and SHS grades jointly explained 72.7% of the variance in academic performance ($R^2 = .727$). This finding indicates that cognitive preparedness continues to influence students' achievement even in pedagogy-oriented courses. Although Professional Education emphasizes instructional strategies, curriculum development, and classroom practice, students with stronger reasoning abilities and consistent prior academic achievement appear better prepared to understand educational theories and apply pedagogical principles effectively. The result supports Pastor and Lumabao [16], who emphasized that standardized admission assessments remain significant predictors of academic achievement across different learning domains.

For General Education GPA among second-year students, the NORSU Online Admission Test (NOAT) emerged as the sole significant predictor, explaining 31.0% of the variance in academic performance ($R^2 = .310$). Although the explanatory power of this model was considerably lower than that of the third-year models, it nevertheless suggests that NOAT provides useful information regarding students' initial readiness for university-level learning. However, the relatively modest R^2 value indicates that additional factors beyond admission test performance influence academic achievement during the early stages of the program. Similar findings were reported by Alamoudi *et al.* [12], who observed that standardized admission examinations often explain only a limited proportion of variance in students' academic performance because learning outcomes are influenced by numerous academic, institutional, and personal factors.

The regression model for Mathematics specialization GPA identified SHS grades as the only significant predictor among second-year students, accounting for 25.5% of the variance in specialization performance ($R^2 = .255$). Although this model demonstrated the lowest explanatory power among the significant regression models, it reinforces the importance of sustained academic achievement before university admission. Mathematics specialization courses require strong conceptual understanding, analytical reasoning, and disciplined study habits, all of which are reflected in students' previous academic performance. These findings support Christmann *et al*. [5] and Sabanal *et al*. [22], who likewise identified prior academic achievement as an important determinant of success in advanced mathematics courses.

Interestingly, the first-year Professional Education model identified a combination of NOAT, interview, and demonstration teaching scores as significant predictors. Unlike the other regression models, this model incorporated both cognitive and performance-based admission measures, suggesting that early success in Professional Education depends not only on academic readiness but also on communication skills, confidence, and instructional competence. This finding reinforces the multidimensional nature of teacher education, where effective performance is shaped by the interaction of cognitive ability and professional dispositions. Lehane *et al*. [14] similarly argued that teacher education admissions should evaluate both academic competence and non-cognitive characteristics because effective teaching requires a balance of intellectual ability, communication skills, and professional judgment.

Collectively, the regression analyses demonstrate that Senior High School grades and the Scholastic Aptitude Test for Teachers emerged as the most consistent predictors of academic performance across multiple learning domains. These admission variables repeatedly appeared in the strongest regression models and consistently explained substantial proportions of the variance in students' Grade Point Averages. In contrast, performance-based admission measures, particularly interviews and demonstration teaching, contributed primarily to Professional Education performance, highlighting their relevance in evaluating competencies associated with teaching practice rather than purely academic achievement.

The findings strongly support the Theory of Predictive Validity, which argues that admission instruments should be evaluated based on their ability to predict future educational outcomes. The consistently high explanatory power of models incorporating SHS grades and SATT scores demonstrates that these admission criteria possess substantial predictive validity within the BSEd Mathematics program. Moreover, the inclusion of interview and demonstration teaching in selected models indicates that cognitive and non-cognitive admission measures are complementary rather than competing predictors of success.

From a policy perspective, the regression models provide empirical evidence for strengthening the University's admission framework. Greater emphasis may be placed on SHS grades and SATT scores because of their consistent predictive value, while interviews and demonstration teaching should continue to be incorporated to assess professional competencies that become increasingly important throughout teacher education. The findings likewise support the development of a data-driven admission policy in which the weighting of admission criteria reflects their demonstrated contribution to students' academic success. Such an evidence-based approach would enhance the fairness, effectiveness, and predictive validity of the University's admission system while promoting the selection of applicants with the greatest potential for academic and professional excellence.

Table 8 Emerging Themes on the Effectiveness of the Admission Policy

Theme	Description	Representative Perspective
Academic Preparedness as a Foundation for Success	Participants perceived that applicants with strong academic backgrounds were generally better prepared to meet the academic demands of the BSEd Mathematics program.	Students and faculty consistently identified SHS grades and scholastic aptitude as important indicators of future academic performance.

Theme	Description	Representative Perspective
Need for Mathematics-Specific Assessment	Participants believed that the current admission process should include stronger measures of mathematical competence.	Respondents emphasized that mathematics proficiency should receive greater emphasis during admission because of the rigorous nature of the specialization.
Importance of Professional Competencies	Communication skills, confidence, and teaching potential were viewed as essential qualities of future mathematics teachers.	Interview and demonstration teaching assessments were considered valuable for evaluating applicants' readiness for teaching.
Need for Continuous Improvement of Admission Procedures	Participants recommended refining the existing admission process to improve fairness, consistency, and predictive accuracy.	Faculty members suggested standardizing scoring rubrics and maintaining consistent admission procedures across cohorts.
Strengthening Academic Support After Admission	Participants emphasized that admission should be complemented by institutional academic support.	Bridging programs, mentoring, and early intervention were recommended for students requiring additional academic assistance.

The thematic analysis revealed that both students and faculty members generally viewed the University's admission policy as an effective mechanism for identifying applicants with the potential to succeed academically. Nevertheless, participants consistently recognized opportunities to strengthen the admission framework through greater standardization, improved mathematics-specific assessment, and enhanced post-admission academic support.

Academic Preparedness as a Foundation for Success

The most prominent theme emphasized the importance of academic preparedness in predicting students' success in the BSEd Mathematics program. Both students and faculty members consistently identified Senior High School (SHS) academic performance and scholastic aptitude as reliable indicators of readiness for the intellectual demands of teacher education. Participants believed that applicants who demonstrated sustained academic excellence prior to admission were generally more capable of adapting to the rigorous coursework, maintaining satisfactory academic standing, and completing the program successfully.

This qualitative finding strongly reinforces the quantitative results of the present study, where SHS grades and the Scholastic Aptitude Test for Teachers (SATT) emerged as the most consistent predictors of academic performance across several regression models. The convergence of quantitative and qualitative findings strengthens the conclusion that previous academic achievement provides meaningful evidence of future success in teacher education.

The findings are likewise consistent with those of Bansiong and Balagtey [4], Dagdagui [11], and Maslang [9], who identified prior academic achievement as one of the strongest predictors of college academic performance. From the perspective of Predictive Validity Theory, sustained academic performance reflects stable learning behaviors and cognitive competencies that extend beyond isolated admission examinations.

Need for Mathematics-Specific Assessment

A second major theme highlighted the perceived need for a Mathematics-specific admission assessment. Both students and faculty members observed that the existing admission process adequately evaluates general academic ability but provides only limited assessment of applicants' mathematical reasoning, conceptual understanding, and problem-solving competence. Given the highly specialized nature of the BSEd Mathematics curriculum, participants believed that applicants' mathematical preparedness should receive greater emphasis during admission.

This perception is supported by the quantitative findings, which demonstrated that cognitive indicators significantly predicted Mathematics specialization performance. Participants argued that a mathematics-focused assessment would enable the University to identify applicants requiring early intervention while ensuring that admitted students possess the foundational competencies necessary for success in advanced mathematics courses.

Similar recommendations have been proposed by Siva [19], who emphasized the importance of mathematics-specific diagnostic assessments in strengthening teacher education programs. Likewise, Sabanal *et al*. [22] reported that mathematical readiness significantly influences students' achievement in higher mathematics.

Importance of Professional Competencies

Another important theme recognized that effective teachers require more than academic ability alone. Participants consistently described communication skills, confidence, instructional readiness, and professional disposition as essential characteristics of successful mathematics teachers. Consequently, interview and demonstration teaching assessments were viewed as indispensable components of the admission process despite their comparatively weaker quantitative predictive relationships.

Faculty members emphasized that applicants who communicate mathematical concepts clearly and demonstrate confidence during teaching activities are generally better prepared for classroom practice. Students likewise acknowledged that effective teaching requires interpersonal competence in addition to subject matter knowledge.

These perceptions support the work of Lehane *et al.* [14], who argued that teacher education admissions should evaluate both cognitive and non-cognitive competencies. Similarly, Salingré and MacMath [15] emphasized that structured interviews provide valuable information regarding applicants' professional dispositions and interpersonal skills that standardized examinations cannot adequately capture.

Need for Continuous Improvement of Admission Procedures

Participants also recognized the need for continuous refinement of the University's admission policy. Faculty members recommended maintaining consistent admission procedures across cohorts and standardizing the scoring rubrics used for interviews, demonstration teaching, and essay-writing assessments. Students similarly expressed the

importance of transparency in communicating admission requirements and evaluation criteria.

These observations align with international recommendations advocating evidence-based admission systems that undergo regular institutional validation. Totoba [10] emphasized that admission policies should be continuously evaluated to ensure fairness, consistency, and predictive effectiveness. Likewise, the quantitative findings of the present study demonstrate that the predictive influence of several admission measures varies across cohorts, further supporting the need for ongoing policy evaluation.

Strengthening Academic Support After Admission

The final theme emphasized that admission alone cannot guarantee academic success. Participants highlighted the importance of bridging programs, mentoring, academic advising, and early intervention strategies to assist students in meeting the academic demands of the BSEd Mathematics curriculum. Faculty members particularly recommended providing additional academic support for students identified as academically at risk based on their admission profiles.

This theme complements Astin's [24] Theory of Student Involvement and Tinto's [25] Theory of Student Retention, both of which emphasize that students' academic success is shaped not only by their characteristics upon admission but also by the quality of their educational experiences and the institutional support they receive throughout their academic journey. Consistent with these theoretical perspectives, the findings suggest that an effective admission policy should extend beyond student selection by incorporating comprehensive academic support services, such as bridging programs, mentoring, academic advising, and early intervention initiatives. Integrating these support mechanisms with the admission framework can enhance students' academic achievement, persistence, and overall success in teacher education programs.

Integrated Qualitative Findings

Overall, the qualitative findings reinforce the quantitative results by demonstrating broad agreement between students' and faculty members' experiences and the statistical evidence. Participants recognized the importance of prior academic achievement and scholastic aptitude while simultaneously emphasizing that professional competencies and institutional support are essential for long-term success in teacher education. Overal, these findings support a multidimensional admission framework that integrates cognitive and non-cognitive assessments with continuous academic support, thereby strengthening both the predictive validity and educational effectiveness of the University's admission policy.

Table 9 Evidence-Based Policy Recommendations for Strengthening the Admission Framework

Major Finding	Policy Implication	Recommended Action
SHS grades consistently predicted academic performance.	Prior academic achievement remains the strongest indicator of future academic success.	Increase the weight assigned to SHS grades in the admission evaluation while maintaining minimum academic standards for program entry.
SATT demonstrated consistent predictive validity across several academic outcomes.	Standardized aptitude assessment effectively measures cognitive readiness for teacher education.	Retain the Scholastic Aptitude Test for Teachers as a major component of the admission process and periodically evaluate its validity and reliability.
Interview, demonstration teaching, and essay writing predicted selected academic outcomes, particularly in the later years of the program.	Professional competencies complement cognitive ability in predicting long-term success.	Standardize the scoring rubrics and evaluator training to improve the reliability, fairness, and consistency of performance-based assessments.
Participants recommended stronger evaluation of mathematical competence.	General admission examinations may not adequately measure mathematics-specific readiness.	Develop a Mathematics-specific diagnostic or admission assessment focusing on mathematical reasoning, conceptual understanding, and problem-solving skills.
Admission results identified varying levels of preparedness among incoming students.	Early intervention may improve student retention and academic achievement.	Implement bridging courses, diagnostic enrichment programs, peer tutoring, and academic mentoring for students identified as academically at risk.
Faculty emphasized the importance of continuous policy evaluation.	Admission policies should be evidence-based and responsive to institutional outcomes.	Conduct periodic predictive validity studies using subsequent student cohorts to evaluate and refine admission policies and weighting schemes.

The findings demonstrate that the University's current admission policy provides a sound foundation for selecting applicants who are likely to succeed in the Bachelor of Secondary Education major in Mathematics program. However, the results also indicate opportunities to strengthen the admission framework by placing greater emphasis on admission criteria that consistently demonstrated predictive validity while refining assessment procedures for components that exhibited more variable predictive performance.

Among the admission variables examined, Senior High School (SHS) grades emerged as the most consistent predictor of academic achievement across multiple learning domains. This finding suggests that sustained academic performance prior to university admission remains one of the strongest indicators of future success. Unlike one-time admission examinations, SHS grades represent students' long-term learning behaviors, persistence, and academic discipline. Consequently, the University may consider assigning greater weight to SHS grades within its admission policy while continuing to maintain appropriate academic standards for entry into the BSEd Mathematics program. Similar recommendations have been advanced by Bansiong and Balagtey [4], Dagdagui [11], and Repayo *et al*. [18], who identified prior academic achievement as a reliable predictor of both college performance and professional outcomes.

The Scholastic Aptitude Test for Teachers (SATT) likewise demonstrated consistent predictive validity across several academic performance indicators. The findings suggest that standardized aptitude assessments continue to provide valuable information regarding applicants' reasoning ability, analytical thinking, and readiness for higher education. Therefore, the University should retain the SATT as a core component of its admission system while periodically reviewing its content, reliability, and alignment with the

competencies expected of future mathematics teachers. Regular validation studies would ensure that the assessment remains responsive to curricular developments and institutional goals.

Although the interview, demonstration teaching, and essay-writing assessments demonstrated comparatively less consistent predictive validity, they contributed significantly to selected academic outcomes, particularly in the later stages of the teacher education program. These findings highlight the continuing importance of evaluating communication skills, instructional competence, and professional dispositions during admission. Rather than reducing the role of these assessments, the University should strengthen their implementation by adopting standardized scoring rubrics, providing comprehensive evaluator training, and conducting periodic inter-rater reliability assessments. Such improvements would enhance the fairness, consistency, and credibility of performance-based admission measures.

One of the most important implications emerging from both the quantitative and qualitative findings is the need to strengthen the assessment of mathematical competence during admission. Students and faculty members consistently emphasized that general admission examinations may not sufficiently evaluate applicants' readiness for the rigorous mathematical content of the program. Developing a Mathematics-specific diagnostic or admission assessment would allow the University to identify applicants' strengths and learning needs more accurately while providing a stronger basis for academic placement and instructional planning. This recommendation is consistent with Siva [19], who advocated mathematics-focused diagnostic assessments to improve teacher preparation, and with Sabanal *et al*. [22], who demonstrated the importance of mathematical readiness in predicting achievement in higher mathematics.

The findings likewise underscore the importance of post-admission academic support. Admission policies should not be viewed solely as mechanisms for student selection but also as tools for identifying students who may benefit from additional academic assistance. The University may therefore establish bridging courses, diagnostic enrichment programs, structured peer tutoring, academic mentoring, and early intervention initiatives for students identified as academically at risk based on their admission profiles. Such initiatives are consistent with Tinto's [25] Theory of Student Retention, which emphasizes that institutional support plays a crucial role in promoting persistence and academic success, and Astin's [24] Theory of Student Involvement, which highlights the importance of meaningful academic engagement throughout students' educational experiences.

Finally, the study highlights the importance of continuous institutional evaluation of admission policies. Predictive validity should not be regarded as a one-time assessment but rather as an ongoing institutional quality assurance process. The University should periodically evaluate the predictive performance of its admission criteria using subsequent student cohorts and revise the weighting of admission components based on empirical evidence. Such an evidence-based approach would ensure that the admission policy remains responsive to changing educational contexts, curricular reforms, and institutional priorities while promoting fairness, transparency, and academic excellence.

Overall, the findings support the continued implementation of a multidimensional admission framework that integrates cognitive indicators, performance-based assessments, and comprehensive post-admission support mechanisms. By strengthening the predictive validity of its admission criteria and aligning admission decisions with evidence-based educational practices, Negros Oriental State University can further enhance the quality of its Bachelor of Secondary Education major in Mathematics program and contribute to the preparation of competent, academically capable, and professionally responsive future mathematics educators.

CONCLUSION

This study demonstrated that the admission criteria used by Negros Oriental State University possess varying levels of predictive validity in forecasting the academic performance of Bachelor of Secondary Education major in Mathematics (BSEd Mathematics) students. Among the admission variables examined, Senior High School (SHS) grades and the Scholastic Aptitude Test for Teachers (SATT) consistently emerged as the strongest predictors of students' performance across General Education, Professional Education, Mathematics specialization courses, and cumulative Grade Point Average. These findings indicate that prior academic achievement and scholastic aptitude provide reliable indicators of students' readiness for the academic demands of teacher education.

The NORSU Online Admission Test (NOAT) demonstrated limited but meaningful predictive value, particularly during the early stages of the program, while the interview, demonstration teaching, and essay-writing assessments showed greater relevance in predicting selected academic outcomes during the later years of study. These results suggest that although cognitive measures remain the strongest predictors of academic success, performance-based assessments contribute valuable information regarding applicants' communication skills, instructional competence, and professional disposition.

The regression analyses further confirmed that the most effective prediction of academic performance was achieved through the combined use of cognitive and non-cognitive admission measures. Rather than relying on a single admission criterion, a multidimensional admission framework provides a more comprehensive evaluation of applicants' potential for academic and professional success. The qualitative findings reinforced this conclusion, with both students and faculty members recognizing the importance of maintaining rigorous academic standards while strengthening the assessment of mathematics readiness, improving the standardization of performance-based evaluations, and providing sustained academic support after admission.

Overall, the findings affirm that the current admission policy provides a sound foundation for selecting qualified applicants for the BSEd Mathematics program. However, its predictive validity and effectiveness can be further enhanced through continuous validation of admission criteria, refinement of assessment procedures, and the integration of targeted

academic support initiatives. These improvements will contribute to a more evidence-based admission system capable of producing academically competent and professionally prepared future Mathematics educators.

RECOMMENDATION

Based on the findings of the study, the following recommendations are proposed:

1. Strengthen evidence-based admission practices. The College of Teacher Education should continue implementing a multidimensional admission system while assigning greater emphasis to admission criteria that consistently demonstrated predictive validity, particularly SHS grades and the Scholastic Aptitude Test for Teachers (SATT).
2. Standardize performance-based assessments. Interview, demonstration teaching, and essay-writing assessments should be supported by standardized evaluation rubrics, structured scoring procedures, and regular evaluator calibration to improve their reliability, objectivity, and consistency across admission cycles.
3. Develop a Mathematics-specific admission assessment. A diagnostic examination focusing on mathematical reasoning, conceptual understanding, and problem-solving should be developed to complement existing admission measures and better assess applicants' readiness for the BSEd Mathematics curriculum.
4. Implement data-driven academic support programs. Admission results should be utilized to identify students who may require additional academic assistance. Bridging courses, mentoring programs, academic advising, peer tutoring, and early intervention initiatives should be institutionalized to strengthen student achievement and retention.
5. Conduct periodic predictive validity studies. The University should regularly evaluate the effectiveness of its admission policy using succeeding student cohorts to determine whether the predictive value of each admission criterion remains consistent and aligned with program outcomes. Findings from these evaluations should guide continuous policy improvement.
6. Expand future research. Future studies may include larger samples from different campuses, teacher education specializations, or higher education institutions to improve the generalizability of the findings. Researchers are also encouraged to investigate additional factors, such as motivation, self-efficacy, learning engagement, socioeconomic background, and institutional support, as well as their influence on retention, graduation, and Licensure Examination for Professional Teachers (LEPT) performance.

The implementation of these recommendations may contribute to a more transparent, equitable, and evidence-based admission system that not only identifies academically capable applicants but also supports their continued development throughout the teacher education program, thereby enhancing the preparation of competent and future-ready Mathematics educators.

REFERENCES

[1] United Nations Educational, Scientific and Cultural Organization. (2021). Reimagining our futures together: A new social contract for education. UNESCO. https://doi.org/10.54675/ASRB4722

[2] World Bank. (2023). Realizing education's promise: A World Bank retrospective. World Bank.

[3] Teacher Education Council (TEC). (2025, April 30). TEC responds to 2024 FLEMMS report with renewed focus on teacher preparation. https://tec.deped.gov.ph/news/tec-responds-to-2024-flemms-report-with-renewed-focus-on-teacher-preparation/

[4] Bansiong, A. J., & Balagtey, J. L. M. (2020). Predicting success in teacher education: Revisiting the influence of high school GPA, admission, and standardized test scores on academic and licensure performance. Journal of Research, Policy & Practice of Teachers and Teacher Education, 10(2), 1–17. https://doi.org/10.37134/jrpptte.vol10.2.1.2020

[5] Christmann, E. P., Busi, R., & Badgett, J. L. (2021). Predicting preservice mathematics teachers' academic achievement. Research Issues in Contemporary Education, 6(1), 47–61.

[6] Roman, J. A., & Roman, A. G. (2026). Readiness to teacher education program: The role of academic performance as an entry-level of future educators. Journal of Education and Learning (EduLearn), 20(2), 1111–1119. https://doi.org/10.11591/edulearn.v20i2.23677

[7] Chaparro-Cruz, I. N., Huertas-Condori, L. N., Cabana-Yupanqui, S. B., & Chaparro-Guerra, A. (2025). Relationship between entrance exam scores, academic performance, and student dropout rates: A longitudinal case study. International Journal of Learning, Teaching and Educational Research, 24(3), 216–243. https://doi.org/10.26803/ijlter.24.3.11

[8] Laus, M. A. (2021). Admission profiles as predictors of academic performance. Asia Pacific Journal of Management and Sustainable Development, 9(1), 39–47.

[9] Maslang, K. L. (2023). Predictors of academic performance among pre-service teachers: The case of a private higher educational institution in Northern Philippines. Saint Mary's University Research Journal.

[10] Totoba, B. A. (2024). Undergraduate students' admission practices and their relationship with students' academic performance at Madda Walabu University, Ethiopia. Hungarian Educational Research Journal, 14(4), 413–427. https://doi.org/10.1556/063.2023.00266

[11] Dagdagui, R. T. (2022). Predicting students' academic performance using regression analysis. American Journal of Educational Research, 10(11), 640–646. https://doi.org/10.12691/education-10-11-2

[12] Alamoudi, A. A., Fallatah, H. I., Eldakhakhny, B. M., Kamel, F. O., AlShawwa, L., & Elsamanoudy, A. Z. (2021). Relationship between admission criteria and academic performance in basic science courses among

health science students. BMC Medical Education, 21, Article 181. https://doi.org/10.1186/s12909-021-02628-4

[13] Alkushi, A., & Althewini, A. (2020). The predictive validity of admission criteria for college assignment in Saudi universities: King Saud bin Abdulaziz University for Health Sciences experience. International Education Studies, 13(4), 141–152. https://doi.org/10.5539/ies.v13n4p141

[14] Lehane, P., Lysaght, Z., & O'Leary, M. (2023). A validity perspective on interviews as a selection mechanism for entry to initial teacher education programmes. European Journal of Teacher Education, 46(2), 293–307. https://doi.org/10.1080/02619768.2021.1920920

[15] Salingré, B., & MacMath, S. (2021). Using multiple mini-interviews for admission into teacher education. Canadian Journal of Education, 44(1), 150–173.

[16] Pastor, M. J. D., & Lumabao, J. M. B. (2024). Entrance scores as predictor of academic performance. Universal Journal of Educational Research, 3(2), 79–86.

[17] Cahapay, M. B., & Toquero, C. M. D. (2022). Predictive validity of selected measures of BEED graduates for first-time performance in the licensure examination for teachers. Journal of Pedagogical Sociology and Psychology, 4(2), 20–34. https://doi.org/10.33902/JPSP.202212383

[18] Repayo, B. D., Malonisio, M. O., & Tambong, C. R. (2025). Beyond admission scores: Mapping the strongest predictors of LET performance in BSEd graduates. Jurnal Ilmiah Peuradeun, 13(2), 1317–1344. https://doi.org/10.26811/peuradeun.v13i2.1364

[19] Siva, E. N. (2022). Teacher education admission test results in mathematics: Basis for pedagogical enhancement. Asia Pacific Journal of Educational Perspective, 9(1), 1–7.

[20] Sipacio, P. J. F., Raza, R. A., & Gopez, S. D. (2021). Correlating grade point average and student teaching grade of teacher education licensure examination. National University Manila Journal, 52–61.

[21] Abao, E. L., Petancio, J. A. M., Sanchez, J. M. P., & Sumalinog, G. G. (2023). Performance of beginning teachers in the licensure examination for teachers: A national study. Frontiers in Education, 8, Article 1240658. https://doi.org/10.3389/feduc.2023.1240658

[22] Sabanal, D., Gako, M., Dela Torre, H., Sabanal, J., So, R. B., Bacal, J. B., et al. (2024). Predictive model for college students' performance in higher mathematics. Social Sciences & Humanities Open, 10, Article 101134. https://doi.org/10.1016/j.ssaho.2024.101134

[23] Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. Qualitative Research in Psychology, 3(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

[24] Astin, A. W. (1993). What matters in college? Four critical years revisited. Jossey-Bass.

[25] Tinto, V. (1993). Leaving college: Rethinking the causes and cures of student attrition (2nd ed.). University of Chicago Press.

[26] Republic of the Philippines. (2012). Republic Act No. 10173: Data Privacy Act of 2012. https://privacy.gov.ph