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Performance of beginning teachers in the licensure examination for teachers: a national study

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The study explored the performances of teacher education graduates in the licensure examination for teachers (LET). The descriptive-comparative research was conducted through a survey questionnaire administered online to 2,780 beginning teachers across the 16 regions in the Philippines. The findings of this study revealed that the graduates in Elementary Education (BEEd) and Secondary Education (BSEd) had satisfactory LET performances from 2017 to 2019. The comparative analysis found that these LET performances significantly vary in their examination year, degree program, specializations, examination components, locale, and type of higher education institution. Furthermore, the performance of graduates in the LET examination could be attributed to their test-taking time, college preparation, and grade point average. Hence, the graduates' satisfactory performances and significant impact on college preparation show that teacher education institutions have aligned their offerings to the standards set by the country's higher education and licensure system. Strengthening curricular enhancement programs, reinforcing constructive alignment, and intensifying retention policy and mentoring practices were recommended.

1. Introduction

Schools all over the world regard licenses as an essential employment entry in the teaching field (Yauney, 2022). In the United States, licensing is the state's obligation. Teachers must be licensed before they can be placed in the teaching field. A license has also determined whether they are competent or incompetent in practicing (National Academies of Sciences, Engineering, and Medicine, 2023). European countries, on the other hand, regard licenses as the most reliable teaching employment qualification along with a mandatory minimum of 2 years of licensed experience (Algate, 2022). In some parts of Asia, attaining a teaching license is a must after the completion of a bachelor's degree (Adoniou and Gallagher, 2016; Yauney, 2022).

A licensure examination is one of the hurdles aspiring professionals must pass. It is given to assess the candidates' skills and abilities to practice their profession capably. The Professional Regulatory Board (PRB) administers the exam, and its ultimate responsibility is to ensure that it meets professional, legal, and technical standards. Once the candidates pass the licensing process, they are granted a license that will qualify them to put their professions into practice.

In the Philippines, the licensure examination became one of the factors that signaled the quality of educators and the instruction they provided. It has become a key safeguard for the caliber of a teacher to be employed in schools. It offers a standard by which to judge whether a graduate has the minimal proficiency necessary to engage in the teaching profession. The majority of professions have licensing tests to admit eligible graduates to their specific sectors. In the case of teacher education, the license exam serves as a preliminary indicator of teaching proficiency (Acosta and Acosta, 2016, as cited in Cahapay, 2021). In a bigger context, it determined whether the teacher education institutions (TEIs) have fully delivered the competencies, skills, and content the graduates expected to possess based on the Commission on Higher Education (CHEd) mandates (Antiojo, 2017; Guzman, 2020). Approximately 80 licensure examinations were conducted twice a year in different testing centers with thousands of examinees. The licensure examination for teachers (LET) has the highest number of examinees who were graduates of various teacher education institutions, both public and private. These TEIs received and followed a unified mandate and quality teaching indicators from CHEd [Ismael, 2019; Professional Regulation Commission (PRC), 2019].

Despite the uniform standards adhered to by the TEIs nationwide, the results of the examinations still varied. A study that covered the examination results from 2011 to 2015 found that a particular university's passing rate was above the national passing percentage. In a separate study that focused on the five-year rating and performance from 2010 to 2015 of the Bachelor of Elementary Education (BEEd) and Bachelor of Secondary Education (BSED) graduates of Benguet State University, findings of research mentioned that the institution's passing percentage was high compared to the national passing rate (Botengan et al., 2018). The BEEd and BSEd performance of Liceo de Cagayan University takers for the last 4 to 5 years was high for professional education, average for specialized areas, and low for general education. There was a significant difference between the BEEd and BSEd takers (Puertos, 2015; Malaluan, 2017). In addition, a study on the LET performance of Cagayan State University takers stressed that the student's weighted average in college has a positive and strong correlation with their LET performance. This result proved that the teachers have successfully delivered instruction that coincided with the graduates' LET performance (Amanonce and Maramag, 2020).

However, at Cavite State University, where the examinees' performance rating was studied, the licensure exam rating was low, and those who failed had low scores. The alarming performance would worsen in the coming years unless a serious intervention was implemented (Antiojo, 2017). According to Mateo (2017), the country's Teacher Education Institutions' performance continues to go downhill. The graduates of teacher education courses only got an average passing percentage of 31%, lower than the percentages garnered by other board exams. It even logged a passing rate of 11% for elementary and 26% for secondary. Half of the universities and colleges with teacher education programs for secondary and elementary levels performed lower than the average national passing rate.

The inconsistencies in their performance were noticeable in the results of the different universities' institutional-based research articles. The studies presented some realities that need to be investigated further since the studies were just conducted utilizing

a smaller scope and fewer takers involved. Participants were only compared to their peers from the same institution using a similar instrument. The years covered also need to be updated, for the factors that caused the varied LET performance per institution could be constant or changing. With the identified gaps, the present study would unfold data from the three main islands – Luzon, Visayas, and Mindanao, presenting the performance of the LET takers from 2017 to 2019. Moreover, this study would reveal the significant variations in the takers' performances when classified according to regions, types of HEIs, and degree programs. Furthermore, it would produce more reliable and valid results that can serve as a basis for policy recommendations to aid the smooth board exam transition from the old to the new curriculum. Consequently, the data of this study would be an excellent addition to the rich literature on the LET takers' performance that can assist future studies to be conducted.

1.1. Teacher quality and teaching quality

Darling-Hammond (2012, *i*) defines teacher quality as "the bundle of personal traits, skills, and understandings an individual brings to teaching, including dispositions to behave in certain ways." It is, without a doubt, a vital component when advancing the educational structure of a country [Department of Education (DepEd), 2019]. Teaching quality, on the other hand, pertains to "strong instruction" that enables most learners to learn (Darling-Hammond, 2012, *i*). Thus, the quality of learning emanates from the quality of teaching [Department of Education – Teacher Education Council (TEC), 2017].

Teacher quality and teaching quality are two concepts closely intertwined with teacher effectiveness. With teaching quality dependent on teacher quality (Darling-Hammond, 2012), it is the primary duty of higher education institutions (HEIs) to produce graduates with teacher quality by equipping them with the knowledge, skills, and dispositions that the present society and even beyond expects of them to possess to be able to teach effectively. Teaching individuals should have mastery of the content, teaching methodologies, and suitable characteristics (Hotaman, 2010).

Graduates of TEIs with strong teacher quality would have better chances of being hired. They are likely to teach effectively (Darling-Hammond, 2012). However, teacher quality does not guarantee teaching quality since other factors such as teaching conditions, class size, curriculum, availability of materials, teacher support, and others are also to be considered. According to Rockoff et al. (2011), teachers needed more progress from when they graduated and got hired. Furthermore, more literature is required to explore the relationship between the initial information obtained from teacher applicants and their consequent teaching performance due to issues in sample size and metrics to be used for teacher performance (Jacob et al., 2016). The main concern is the need for the tools used to evaluate teachers to assess their teaching capacity (Darling-Hammond, 2010).

Different studies make use of additional data to account for effective teaching performance. Duckworth et al. (2009) used the teacher rankings from administrators based on student academic gains. Rockoff et al. (2011) referred to the student's achievement on standardized tests, performance ratings, absences, and retention of teachers. Aydin et al. (2013) employed essential competencies, personal and professional development, content area knowledge, and national and global values. Bastian et al. (2015) utilized value-added

scores, evaluation ratings, and retention of teachers to determine teacher effectiveness. A teacher evaluation system on which to base how teachers' performance will be measured could help TEIs explore factors and predictors of effective teaching performance. Knowledge and understanding of such will help TEIs better plan, prepare, and implement the teacher training program and assessment tools for prospective teachers. Higher teaching quality standards will achieve higher student learning expectations (Darling-Hammond, 2010).

1.2. Teacher training and licensure

With teacher quality identified as the main in-school factor that impacts student achievement based on empirical studies, admitting teachers to the workforce is regulated by policymakers through teacher licensure (Goldhaber, 2011). Countries have different teacher licensure systems to ensure the teacher quality of those who intend to teach. A teaching license gives its holder the right to legally practice and work as a professional teacher for a specified location. In some places, it is termed as a teaching certification, qualification, or credential (Deady, 2020, para. 3).

Most teacher licensure systems worldwide require that teachers graduate from accredited TEIs, complete student teaching, and pass one or more licensure examinations (Goldhaber, 2011). The completion of teacher training programs in colleges and universities is the most popular pathway into teaching. However, other certification programs are also available to address challenges with teacher quality and quantity in a country such as the United States of America (Boyd et al., 2007). Meanwhile, according to some authors, teacher preparation through undergraduate coursework (formal pre-service and in-service) does not affect teacher productivity (Harris and Sass, 2011) nor the performance of students (Boyd et al., 2007).

Empirical literature also revealed that there is only a weak association between teacher licensure and student achievement (Goldhaber, 2011). Studies conducted and a report from the National Research Council also pointed out that most licensure tests do not necessarily predict the success of beginning teachers in their workplaces (Darling-Hammond, 2010). Nevertheless, even with these findings, much premium is still being placed on requiring individuals to pass licensure tests to teach.

Table 1 summarizes the teacher licensure systems and the required teacher training in the countries that were top performing in the Programme for International Student Assessment (PISA) 2018. Notably, these countries are all located in the continent of Asia. Based on the table, Singapore, Macao, and Hong Kong require that the teachers be bachelor's degree holders as the minimum educational qualification. Non-education bachelor's degree holders can also teach in Macao and Hong Kong with additional training to become certified teachers. Meanwhile, in Singapore, there is only one institution that trains teachers, and that is the National Institute of Education (NIE). In China, the highest educational qualification would depend on whether the teacher teaches in the primary, lower, or upper secondary levels. In Taiwan, the type of higher education institution—college or university—where the teacher will enroll depends on the level where they intend to teach.

The table also reveals that out of the top five performing countries in PISA 2018, only two countries require that teachers pass an examination. These countries are China and Taiwan. China also conducts two sets of tests with a demonstration component for teaching ability in one of the exams. On the other hand, the three different countries, namely Singapore, Macao, and Hong Kong, do not conduct such an examination. It can be noted that these three countries were formerly colonies of Western countries. Both Singapore and Hong Kong were British colonies, while Macao was a colony of Portugal.

Meanwhile, the Philippines, which belonged to the lower ranks in the PISA 2018, also requires the teachers to be bachelor's degree holders at the minimum. This bachelor's degree can be obtained by completing the coursework in 4 years, including one semester for Student Teaching. Just like most of the countries stipulated in Tables 1, a degree in education is a requirement to be able to take the licensure examination.

In 2010, due to the increase in the number of HEIs offering degree programs in education and the gradual decline in the performance of their graduates on the licensure examination, the CHEd issued a moratorium on opening new teacher preparation programs (Commission on Higher Education, 2010). Then, under CHEd Memorandum Order (CMO) No. 46, s. 2012, an outcomes-based quality assurance system was being pursued. To respond to the 21st-century Philippine Teacher Education framework, the shift to outcomes-based education was implemented with the Policies, Standards, and Guidelines (PSGs) set in place for the different degree programs in education in 2017. Furthermore, there was an alignment of the new curricula to the Philippine Professional Standards for Teachers (PPST) to replace the National Competency-Based Teacher Standards (NCBTS) according to DepEd Order (DO) No. 42, s. 2017 through TEC.

After obtaining the necessary degree, the education graduate can apply to take the LET in the PRC. The exam for elementary teachers has two components—general education and professional education. The exam has three components for secondary teachers, with their specialization or major as the third component. Once the teacher passes the LET, they become licensed professional teachers (LPTs) in the country.

A World Bank study, Philippines Basic Education Public Expenditure Review, examined data from 2009 to 2017, with findings implying the need to improve teacher preparation as teachers performed poorly on tests measuring teacher content knowledge (World Bank, 2019). Another study examined teacher education programs with LET performance from 2010 to 2016 as a proxy for program quality indicators. If the LET has improved teaching quality, it is necessary to revisit Republic Act 7836, also known as the "Philippine Teachers Professionalization Act of 1994" (Generalao et al., 2022). It should be noted that the pre-service and in-service teachers during the inclusive years in the two aforementioned studies belonged to the old teacher education curriculum.

Recognizing that the quality of education is determined by the quality of teachers, Republic Act No. 11713 was signed on April 27, 2022, to intensify teacher education in the Philippines through the enhancement of the Teacher Education Council. This "Excellence in Teacher Education Act" is an amendment to Republic Act No. 7784. Furthermore, the provision of quality teacher education was included in the Marcos administration's Philippine Development Plan (PDP) 2023–2028 (Philippine News Agency, 2023). The current study, which focuses on the 2017–2019 graduates and their LET performance,

TABLE 1 Teacher training and licensure systems of PISA 2018 top performing countries.

Countries	Teacher training and licensure system

China Beijing-Shanghai-Jiangsu-Zhejiang (Rank 1)	1. earn a diploma
	  a. high school diploma for preschool and primary teachers
	  b. 2 year-normal college training for lower secondary teachers
	  c. 4-year bachelor's degree from a normal university for upper secondary teachers
	2. pass the National Mandarin Language Test
	3. pass examinations in the four areas: pedagogy, psychology, teaching methods, and teaching ability (with demonstration) (National Center on Education and the Economy, 2021)

Singapore (Rank 2)	Earn a Bachelor's or Master's degree from the National Institute of Education (NIE)
	  a. undergraduate: 4-year program with 22 weeks of practical experience
	  b. graduate: 16-month program with 10 weeks of practical experience (National Center on Education and the Economy, 2021)

Macao (Rank 3)	1. complete the Bachelor's degree teacher education program; or 2. complete the Postgraduate Certificate of Education (PGCE) program for bachelor's degree holders but not in teacher education (Wei, 2019)

Hongkong (Rank 4)	1. apply for registration at the Education Bureau
	2. get classified as a registered teacher or permitted teacher
	  a. registered teacher (earned a bachelor's degree or higher and completed teacher training)
	  b. permitted teacher (earned a bachelor's degree) (National Center on Education and the Economy, 2021)

Taiwan (Rank 5)	1. complete coursework from:
	  a. teacher's colleges for primary school teachers
	  b. college of education in universities for secondary-level teachers
	2. complete a six-month, full-time practicum doing teaching and administrative work
	3. pass the Teacher Qualification Examination (National Center on Education and the Economy, 2021)

provides valuable baseline data for future studies that will investigate the quality of the new teacher education program and its translation into improved student learning outcomes in the classroom.

1.3. Licensure examination for teachers in the Philippines

The LET is the measure by which the PRC and Board for Professional Teachers (BPT) ascertain the educational preparedness of these future teachers. From 2017 to 2019, the average national passing rates for elementary and secondary education examinees were below 50%. Table 2 shows the passing percentages in the six licensure examinations administered by the PRC in 3 years (PRC, 2017a,b; PRC, 2018a,b; PRC, 2019a,b).

The passing percentages reflected in the table consider both first-timers and repeaters. It can be gleaned from the table that there is an increasing trend in the passing percentage of elementary teachers from September 2018 to September 2019. However, the performance of the secondary teachers in the LET is erratic with an upward-downward trend. The passing percentages during the conduct of the LET in September were higher than that in March of each year from 2017 to 2019 among the secondary teachers.

Identifying the trends in the LET performance of elementary and secondary teachers is an area of research interest among higher education institutions offering teacher training programs. TEIs have conducted several studies to examine the graduates' performance in the national exam in the past 10 years, along with other variables. These studies examined the LET performance of the Bachelor of Elementary Education graduates, Bachelor of Secondary Education graduates, or graduates in both mentioned degree programs.

However, it can be noted that these studies usually consider only fresh graduates or first-timers in taking the LET.

In the licensure examination for elementary teachers, there are only two components: (1) General Education and (2) Professional Education. General Education weighs 40% on the final LET rating, while Professional Education weighs 60%. To pass the LET, elementary teachers should obtain an average rating of at least 75%, with no rating lower than 50% in any of the components.

Several studies have shown that the BEEd graduates outperformed their BSEd counterparts in the LET. Rudio (2016) reported that the overall LET performance of the BEEd graduates in DMMMSU-North La Union Campus surpassed that of the secondary test takers. Antiojo (2017) also discovered that the elementary test takers' performance exceeded that of the secondary test takers from Cavite State University in the LET from 2013 to 2015. The BEEd graduates also achieved better in General Education than in Professional Education. According to Chan-Rabanal and Manzano (2018), the BEEd group outperformed the BSEd group, surpassing the Bachelor of Science in Industrial Education (BSIE) group of the University of Northern Philippines during the 2012–2014 licensure examinations. Furthermore, Banaag and Banaag (2019) discovered that the elementary LET takers performed better than the secondary takers of Cavite State University from 2013 to 2016. The BEE SPEd graduates also obtained the highest ratings in Professional Education. However, in the study of Malaluan (2017), the results revealed no significant difference between the LET performance of the BEEd and BSEd graduates of Batangas State University from 2011 to 2015. The majority of the elementary test takers also described the exam for Professional Education as difficult.

Some studies looked into the LET performance of the elementary group in terms of the passing percentage. Chan-Rabanal (2016) found

TABLE 2 LET passing percentage of elementary and secondary teachers from 2017 to 2019.

Date of administration of LET	Passing percentage of elementary teachers	Passing percentage of secondary teachers
March 2017	10.39	25.46
September 2017	26.33	46.37
March 2018	23.62	29.91
September 2018	20.29	48.03
March 2019	27.28	25.95
September 2019	31.34	39.68

that most of the BEEd graduates in UNP passed the LET in 2013. Guzman (2020) determined the overall LET performance of the BEEd graduates of Isabela State University. The LET results showed that their passing percentages from 2010 to 2017 were higher than the national. Furthermore, for eight consecutive years, the number of BEEd LET passers was always 50% higher than the test takers who failed the test.

Nool and Ladia (2017) examined the LET performance of the BEEd graduates of 110 TEIs in Central Luzon from 2009 to 2016. This study revealed that most TEIs performed unsatisfactorily, with their passing percentages being significantly close to the national passing percentages in the seven-year duration. In the study of Alfonso (2019), the LET performance of 12 TEIs from 2013 to 2017 was compared. Of the 12 TEIs, three schools had BEEd graduates who performed higher than the national passing percentage. The other 9 TEIs, meanwhile, were noted to be inconsistent in their LET performance. There were 4 TEIs whose passing percentages were below the national passing percentages for the 10 licensure examinations from 2013 to 2017. Also, the study of Maramag et al. (2020) looked into the 2017 LET performance of BEEd graduates belonging to 7 different campuses in Cagayan.

While there are two components in the LET for elementary teachers, there is a third component for secondary teachers: their specialization or major. The specializations include English, Filipino, Biological Sciences, Physical Sciences, Mathematics, Social Studies/ Social Sciences, Values Education, MAPEH, Agriculture and Fishery Arts, and Technology and Livelihood Education. This specialization is given a weight of 40% in the final rating, while 20% and 40% for General Education and Professional Education, respectively.

Secondary takers' LET performance has been explored in some studies regarding passing percentages. Bañez and Pardo (2016) reported that the passing percentages of the UNP BSEd Biological and Physical Sciences graduates in the LET 2014 and 2015 were higher than the national passing percentages. In the study of Rudio (2016), the BSEd graduates of DMMMSU-North La Union Campus performed moderately lower or higher than the national passing percentage. Chan-Rabanal and Manzano (2018) noted the passing performance of the secondary test takers of the University of Northern Philippines from 2012 to 2014 in all components of the LET. There are also studies about the BSEd graduates' performance in the different LET components. The study of Antiojo (2017) revealed that the secondary test takers of Cavite State University from 2013 to 2015 performed best in the General Education component, followed by Professional Education and their specialization. According to Malaluan (2017), the BSEd test-takers in the LET of Batangas State University from 2011 to 2015 perceived the areas of Math and Science in General Education to be difficult.

Some studies also identified particular specializations to report the LET performance of the secondary LET test takers. The study by Antiojo (2017) revealed that the English and Math majors of Cavite State University from 2013 to 2015 had comparable performance but surpassed the Biological Science majors. Banaag and Banaag (2019) discovered that the BSE Biological Science graduates obtained the highest ratings in General Education and specialization among the secondary education graduates of Cavite State University from 2013 to 2016. The findings of Guzman (2020) revealed that from 2010 to 2017, there was a year wherein there were more takers than passers among the Filipino and English majors of the BSEd graduates of Isabela State University. Most of the Mathematics majors passed the LET after graduation, and there was even a topnotcher among them. The Social Science majors got a 100% passing rate in 2017. There was, however, a year wherein none of the Social Science and TLE majors who took the LET passed. Meanwhile, the performance of the MAPEH majors ranged from 25% to 87.10% in 8 years.

1.4. Need for a nationwide study on the 2017–2019 LET performance

The literature review presented studies conducted by different TEIs to scrutinize the LET performance of their graduates from as far back as 2009 up to 2017 as the most recent. These studies were initiated and executed by the TEIs to assess the quality of their teacher education program. The results and implications were to be utilized to improve the pre-service education provided to the prospective teachers of their respective institutions. Raising the bar of teacher excellence is ultimately the goal of every TEI.

The varied results regarding the LET performance of the BEEd and BSEd graduates manifest the many factors that could affect such performance. Hence, most studies that examined LET performance included other variables and correlated them with the LET ratings obtained by the test takers. Some studies showed that the test takers' academic performance (Chan-Rabanal, 2016; Rudio, 2016; Banaag and Banaag, 2019) and their college admission test scores (Bañez and Pardo, 2016) have a significant relationship with their LET performance. Other factors mentioned are the number of repeaters (Nool and Ladia, 2017), the accreditation status of the institution, and the number of faculty with doctorate degrees (Maramag et al., 2020). While TEIs are consistently performing better, as evident with their above national passing percentages, there are also those TEIs that are trailing behind. This reality necessitates the need to conduct a comprehensive study that will scrutinize the LET performance of every TEI to provide a better picture of the quality of the education

graduates being produced. The review of related literature revealed that the published studies were conducted among TEIs in Luzon.

Therefore, there is a need to conduct a study that will examine the 2017 to 2019 LET performance of the BEEd and BSEd graduates of the different TEIs not just in Luzon but also in the Visayas and Mindanao. A study that looked into the LET performance of the TEI graduates for the three named island groups for the three mentioned years has yet to be conducted. The present study will contribute to the literature on the LET performance of TEI graduates of the previous teacher education curriculum.

1.5. Statement of objectives

The study determined the performance of the teacher education graduates in the licensure examination for teachers (LET) for the last three examination years (2017–2019). Firstly, the study determined the LET performance levels of teacher education graduates in general education, professional education, and specialization components. Secondly, the paper also described their overall LET performance. These objectives were achieved by conducting a nationwide survey across the Philippines and obtaining pertinent LET information across different regions.

Moreover, the study compared the beginning teachers' LET performances according to identified parameters, including the year, degree programs, concentrations or specializations, examination components, island group locale, regional locale, and type of higher education institutions. This objective was attained through conducting a comparative analysis of teacher graduates' LET performances and demographic variables, which showed statistical differences in certain parameters. These statistically significant differences are discussed in the Results and Discussion.

Furthermore, this paper determined the predictive power of test-taking time (recency), college preparation, and college grade point average on the teacher education graduates' LET performances. This particular objective was answered by subjecting LET performances in multiple regression analysis. Statistical significance was noted and taken into account regarding the impact of the three aforementioned variables on the beginning teachers' licensure performance.

2. Methodology

The present study was pure quantitative research involving data on the performances of teacher graduates in the licensure examination for teachers (LET). Specifically, the study employed descriptive-correlational design in describing and comparing LET performances and determining relationships between such performances and identified factors.

2.1. Participant selection

The study respondents were selected from a pool of 194,037 passers of LET conducted between 2017 and 2019 in the Philippines. The selection process involved a multi-stage approach. Firstly, only beginning teachers employed within the Department of Education, who had graduated within the last 5 years (from 2016 to 2020), were

considered eligible for participation. Secondly, among these eligible teachers, those who had been hired within the last three school years (2018–2019, 2019–2020, and 2020–2021) in the public school system were invited to take part in the study.

Participants were chosen from different regions of the country to provide a representative sample. This deliberate sampling is intended to gather various viewpoints and first-year teaching experiences across the nation. A total of 2,780 qualified respondents successfully participated in the online survey through this thorough selection process. Table 3 below contains comprehensive information about the distribution of the study sample.

2.2. Survey instrument

The research instrument used in this study was a validated survey questionnaire administered online through Google Forms. The questionnaire involves data on LET performance and components such as ratings on general education, professional education, and specialization. Aside from these data, the instrument also collected pertinent information about the teacher education graduates' year of testing, degree programs, specializations or concentrations, island group locale, regional locale, and type of higher education institution. Lastly, the survey tool also gathered data on the test-taking time (recency), college preparation, and college grade point average.

To ensure the validity of the survey instrument, an extensive validation process was undertaken. This validation involved subjecting the questionnaire to a rigorous process, including content validity by a panel of education experts. The panel of experts includes former professional regulations commissioners, current Department of Education regional directors, and higher education heads. This

TABLE 3 Distribution of study sample by region, N = 2,780.

Region	No. of respondents	Percentage
I—Ilocos Region	45	1.62
II—Cagayan Valley	38	1.37
III—Central Luzon	203	7.30
IV-A—CALABARZON	258	9.28
IV-B—MIMAROPA	22	0.79
V—Bicol Region	296	10.65
VI—Western Visayas	320	11.51
VII—Central Visayas	121	4.35
VIII—Eastern Visayas	255	9.17
IX—Zamboanga Peninsula	138	4.96
X—Northern Mindanao	291	10.47
XI—Davao Region	399	14.35
XII—Soccsksargen	109	3.92
XIII—Caraga	115	4.14
National Capital Region (NCR)	13	0.47
Cordillera Administrative Region (CAR)	157	5.65

process refined the content of the questionnaire and enhanced its clarity, relevance, and reliability.

2.3. Data analysis

The data were managed in Microsoft Excel and analyzed through the Statistical Package for Social Sciences (SPSS). The categorical data were analyzed through absolute counts and percentages, while the continuous data were described as mean and standard deviations. All data were preliminarily tested for their appropriateness for the succeeding parametric tests such as normality and data homogeneity. Normality ($p > 0.05$) was ascertained through the Shapiro–Wilk test and homogeneity of variances was evaluated using Levene's test ($p > 0.05$). These results ascertained the assumptions for analysis of variance (ANOVA) and multiple regression analysis.

The continuous data were compared across different categorical strata using the ANOVA with conditional post-hoc Tukey HSD test. Specific parameters were tested for their predictive relationship through multiple regression analysis. All tests were conducted at 95% confidence intervals, and $p \le 0.05$ is considered significant.

2.4. Ethical considerations

The manuscript was submitted to the University Ethics Research Committee for review. When the ethics certification was given, the researchers asked permission from the Department of Education to conduct the survey among the beginning teachers in the public school system in the country. After the education department approved this permission, the beginning teachers were asked for their informed consent regarding their voluntary participation in the study. Once they agreed to participate, they continued with accomplishing the survey questionnaire. All data gathered from the survey were kept confidential and all names remained anonymous at all times during the conduct of this study. Excel and SPSS files were encrypted for data security to minimize risks and maximize the benefits derived from the study results.

3. Results and discussion

3.1. LET performance of teacher graduates

The performances of teacher graduates from 2017 to 2019 were tabulated in Table 4.

Table 4 shows the differences in the percentage scores of the LET performance of the elementary and secondary teacher education graduates in general education, professional education, and specialization. In the General Education component of the LET, elementary education graduates got satisfactory ratings from 2017 to 2018 and a very satisfactory rating in 2019, while secondary education graduates garnered a very satisfactory rating from 2017 to 2019. In the three-year performance, the secondary education graduates got better percentage scores than the elementary education graduates. In the classroom setting, elementary education students focused only on learning the basics and simplifying them to fit the children's learning capacity. In contrast, secondary education students delved more into complex content, thinking they would serve high school students. However, the results contradicted the idea that elementary education graduates were developed to either become generalists who could handle a subject across areas in grade school or teach elementary subjects as a whole. So, it was expected that they would get higher scores in the licensure examination. Elementary and secondary-level graduates had the same coverage and course offerings in their undergraduate studies. The percentage gap between the two groups of takers could be attributed to their ability to recall facts and information presented by their instructors during the completion of their degrees.

TABLE 4 LET performances of teacher graduates from 2017 to 2019.

Examination	Subject	Mean (SD) and description		
		2017	2018	2019
LET-elementary	General education	77.46 (3.28) Satisfactory	77.58 (3.95) Satisfactory	85.58 (6.14) Very satisfactory
	Professional education	80.10 (2.96) Satisfactory	80.22 (4.31) Satisfactory	79.73 (3.24) Satisfactory
LET-secondary	General education	84.42 (6.03) Very satisfactory	85.16 (4.87) Very satisfactory	85.93 (6.12) Very satisfactory
	Professional Education	80.87 (4.05) Satisfactory	81.26 (3.91) Satisfactory	80.10 (6.06) Satisfactory
	Specialization	79.53 (5.14) Satisfactory	81.03 (5.47) Satisfactory	80.66 (7.28) Satisfactory
Overall	General education	82.02 (6.20) Satisfactory	82.68 (5.80) Satisfactory	85.79 (6.12) Very satisfactory
	Professional education	80.60 (3.73) Satisfactory	80.92 (4.07) Satisfactory	79.95 (5.13) Satisfactory
	Specialization	79.53 (5.14) Satisfactory	81.03 (5.47) Satisfactory	80.66 (7.28) Satisfactory

75–83.33 (Satisfactory), 83.33–91.66 (Very satisfactory), 91.67–100 (Outstanding).

Most of the LET General Education questions were more about understanding and remembering when contextualized against Bloom's taxonomy.

Regarding the takers' performance in the Professional Education component, both groups consistently scored satisfactorily from 2017 to 2019. The closely related performances could be due to their comparable capacity to evaluate scenarios, make decisions, contextualize learning, and judge slightly different situations. In consonance, Professional Education questions in the LET were mostly applications and contextualizations of classroom scenarios where takers' alternatives/options could all be the answers. However, one of them should prevail to be the fittest response.

The comparison between the two groups of takers has been limited to the General Education and Professional Education components since the secondary education graduates had an additional exam to pass—their area of specialization, which the elementary education graduates still needed to have. Based on the table, the secondary education graduates' performances from 2017 to 2019 have all been satisfactory. Looking at their overall performance, the General Education rating of both takers was satisfactory from 2017 to 2018, but it rose to very satisfactory in 2019. It was due to the schools' initiatives in putting up some enhancement activities and more aligned competencies in instruction after noticing the slightly lower rating in the two previous years. Favorably, their Professional Education's overall performance has been satisfactory for three consecutive years, along with their specializations' performance.

3.2. Overall LET performance of teacher graduates

The overall performance of the teacher education graduates in the licensure exam is presented in terms of national passing percentages (Table 2) and mean performances (Table 5).

According to Table 2, graduates of the BEED and BSED programs from 2017 to 2019 show increased performance in both the LET Elementary and LET Secondary for first-takers and repeaters, respectively. One manifestation of this effect is the well-designed/reviewed curriculum, appropriate alignment of program and course competencies with their implementation, and assessment measures. This finding is concurred by the study of Amanonce and Maramag (2020), which noted that TEIs must align their instruction with the LET competencies. They posit that this is evidence of the effective delivery of instruction and sound evaluation procedures in the university since the teachers' assessment coincides with the graduates' performance in the LET. In addition, curricular enhancement programs and activities have reinforced the concepts and skills learned from their different courses. These findings further imply that from admission to graduation, academic institutions conscientiously prepare students for the academic tasks and responsibilities that lie ahead. One critical step towards realizing this goal is for them to pass and succeed in the challenges posed during the LET.

According to Goldhaber (2011), with teacher quality identified as the main factor impacting student achievement based on empirical studies, policymakers are regulated by teacher licensure by admitting teachers to join the workforce. This context is demonstrated through the active collaboration of education stakeholders with the intent to ascertain that sufficient preparation leads to employment.

TABLE 5 Overall LET performances of teacher graduates from 2017 to 2019.

Examination	Mean (SD) and description		
	2017	2018	2019
LET-Elementary	78.91 (2.59) Satisfactory	79.20 (2.85) Satisfactory	82.00 (3.67) Satisfactory
LET-Secondary	81.06 (3.54) Satisfactory	81.85 (3.76) Satisfactory	81.49 (4.52) Satisfactory
Overall	80.32 (3.40) Satisfactory	80.98 (3.70) Satisfactory	81.70 (4.21) Satisfactory

75–83.33 (Satisfactory), 83.33–91.66 (Very satisfactory), 91.67–100 (Outstanding).

In Table 5, on the other hand, the results for both the LET Elementary and LET Secondary in 3 years generally reveal that the latter was far higher than the former except for a slight variance in 2019. Because of the components in the said examination, the LET Elementary bears 40% General Education and 60% Professional Education, while the LET Secondary bears 20% General Education, 40% Professional Education, and 40% Specialization. To pass the LET, the elementary and secondary teachers should obtain an average rating of at least 75%, with no rating lower than 50% in any of the components.

Encounters with some test takers of both programs noted that it is in their preparation stage for the baccalaureate degree that ushered to performance higher than the national passing percentage. Their background knowledge in basic education and their achieved competencies in higher education created a similar impact. Some noted that certain basic general education and situational analysis, which seemed challenging, prompted these test takers to turn them into opportunities. Thus, this made their experience in the examination more meaningful.

In a nutshell, it can be deduced that the LET performance of both programs in 2017–2019 is an expression of a curriculum responsive to the stakeholders' needs. If this is done collaboratively and conscientiously, academic institutions continue to gain higher LET performance, more so a better capture of competent newly hired teachers. They are expected to possess 21st-century skills, technology, and values-driven global teachers.

3.3. Comparisons in LET performances

Comparative analyses were conducted to compare the LET performances of the teacher graduates. The points of comparison in these analyses were the year, degree programs, concentrations/specializations, island group locale, regional locales, and type of higher education.

3.3.1. Year

The results of comparing LET performances of teacher graduates according to year are shown in Table 6.

The data revealed statistically significant variations in the mean shown in the licensure performance among the three groups of LET test takers ($F = 18.618$, $p < 0.010$). However, these differences among the three groups were relatively small ($\eta^2 = 0.01$). Hence, the examination year only slightly explains the LET performance of the education

graduates. Tukey's HSD Test found that the 2018 LET performance was better than in 2017. Likewise, the 2019 LET performance was more remarkable than the 2017 performance. The trend of the LET performance from 2017 to 2019 was increasing, as seen in the means reflected in the table. However, no statistically significant distinction existed between the 2018 and 2019 LET performances.

During the 3 years from 2017 to 2019, the 2017 LET performance was the lowest. This performance might result from both elementary and secondary teachers' March 2017 passing rates. Only 10.39% of elementary school students passed, while 25.46% of secondary school students passed. These numbers reflect a reduction from the elementary and secondary LET passing percentages of 30.18% and 33.78% from September 2016. These figures were, in fact, the lowest for both test takers from March 2017 to September 2019, as already reflected in Table 2.

The 2017 results may be attributed to the change in national government positions. The Professional Regulation Commission (PRC) may have undergone organizational changes due to the 2016 presidential election, which could have impacted the preparation and administration of the LET. Additionally, the adoption of an OBE-based curriculum in colleges and universities has yet to be intensified.

On the other hand, the dismal results in the 2017 LET might have prompted the different TEIs to ramp up their efforts and implement interventions for their graduates to perform better in the succeeding licensure examinations in 2018 and 2019. As Antiojo (2017) pointed out if a serious intervention was not made, it was anticipated that LET performance would worsen over the next few years. Fortunately, it can be gleaned from the results that there was indeed a faithful intervention, thus, a significant improvement and a comparable achievement of the test takers in the 2018 and 2019 exams.

3.3.2. Degree program

The LET performances were also compared according to degree programs. The results are presented in Table 7.

The results demonstrate moderately significant ($F = 77.895$, p 0.010, $\eta^2 = 0.07$) differences in their LET performances. These findings

imply that the degree program can somewhat explain the variability in LET performance. The BSEd test takers did better than the BEEd test takers, according to post-hoc analysis results. The DPE test takers also did better than the BEEd test takers. However, test takers' results on the BSEd and DPE were merely equivalent. It should be emphasized that in contrast to BEEd exam takers, who only took two sets of tests, both BSEd and DPE test takers responded to three tests. The present findings do not concur with previous studies that demonstrated the superior performance of the elementary test takers over the secondary test takers (Rudio, 2016; Antiojo, 2017; Chan-Rabanal and Manzano, 2018; Banaag and Banaag, 2019) and the nonsignificant variation in their performances (Malaluan, 2017). The results coincide with the study of Guanson and Marpa (2013, as cited in Antiojo, 2017) where secondary education graduates performed better. It should be noted that the studies mentioned have different populations of interest.

The results imply that the component weights assigned in the LET should be re-evaluated. Given that Professional Education makes up 60% of the test, while General Education makes up 40%, the BEEd test takers will intuitively focus their studies primarily on this section. Meanwhile, the 40 percent weight given to Professional Education and Specialization increases the BSEd and DPE test takers' chances of receiving a higher rating. Furthermore, the subject they specialize in could be among the content areas in the test for General Education that weighs 20%.

3.3.3. Concentrations or specializations

The different concentrations for BEEd and specializations of BSEd were analyzed through ANOVA; the results are in Table 8 (BEEd) and Table 9 (BSEd).

Table 8 presents the ANOVA results to compare the LET performances of the BEEd test takers classified based on their concentration: General Education, Early Childhood Education, and Special Education. Their performances showed no significant differences ($F = 0.083$, $p = 0.920$). It is worth noting that these three groups of test takers answered the same two sets of tests for the LET. These results show that the three groups' performances are equal without the third test for Early Childhood and Special Education content, outcomes, or competencies. In the study of Banaag and Banaag (2019), the SPEd examinees garnered the highest ratings in Professional Education. The BEEd graduates have specializations: General Education, Early Childhood Education, and Special Education. Nevertheless, they were not explicitly assessed in these areas as they only answered two tests—General Education and Professional Education. A third test to gauge their proficiency in their area of concentration could help pull up their LET ratings and produce variations in their performances across specializations.

The higher percentage awarded to professional education means that BEEd exam takers possess greater pedagogical expertise than

TABLE 6 Comparative analysis of LET performances according to examination year.

Year	LET performance[a]	F-value	p-value	η^2	Significant post-hoc
2017	80.32 (3.40)	18.618**	<0.010	0.01[b]	2018 > 2017
2018	80.98 (3.70)				2019 > 2017
2019	81.70 (4.21)				

**Highly significant at $\alpha = 0.01$.
[a]Mean (SD).
[b]Small effect (<0.06), Moderate (<0.14), Large (≥0.14).

TABLE 7 Comparative analysis of LET performances according to degree program.

Program	LET performance[a]	F-value	p-value	η^2	Significant post-hoc
BEEd	79.49 (3.06)	77.895**	<0.010	0.07[b]	BSEd > BEEd
BSEd	81.54 (3.79)				DPE > BEEd
DPE	80.75 (3.60)				

**Highly significant at $\alpha = 0.01$.
[a]Mean (SD).
[b]Small effect (<0.06), Moderate (<0.14), Large (≥0.14).

TABLE 8 Comparative analysis of LET performances according to BEEd concentrations.

Concentration	LET performance[a]	F-value	p-value	η^2	Significant post-hoc
General Ed.	79.50 (3.07)	0.083[ns]	0.920	0.00[b]	None
Early Child. Ed.	79.61 (3.32)				
Special Ed.	79.31 (2.19)				

[ns]Not significant at $\alpha = 0.01$.
[a]Mean (SD).
[b]Small effect (<0.06), Moderate (<0.14), Large (≥0.14).

TABLE 9 Comparative analysis of LET performances according to BSEd specializations.

Specialization	LET performance[a]	F-value	p-value	η^2	Significant post-hoc
English	80.58 (3.33)	30.004**	<0.010	0.13[b]	Math > English, Filipino, Social Sci., MAPEH, TLE, Values
Filipino	81.56 (3.62)				Science > English, Filipino, Social Sci., MAPEH, TLE, Values
Mathematics	83.26 (3.95)				English > TLE
Science	82.71 (3.77)				Filipino > MAPEH, TLE
Social Sci.	81.09 (3.54)				Social Sci. > TLE
MAPEH.	79.91 (3.08)				
TLE.	79.13 (2.87)				
Values Ed.	80.40 (3.22)				

**Highly significant at $\alpha = 0.01$.
[a]Mean (SD).
[b]Small effect (<0.06), Moderate (<0.14), Large (≥0.14).

content. Similarly, the secondary test takers are expected to be more adept in content over pedagogy. Academic achievement is critical to LET performance (Chan-Rabanal, 2016; Rudio, 2016; Banaag and Banaag, 2019).

The same two sets of exams—General Education and Professional Education—were taken by BSEd test takers. However, they responded to a third exam based on their area of expertise. This additional exam could explain the disparities in the LET performance of the secondary test takers based on their major. These variations, however, were not evident among the BEEd test takers who took the same two exams.

Furthermore, Tukey's HSD Test found no significant difference between the LET performance of the Math and Science test takers. The Math and Science test takers outperformed the English, Filipino, Social Science, MAPEH, TLE, and Values Education test takers. Meanwhile, the English test takers performed better than the TLE test takers. The Filipino test takers also performed better than the MAPEH and TLE test takers. Moreover, the performance of the Social Science test takers was also significantly greater than that of the TLE test takers.

These results are coherent with the study of Banaag and Banaag (2019), whereby the Biological Science test takers outperformed the others in General Education and the major examination, and the study of Guzman (2020), wherein most of the Math test takers passed the test. In the study of Antiojo (2017), the English graduates did just as well as the Math graduates but exceeded the performance of the Biological Science graduates. The BSEd Math and Science graduates' better LET performances in the present study could be ascribed to the competitiveness in obtaining scholarships like that offered by DOST at the college entry level of these students. The graduates majoring in the humanities—English, Filipino, and Social Studies—came next in rank to the Math and Science majors. Furthermore, the test takers in the skill subjects—MAPEH and TLE—trailed behind.

MAPEH and TLE, as subjects, have multiple distinct tracks. MAPEH includes Music, Arts, and Physical Education, and TLE involves Home Economics, Agriculture, Industrial Arts, and Entrepreneurship. Given their broad scope, the teaching of these subjects would depend on the proclivities of the students, the availability and skill of the instructors and professors, and the facilities and equipment the colleges and universities could offer the students. These multiple factors need to be considered when discussing the LET performance of the MAPEH and TLE test takers.

Furthermore, it cannot be refuted that MAPEH and TLE involve practical and creative arts emphasizing psychomotor learning outcomes. On the other hand, the LET is a test with high cognitive demand. Hence, the results in the table imply the need to examine the items being constructed for MAPEH and TLE majors in the LET to cater to the nature of these subjects and their outcomes. Also, implementing retention policies (Nool and Ladia, 2017) in TEIs might prompt education students to improve and equip themselves with the much-needed knowledge, skills, and attitudes as they prepare for the licensure exam.

The ANOVA results in Table 9 show the effect of specialization on the LET performance of the BSEd test takers. The figures show marginally significant test takers' performance variations across eight majors ($F = 30.004$, $p < 0.010$, $\eta^2 = 0.13$). Therefore, among BSEd graduates, specialization may help explain LET performance.

3.3.4. Examination components

The licensure examination for teachers has two components for BEEd and three for BSEd. The comparison results in terms of these examination components are shown in Table 10 (BEEd) and Table 11 (BSEd).

Table 10 data shows a profound difference between the performance on the General Education and Professional Education tests ($F = 5.99$, $p < 0.010$, $\eta^2 = 0.31$). The post-hoc test findings show that

TABLE 10 Comparative analysis of LET performances according to BEEd examination components.

Exam component	LET performance[a]	t-value	p-value	η^2	Significant post-hoc
Gen. Ed.	78.74 (5.00)	5.99**	<0.010	0.31[b]	Prof. Ed. > Gen. Ed.
Prof. Ed.	80.09 (3.57)				

**Highly significant at $\alpha = 0.01$.
[a]Mean (SD).
[b]Small effect (<0.06), Moderate (<0.14), Large (≥0.14).

TABLE 11 Comparative analysis of LET performances according to BSEd examination components.

Exam component	LET performance[a]	F-value	p-value	η^2	Significant post-hoc
Gen. Ed.	84.91 (5.61)	326.15**	<0.010	0.39[b]	Gen. Ed. > Prof. Ed., Specialization
Prof. Ed.	80.93 (4.30)				Prof. Ed. > Specialization
Specialization	80.28 (5.62)				

**Highly significant at $\alpha = 0.01$.
[a]Mean (SD).
[b]Small effect (<0.06), Moderate (<0.14), Large (≥0.14).

the BEEd test takers performed better on the LET in Professional Education than in General Education. This result indicates that the BEEd test taker's performance can be substantially attributed to the exam component they are taking.

These findings contradict the studies of Antiojo (2017), wherein the General Education ratings of the BEEd test takers were higher than that in Professional Education, and Malaluan (2017), whereby the elementary examinees found Professional Education difficult. The weight given to professional education, which is 60%, while general education is 40%, may have caused the outcomes. As a result, BEEd LET test participants would put much effort into preparing for the Professional Education courses. These results could also be explained by the fact that the BEEd graduates had more practical teaching opportunities because they were general practitioners than the BSEd graduates. Therefore, the BEEd test takers have experienced actual classroom settings where concepts, principles, and strategies must be applied. On the other hand, their performance in General Education may be attributed to the fact that the concepts and skills covered in these courses and tested on the exam are above the elementary level.

Table 11 displays the ANOVA results to compare how each exam component affected LET performance. The BSEd test takers performed significantly differently on the three components, General Education, Professional Education, and their Specialization ($F = 326.15$, $p < 0.010$, $\eta^2 = 0.39$). Thus, it can be said that the exam component can substantially explain the LET performance of the BSEd test takers. Furthermore, *post hoc* analysis findings reveal that the performance of the BSEd test takers in General Education was superior to Professional Education, which was also better than their Specialization.

The results are in accordance with what Antiojo (2017) also found: the secondary examinees' performance is best in General Education, followed by Professional Education, and least in their specialization. Also, in the study of Maramag et al. (2020), the BSEd graduates obtained satisfactory ratings for the General and Professional Education components but not in their specialization. Since there are three sets of tests in the LET for the secondary test takers belonging to eight different specializations, each with many various topics, there is a large amount of variation in their performances. Because of the BSEd graduates' major or area of specialization, which may have

helped raise their rating in General Education, their achievement in this area may have been better than the other two components. For Professional Education, the BSEd graduates' experiences throughout their practice-based teaching may have assisted them in applying what they learned in lectures and coursework in answering the test.

In the present study, the performance of the secondary test takers in their specialization is the least of all components may be due to its breadth and scope. Consider the subject of Mathematics, which covers algebra, geometry, trigonometry, probability, and statistics. The same is true in Science, which includes several fields such as biology, chemistry, and physics. The other subjects under the humanities are also very content-laden. Furthermore, the skill subjects like MAPEH and TLE encompass multiple tracks. This finding means there is a lot for the BSEd test takers to study and learn. However, with time constraints during their practicum, they could only teach some of these topics and tracks.

These results imply the necessity to constructively align the course outcomes in the different specializations with their assessment in the licensure exam. To ensure that a broader range of learning outcomes are examined during the LET, it is essential to consider the drawbacks of a written evaluation and how to overcome them. To further ensure the production of graduates with teacher quality in the country, this may promote the sharing of knowledge, best practices, and resources - both material and human.

3.3.5. Island group locale

Table 12 shows a significant difference in the LET performances of teacher graduates when these performances are grouped according to the island group ($F = 9.397$, $p < 0.010$, $\eta^2 = 0.01$). *Post hoc* analysis found that the graduates from the Visayas yielded better results than those from Luzon but similar results to Mindanao graduates. This finding is coherent with the study of Baylan (2018), who revealed that more Visayas and Mindanao TEIs performed well than Luzon institutions. LET studies in Luzon, such as Dagdag et al. (2017), Nool and Ladia (2017), Delos Angeles (2019), and Amanonce and Maramag (2020) noted fair or low performances in the different exam components. However, some TEIs in other island groups also showed low performances, such as that of Cahapay (2021) in Mindanao. The present findings and the literature suggest that there may be incongruence in teacher education training across the different

island groups. Insufficient training and preparation could lead to deficient licensure performance (Chan-Rabanal and Manzano, 2018). Therefore, precise alignment of the standards and initiatives in teacher training and preparation is needed to achieve better teacher education outcomes (Dagdag et al., 2017; Baylan, 2018).

3.3.6. Regional locale

Administrative regions were also points of comparison in this study. The results of this comparison are showcased in Table 13.

The LET performances across different regions showed a significant difference ($F = 4.820$, $p < 0.010$, $\eta^2 = 0.03$), indicating that there have been different LET results of teacher graduates among regions in the country. Findings revealed the LET prowess of the teachers as seen in the satisfactory performances of graduates from all regions except Region III and IV-A. In the Tukey HSD test, the graduates' fairly satisfactory performances in Region III and IV-A were also observed to be significantly lower than those from Region II, VI, VIII, X, and XI.

Based on Table 13, there are different extents of performance levels of TEIs across regions, as evident in the sampling of institutions of Baylan (2018), noting performing and underperforming institutions

at the regional level. The post-hoc result that Central Luzon performed less than other regions reflects the results of Nool and Ladia (2017), mainly presenting low LET performances. Literature also showed good performance levels in other regions, such as the investigations of Junio-Pachejo and Allaga (2013) in NCR, Ferrer et al. (2015), and Bellen et al. (2018) in Eastern Visayas. However, studies of other regions negated the post-hoc results, like the analysis of Delos Angeles (2019) and Maramag et al. (2020). Like the island group locale, there may be incongruence in the LET performances across TEIs in the country. More training and preparation could improve licensure performance (Chan-Rabanal and Manzano, 2018). Therefore, a precise alignment of the standards and initiatives in teacher training and preparation is needed to achieve better teacher education outcomes (Dagdag et al., 2017; Baylan, 2018).

3.3.7. Type of higher education

The type of higher educational institution the teachers graduated from was looked into, and the comparative analysis results are highlighted in Table 14.

The ANOVA results in Table 14 highlighted the significant difference in graduates' LET performances according to the type of

TABLE 12 Comparative Analysis of LET performances according to island group locale.

Island group	LET performance[a]	F-value	p-value	η^2	Significant post-hoc
Luzon	80.25 (3.39)	9.397**	<0.010	0.01[b]	Visayas > Luzon
Visayas	81.11 (3.62)				
Mindanao	80.90 (3.82)				

**Highly significant at $\alpha = 0.01$.
[a]Mean (SD).
[b]Small effect (<0.06), Moderate (<0.14), Large (≥0.14).

TABLE 13 Comparative analysis of LET performances according to regional locale.

Region	LET performance[a]	F-value	p-value	η^2	Significant post-hoc
I—Ilocos	81.60 (3.69)	4.820**	<0.010	0.03[b]	II > III, IV-A
II—Cagayan	82.20 (3.64)				VI > III, IV-A, NCR
III—Central Luzon	79.80 (3.14)				VIII > IV-A
IV-A—CALABARZON	79.47 (3.16)				X > III, IV-A
IV-B—MIMAROPA	81.49 (3.80)				XI > III, IV-A
V—Bicol	80.44 (3.41)				
VI—W. Visayas	81.57 (3.42)				
VII—C. Visayas	80.59 (3.63)				
VIII—E. Visayas	80.87 (3.76)				
IX—Zamboanga	80.56 (3.45)				
X—N. Mindanao	81.18 (3.43)				
XI—Davao	81.29 (4.24)				
XII—Soccsksargen	80.13 (4.01)				
XIII—Caraga	80.82 (3.70)				
NCR	80.09 (3.13)				
CAR	83.00 (4.98)				

**Highly significant at $\alpha = 0.01$.
[a]Mean (SD).
[b]Small effect (<0.06), Moderate (<0.14), Large (≥0.14).

institution they graduated from ($F = 5.175$, $p < 0.010$, $\eta^2 = 0.22$). This result signifies that graduates from public HEIs got significantly higher licensure performances than those from private schools. This finding is supported by the policy brief of David and Ducanes (2018), which presented higher LET scores in public schools than private ones in both BEEd and BSEd. In contrast, the study of Faltado (2014) found comparable performances between these types of institutions. Similar to the island group and regional locale, this finding suggests inconsistencies in the LET performances due to the quality of teacher training and preparation that public and private schools provide to the graduates. Hence, a precise alignment of the standards and initiatives in teacher training and preparation is needed to arrive at better teacher education outcomes (Dagdag et al., 2017; Baylan, 2018).

3.4. Predictive power of test-taking time, college preparation, and college grade point average on the LET performance of teacher graduates

Three critical variables were explored—test-taking time, college preparation, and college grade point average—to determine whether these variables affect the LET performances of the teacher graduates. The results are shown in Table 15.

Multiple regression was run to predict the LET performance of teacher graduates from test-taking time, college preparation, and college grade point average. These variables statistically predicted LET performances, $F = 74.889$, $p < 0.010$, $R^2 = 0.094$. All three variables added statistically significantly to the prediction, $p < 0.010$. Test-taking time significantly affects the LET performances of the teacher graduates ($B = 1.522$, $p < 0.010$). This finding means that when graduates take the licensure exam immediately after graduation, they can perform better in this exam.

Moreover, the extent of college preparation also showed a significant effect on LET performance ($B = 0.420$, $p < 0.010$). This result signifies that when graduates are prepared well by their respective alma mater, they can get good and even better performance in the licensure examination. This finding adheres to the recommendations of the read literature to provide sufficient and adequate teacher training and preparation to education students to attain better outcomes, including passing the licensure examination (Dagdag et al., 2017; Baylan, 2018).

Furthermore, the college grade is highlighted to affect the teacher graduates' LET performances significantly. This result indicates that higher college grades could result in higher performance in the examination. Most read literature agrees with college grades as a predictor of passing the LET (Rudio, 2016; Dagdag et al., 2017; Delos Angeles, 2019; Amanonce and Maramag, 2020). This result implies that when students have good grades, they perform well in the activities given by their teachers. Therefore, TEIs should provide activities coherent with the standards and appropriate to students' course needs to derive an advantage when the latter take the LET.

3.5. Implications of the study

In consideration that the Licensure Examination for Teachers is a qualifying examination for all aspiring teachers, it has become a significant touchstone to ensure the quality of teacher education. The foregoing findings therefore denote and provide a valuable impetus to the teacher education institutions.

1. The teachers purposefully and carefully plan, creatively deliver, and appropriately assess the pre-service teachers' learning experiences. They make conscious efforts to align the competencies provided by the Commission on Higher Education with the Philippine Professional Standards for Teachers and the competencies of the Professional Regulation Commission.
2. The school curriculum provides a quality assurance to determine the students' degree of competence and their readiness for an ongoing better performance in the licensure examination.
3. The pre-service teachers are made conscious that becoming a desirable teacher starts with their good class performance which eventually leads to the passing of the licensure examination.

TABLE 14 Comparative analysis of LET performances according to BEEd examination components.

Type of HEI	LET performance[a]	F-value	p-value	η^2	Significant post-hoc
Public	81.16 (3.68)	5.175**	<0.010	0.22[b]	Public > Private
Private	80.35 (3.60)				

**Highly significant at $\alpha = 0.01$.
[a]Mean (SD).
[b]Small effect (<0.06), Moderate (<0.14), Large (≥0.14).

TABLE 15 Model summary and regression coefficients.

Model summary and ANOVA				Coefficients			
Model	R^2	F-value	p-value	Predictor	B-value	t-value	p-value
1	0.094	74.889**	<0.010	Time[a]	1.522	10.713**	0.000
				College preparation	0.420	4.572**	0.000
				College grade	1.943	8.218**	0.000

**Highly significant at $\alpha = 0.01$.
[a]0 = Not immediate, 1 = Immediate.

4. The teachers' competence (wisdom and experience) in the course/s taught creates a positive impact on the pre-service teachers' preparation and performance in the LET

5. Appropriate interventions play a pivotal role in the realization of a satisfactory performance in the said licensure examination.

6. Students' admission and retention policy is a helpful mechanism in the attainment of a satisfactory or even better performance in the licensure examination.

3.6. Limitations of the study

1. Only LET passers of the three-year duration (2017–2019) who were hired at specific times participated in this study. Lengthening the testing and hiring period can increase the number of study participants, thereby increasing the study sample.

2. Although this study is meticulously sampled, some regions of the country had smaller representation in the sample. Intensifying collaboration with the education agencies can improve regional representation in the sample.

3. Only the first-time takers were considered in the survey to create a well-grounded conclusion. To widen the licensure examination perspective, future researchers may include repeaters who passed and were hired in public schools in their study sample.

4. The study participants were not officially/formally interviewed. Future researchers may explore the context, experiences, and perceptions of beginning teachers to offer an in-depth understanding of the said phenomenon.

4. Conclusion

Based on the findings, this study concludes that the general comparability of the LET performance in 3 years is a manifestation that the curricula in both the BEED and BSED programs have been aligned to the standards of the Teacher Education Institutions and the Professional Regulation Commission. Despite the slight variance in the LET performance of certain regions, the findings denote that collaboration among the public and private TEIs, and policies on admission and retention, among others, take a significant stance on attaining these licensure examination results.

The following recommendations based on the findings of the study are hereby proposed:

1. Strengthen the curricular enhancement program of every institution that gives premium on the reinforcement of input in general education, professional education, and specialization courses;

2. Engage in active collaboration among the Teacher Education Institutions in the country;

3. Intensify retention policy and mentoring practices;

4. Review the distribution of weights among components of the LET;

5. Reinforce the constructive alignment between the curriculum, teacher training, and licensure examination;

6. Consider performance-based written assessment for degree programs that involve physical activities; and

7. Give premium on the recency of test-taking.

Data availability statement

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

Ethics statement

The studies involving humans were approved by Cebu Normal University Ethics Research Committee. The studies were conducted in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

Author contributions

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Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

Publisher's note

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