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An exploration of the quality of graduates of Philippine teacher education institutions

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The study evaluated the quality of graduates of Philippine Teacher Education Institutions (TEIs) through the performance of the graduates in the Board Licensure Examination for Professional Teachers (BLEPT) and the teaching performance of the beginning teachers in their first three years of teaching. A nationwide survey study employing a descriptive cross-sectional design was conducted to 2,680 respondents from 16 regions in the country, selected using a multi-stage approach. Results revealed an increasing trend in the beginning teachers' performance in the licensure examinations from 2017 to 2019. These teachers were also consistently averaging a rating of Very Satisfactory from 2019 to 2021 in their teaching performance. Furthermore, socio-economic status, grade point average in college, and grade level taught were other factors found to be significant in relation to teaching performance. As a result, a graduate's score on the teacher licensure exam has an impact on their success during their first three years of teaching. The dimensions of teacher quality in the country are anchored on the alignment of the outcomes and competencies in the written and tested curricula, effective program delivery, and qualified faculty which contribute to the high probability of passing the BLEPT that ultimately results in better teaching performance of beginning teachers. By focusing on these aspects, institutions can play a pivotal role in nurturing highly competent educators who make a lasting impact on the education system. The findings of this study serve as a valuable guide for educational policymakers and institutions striving to elevate the standard of teacher education across the country.

KEYWORDS

teacher education, licensure examination, teacher performance, beginning teachers, descriptive-correlational survey, Philippines

1 Introduction

Teacher quality is a crucial factor in student achievement. There is strong empirical evidence to support that teacher quality significantly impacts student performance (Rice, 2003; Abe, 2014; Kim, 2015; Seebruck, 2015; Goldhaber, 2016) and ultimately, the overall quality of education (Fitchett and Heafner, 2018). While the vast literature shows that quality education rests on many factors, it mostly relies on the quality of teachers (Rice, 2003; Goldhaber, 2016). The construct of teacher quality and teacher preparation has then become a shared agenda across different regions in the world. The Sustainable Development Goals (SDGs) of the United

Nations have made it a priority to encourage opportunities for lifelong learning for everyone while ensuring inclusive and equitable quality education.

In the Philippines, the situations regarding teaching and learning gained more attention as the country continues to perform poorly in international assessments. For instance, the 2019 report of the Trends in International Mathematics and Science Study (TIMSS) revealed that the Philippines ranks last among the 58 participating countries (TIMSS 2019 International Results in Mathematics and Science, 2019) noting a decrease in the performance in both science and mathematics compared to the 2003 assessment. The Southeast Asia Primary Learning Metrics (SEA-PLM) Program 2019 revealed that among the Grade 5 students, only 10% met the highest proficiency level in reading; 1% attained the approaching highest proficiency band in writing; and 16% achieved the mathematical literacy skills expected for primary school completers (SEA-PLM, 2019). In the Organization for Economic Co-operation and Development's (OECD) 2018 Program for International Student Assessment (PISA), the Philippines came in last among the 79 participating OECD member countries for reading performance and second-to-last for both mathematics and science. This means that among the other PISA 2018 participating nations, the Philippines' 15-year-old children performed worse in reading (80% of these children did not achieve the required level of reading competency), mathematics, and science (OECD, 2019).

With the dismal performance of students in international examinations, the dimensions of teacher quality that result in improved student learning have gained more interest among teacher education institutions (TEIs) and other education stakeholders. Improving teacher quality has been the focus of major reforms in the country as it is regarded as a key element in addressing the ongoing crisis in education.

The Department of Education (DepEd), the agency responsible for the basic education in the country (including the in-service training of teachers), launched Sulong EduKalidad in 2019 as a proactive response to improve the quality of teaching and learning outcomes in basic education. It focused on key reform areas such as curriculum review and update as well as teachers' continuing professional development among others. On the other hand, the Commission on Higher Education (CHED), a government agency mandated to ensure teacher quality in the pre-service program, has initiated aggressive curricular reforms to produce effective teachers who will teach basic education. The Commission has issued CHED memorandum order (CMO) nos. 74–80, 82, and 83 s 2017 which established the standards and guidelines in all programs in teacher education. These curricular revisions are anchored on outcomes-based education (OBE) and the development of quality teachers in the country.

The indicators on teacher quality as espoused by Goe (2007) captured the main variables of teacher quality among research studies published between 2000 and 2007. Among these variables are teacher qualifications (credentials, certifications, knowledge, and experiences that teachers bring with them when they practice their profession), teacher characteristics, teacher practices, and teacher effectiveness. The first category is teacher qualifications which include grades, subject-matter expertise, degrees, test scores, experience, certifications (licensure exam in the case of the Philippines), and evidence of participation in continued learning (e.g., internships). These parameters on teacher quality are expected to be developed/acquired

by graduates of TEIs. The second dimension of teacher quality is teacher characteristics which refer to the attitudes and attributes of teachers. Teachers' specific traits bear an influence on the teacher's development (Kennedy, 2006) which in turn affects teacher quality. The third dimension is on teacher practices that pertain to classroom practices teachers employ including the teaching strategies they use to accomplish specific teaching tasks. The fourth category is teacher effectiveness which refers to the "value-added" assessment of teachers' contribution to students' learning effectiveness as measured in standardized tests which may not apply to newly-hired teachers.

While teacher quality, in general, affects quality education (Belsitio, 2016), there is less research-based evidence on specific aspects of teacher quality (e.g., teacher qualification, characteristics, and practices) that can most likely enhance teaching effectiveness and ultimately result in improved student outcomes. Furthermore, there has been no agreement yet on which specific teacher characteristics are the most vital for student achievement and success (Rice, 2003; Darling-Hammond, 2006; Scheerens and Blömeke, 2016; Toropova et al., 2019). There are even fewer studies on whether teachers who passed the BLEPT in the Philippines (as part of teacher qualification in the country) are effective as shown in their teaching performance. These pieces of information are needed to guide educational policymakers, administrators, and other education stakeholders on what constitutes teacher effectiveness.

To contribute to more robust research-based evidence on dimensions and categories of teacher quality, this study explores the quality of provisions of teacher education graduates vis-à-vis the outcomes of the BLEPT and teachers' performance in the first three years of teaching in DepEd. The findings of the study can shed light on curricular innovations, management, leadership, and policy reforms in teacher education to ensure teacher quality through quality training.

1.1 Related literature and studies

Teacher quality has been recognized as the most important factor in the success of any school. It is directly linked with student achievement and success (Rice, 2003; Kim, 2015; Seebruck, 2015; Goldhaber, 2016). According to Belsitio (2016), teacher quality is vital in producing high-quality teaching. Concepts such as strengthening teacher quality and revolutionizing teacher education have earned substantial attention in the fields of scholarly work, policy, and practice (Madalińska-Michalak, 2020). Moreover, today's ever-changing and complex education is viewed as challenging, thus requiring constant research and policy reforms. It is for these reasons that there have been several recommendations and policy initiatives being introduced along with recruiting, selecting, inducting, and sustaining highly qualified and effective teachers.

However, although it is a prevailing view that teachers' quality determines students' future success, researchers have not yet reached an agreement as to which of the teacher characteristics are of the greatest importance for student learning outcomes (Rice, 2003; Darling-Hammond, 2006; Scheerens and Blömeke, 2016; Toropova et al., 2019). There have been different parameters and variables considered and the consensus is difficult to determine as to which factor is directly linked to teacher quality (Harris and Sass, 2008) and what teacher characteristics make for an effective teacher (Burroughs

et al., 2019). Nonetheless, even if it is difficult to encompass the concept of teacher quality, researchers have been trying to gather empirical evidence and provide measurable and policy-relevant indicators and characteristics that would reflect teacher quality.

According to researchers, the complex interaction between several elements, including teacher preparation, programs and degrees, and teacher experience, regulates teacher quality (Rice, 2003; Burroughs et al., 2019; Toropova et al., 2019). Other factors include teacher coursework, teacher certification (Rice, 2003; Goe, 2007; Seebruck, 2015; Toropova et al., 2019), teachers' test scores (Rice, 2003), strategic teacher professional development (Rowe, 2003), employability (Zahid, 2014), and teacher effectiveness about quality teaching indicators (Belsitio, 2016; Akram, 2019). This investigation sought to contribute to this ongoing discussion on what aspects of teacher training are deemed contributory to effective teaching in the field through an investigation of identified dimensions which are discussed in the next sections.

1.1.1 On teacher education preparation

Teacher preparation and development are described as the key elements in honing effective educators (Darling-Hammond et al., 2017). Cognizant of this, countries around the world invest much in teacher education. In Finland, teaching is viewed as a persistent profession that develops teachers into becoming leaders and experts over time. Since 1979, Finland has invested immensely in teacher education by providing teachers with substantial support such as time for peer collaboration to develop curriculum and assessment, including considerable autonomy. In Singapore, the shift from teacher recruitment after independence in 1965 to supplying quality teachers fueled modifications in the employment, training, compensation, status, and professional development of teachers. Support goes beyond graduation as mentor teachers trained by the National Institute of Education mentor novice teachers for the first two years. In Canada, teacher preparation, certification, and practice are guided by standards crafted by a professional group in each of its provinces. For instance, the Ontario College of Teachers established its Standards of Practices composed of a set of competencies that serve as a framework for ongoing practice in Ontario. In Victoria, several education initiatives include creating new models of teacher preparation by featuring strengthened partnerships between universities and schools (Darling-Hammond et al., 2017). Countries around the world practice a certain system for teacher education preparation primarily targeting the development of quality educators.

The Philippines houses a huge number of state-funded and non-state-funded TEIs either offering teacher education as one of the many course offerings or specializing in teacher education, known as the normal schools and universities (Ingvarson et al., 2013). The state-funded TEIs refer to state universities and colleges (SUCs). Both state-funded and non-state-funded TEIs are bounded by the policies and standards adopted and promulgated by CHED to produce globally-competitive teachers.

The Commission on Higher Education (CHED) states that the main goal of teacher education is to develop globally competitive educators instilled with Filipino ideals, aspirations, and traditions and are adequately equipped with pedagogical knowledge and skills. Furthermore, teacher education programs are developed to produce teachers who are effective synthesizers of organized knowledge,

efficient promoters and facilitators of learning, and committed humanists (CHED Memorandum Order No. 11, s, 1999).

The Bachelor of Elementary Education (BEED) for elementary teaching and the Bachelor of Secondary Education (BSED) for secondary-level teaching are the two main streams of the teacher education curriculum. This curriculum is divided into three main sections: general education, professional studies, and specialization. The goal of the general education component is to build a broadly educated, creative, culturally literate, morally upright, and productive individual. It addresses the humanities, natural and behavioral sciences, computer literacy, mathematics, logic, and ethics. The professional studies component includes direct considerable teaching participation, the methodical study of teaching and learning concepts and theories, curriculum building, teaching and learning processes, and educational philosophy and goals. The specialization component focuses on the in-depth knowledge of the context as well as the specified skills required in the major field (CHED Memorandum Order No. 11, s, 1999). The teacher education curriculum accentuates the intertwining of theoretical and experiential knowledge through relevant and differentiated learning experiences of teacher education students (CHED Memorandum Order No. 30, s, 2004). Throughout the years, Philippine TEIs boost efforts for reforms and innovations to provide the country with the quality teachers it needs.

In a research study focusing on the quality of teacher education in the Philippines by David et al. (2018), factors such as TEI classification, size, and year established are explored. Based on the study, SUCs are seen to excel better in the board examination for the elementary level while private higher education institutions (HEIs) and Local Universities and Colleges (LUCs) score slightly better at the secondary level. Large TEIs also tend to perform better in the board examination compared to small to medium TEIs. Older TEIs established in the 1970s and even before, steadily accomplish better results in both elementary and secondary levels in the board examination compared to those established in the 1980s to the present.

To sustain excellence in HEIs as well as to recognize their models of quality and resource centers, Republic Act No. 7722 (1994), otherwise known as the "Higher Education Act of 1994," provides for the recognition of exemplary institutions. The Center of Development (COD) is distinction awarded to a department in an HEI that displays the potential to eventually become a Center of Excellence (COE). COE is then awarded to a department within an HEI that continually manifests outstanding performance in the fields of instruction, research and publication, extension and linkages, and institutional qualifications. Manasan (2012) found that the number of CODs positively correlated with the BLEPT passing rate. Ladia et al. (2012) confirmed programs awarded with COE status perform substantially better in BLEPT compared to non-COE programs. David et al. (2018) also noted that between 2010 and 2016, an oversized problem of poor quality of teacher education was traced in Mindanao, specifically in regions where there is no single TEI recognized as COE.

As a fundamental part of the education system, the teacher education program has significantly developed and will continue to progress to address the emerging needs of society (Rahman et al., 2011). Teacher preparation programs equip the pre-service teacher with content, pedagogy, as well as attitude to aid in the anticipation of challenges they may encounter and how to effectively respond to these while providing learners with meaningful learning opportunities (Goldstein, 2008). Strengthening teacher preparation programs, such

as formal university-based education programs or alternative preparation programs, is one strategy to ensure having competent instructors in the field, according to several studies (Harris and Sass, 2008; Kim, 2015). Moreover, the studies of Adegoke (2003) and Benneh (2006) emphasized that teacher education programs must capture comprehensive pre-and in-service training focusing on preparing teachers to be competent in both content and pedagogy. This is referred to as 'professional knowledge' by Collinson (1999 in Burroughs et al., 2019) and is gained during the teachers' educational coursework. According to a subsequent study by Goldhaber and Brewer (2000), the sort of coursework that teachers have taken is more significant than the degree itself. This is consistent with earlier studies that emphasize the significance of teachers' subject-matter expertise and their understanding of the best ways to teach it. Kim (2015) also stressed the significance of pre-service teachers receiving on-the-job training because it may lead to a wide range in their skill sets.

TEIs and their methods of preparation and training contribute to beginning teachers' characteristics, habits, attitudes, and personalities (Rahman et al., 2011). It is in the continuous effort of investigating, planning, and reforming that TEIs aim to demonstrate excellence in standardized tests as the next hurdle for teacher-education graduates.

1.1.2 On licensure examinations

Phelps (2008) called standardized testing the "most useful evaluation method available for human-resource intensive endeavors." Amidst critics noting the harmful effects of standardized tests, Sireci (2020) believed that these are designed for fairness and 'standardized' purely means that test coverage is comparable across test administrations and "conditions under which the test is administered are the same for all test takers." Passing the standardized national examinations like the BLEPT is an important requirement to verify that a graduate has the necessary competence to be a qualified and licensed professional teacher.

Teacher licensing aims to distinguish between teachers who are capable to enter the profession in the context of abilities measured through the examination and those who are not (Abdallah and Musah, 2021). Countries and states have their certification and licensing system. In the Netherlands, the diploma received from the university serves as the teaching certificate. Hong Kong and Singapore are countries that provide certification after a graduate complied with curriculum requirements and impose no additional demands for certification. On the other hand, England and the Philippines require a separate licensure examination for teachers after course completion (Wang et al., 2003). Teachers in England must pass the Teacher Training Agency's skills test to acquire Qualified Teacher Status (QTS) while teachers in the Philippines must pass the BLEPT to become a Licensed Professional Teacher (LPT).

In the BLEPT, the Bachelor of Secondary Education (BSEd) graduates are evaluated using three components: General Education (20%), Professional Education (40%), and Field of Specialization (40%). Meanwhile, two components are utilized for evaluating the Bachelor of Elementary Education (BEEd) graduates: General Education (40%), and Professional Education (60%). With these, the graduates are expected to attain at least a 75% passing rate to be allowed to practice the teaching profession (Republic Act No. 7836, 1994).

Philippine TEIs regard the BLEPT as an indicator of quality and thus use it to gage the quality of education they provide to their clienteles (Antiojo, 2017). As such, numerous studies correlating teacher graduates' grade point average (GPA) with BLEPT results have been conducted. A student's GPA provides a general description of how well the student has performed in the entire course of his baccalaureate studies while BLEPT determines if the teacher-graduates have acquired the essential competencies and professional accountability needed to practice the profession. The findings of these studies have been conflicting. For example, Delos Angeles (2020) confirmed that the higher the GPA, the higher the possibility of passing or acquiring a higher BLEPT rating. Dagdag et al. (2017) supported this claim noting that GPA was discovered to have the strongest relationship with licensure examination performance. Other studies revealed that graduates' GPA correlates positively and highly with BLEPT performance (Hena et al., 2014; Ferrer et al., 2015; Quiambao et al., 2015). On the other hand, Antonio et al. (2016) found a weak relationship between academic performance and BLEPT performance. Pachejo and Allaga (2013) and Apare et al. (2018) found that there is a weak and insignificant relationship between GPA and BLEPT performance of teacher education graduates in certain universities and colleges in Luzon and Mindanao.

While scholars contend the importance of licensure examination as an indicator of the TEI quality (Antiojo, 2017), the country's National Research Council (2001) reminded that licensure examinations are only a single factor influencing the overall teacher quality and that improvement or deterioration of teaching performances can be attributed to many other factors. Regardless, the purpose of the licensure examination itself has already been deemed an assurance of quality. As Acosta and Acosta (2016) put it, the licensure exam "establishes the floor intended to distinguish between those who have the necessary level of competence to begin practice and those who do not."

1.1.3 On teacher evaluation

Teacher appraisals have two purposes: competency and professional growth commitments (Hallinger et al., 2014). In Australia, the development of Australian Professional Standards for Teachers leads to the provision of continuous benchmarks to assist teachers in performance assessment, identification of professional learning areas, and recognition of excellent teachers based on national standards (Santiago et al., 2011). In Finland, teacher appraisal is guided by the agreement between the local government employer and the teachers' trade union as specified in the labor-market negotiations. This means that teachers are evaluated using the contents and aims of the national core curriculum and even using the school's yearly development plan (Nusche et al., 2011). In Ontario, Canada, teacher performance appraisal is guided by the Standards of Practice for the Teaching Profession which includes components such as commitment to students, professional knowledge, professional practice, leadership in communities, and ongoing professional learning (OECD, 2009). In Singapore, the Enhanced Performance Management System (EPMS) manages teacher development and appraisal. Most countries link teacher appraisal to professional development, others to incentives, or even both, and other elements.

To respond to the call for teacher quality in the Philippines, DepEd developed the Philippine Professional Standards for Teachers (PPST), adopted from its former standard, the National Competency-Based Teacher Standard (NCBTS) (Department of Education, 2017). The PPST "articulates what constitutes teacher quality through well-defined domains, strands, and indicators that provide measures of professional

learning, competent practice, and effective engagement across teachers' career stages" (Department of Education, 2018). The PPST provides academic institutions with a concrete framework with which they can gage and assess teacher quality in their organizations. It also provides teachers with the standards with which they can be guided to continuous quality teaching and professional development. In the PPST, teachers are classified as Beginning Teachers (Teacher I with 0–3 years in service), Proficient Teachers (Teacher I-III with more than 3 years in service), and Master Teachers (Department of Education, 2015a). It also stipulated what is required of teachers for each career stage. For example, it describes Career Stage 1 or Beginning Teachers as, "teachers who have gained the qualifications recognized for entry into the teaching profession." These teachers must possess the required competencies to effectively carry out their profession.

Meanwhile, a Results-Based Performance Management System (RPMS) is an assessment instrument utilized to manage, monitor, and ensure quality teaching performance as well as to detect organizational and human resource development needs (Department of Education, 2015b). DepEd Order No. 2, s. (2015) defines the RPMS as the contextualized Strategic Performance Management System (SPMS). It is a process that ensures strategic alignment of the department's vision, mission, values, and strategic priorities with that of its personnel. It is also a mechanism for monitoring and evaluating the performance of the personnel and providing support to their development needs. RPMS tools are used as instruments to describe and measure the attainment of the teacher's duties and responsibilities through performance. For school-based personnel such as teachers, the RPMS is utilized as an appraisal tool that serves as the basis for training and development. The RPMS was aligned with the PPST during the national validation study of PPST in 2015 where participants in focus group workshops strongly articulated the need for alignment.

In the RPMS tools, there are three assessment instruments according to the three classifications of teachers in the PPST. Each of these tools defines the duties and responsibilities of teachers across career levels; the Key Result Areas (KRAs) for the achievement of the specified duties; the particular objectives for the attainment of KRAs; the different Means of Verification (MOV) which serve as evidence of accomplishing the objectives alongside performance indicators, from outstanding to poor [Philippine National Research Center for Teacher Quality (RCTQ), 2021].

Grade level taught is another vital factor associated with successful teaching and learning (Kini and Podolsky, 2016; Dorji and Wangchuk, 2022) as it is one of the predictors of teaching performance and job satisfaction based on various investigations (Baluyos et al., 2010; Churchwell, 2016). High school teachers are more focused on their field of specialization, thus, are expected to be experts. Teacher performance is significantly affected when teachers are knowledgeable in their subject (Batuigas et al., 2022). Moreover, various job satisfaction perceptions are related to the level taught by teachers. Churchwell (2016) observed that high school teachers have a higher job satisfaction compared to teachers handling other levels. This was supported by Baluyos et al. (2019) observing that the most satisfied teachers are those who are in high school.

1.1.4 On teacher characteristics

As education quality and learning outcomes are linked to teacher quality, it is vital to identify teacher characteristics that serve as vehicles to promote teacher effectiveness. Imig and Imig (2007) claimed that "the

concept of quality in both teaching and teacher education is complex and elusive" due to these being hinged on a multitude of perspectives ranging from those of the teacher's personal and professional traits, TEIs and training, as well as teacher's performance in actual school settings and educational context, the impact of teachers to student success, and others (Wang et al., 2003). Specific traits of teachers that are already evident or present at the start of the teacher training program influence the teacher's development (Mayr, 2006). Personal characteristics make up the entirety of the individual. With this notion, the performance of an action or task might be affected by personal makeup.

Even with considerable efforts to push for gender diversity in educational settings, it is observed that teaching is still a female-dominated field. This is also revealed in the international data for European Union countries showing that primary and secondary teaching are numerically dominated by women (Tasner et al., 2017). In the country, 87.6% of teachers at the primary level are females, as of 2021 (Data World Bank, 2023).

Queries on how gender influences the effectiveness of teachers yield varied results (Islahi and Nasreen., 2013). Some studies describe female teachers as patient, supportive, motivators of student interaction and participation in class through group activities and referential questions (Rashidi and Naderi, 2012), give positive feedback to learners, and encourage peer collaboration in class (Rashidi and Rafiee Rad, 2010). The National Survey of Student Engagement (NSSE) (2005) reported that women faculty members highlight higher-order thinking skills, diverse experiences of learners, and collaborative learning more than men. Moreover, Kuh et al. (2004) noted that effective educational practices are possibly utilized by female teachers more than their male counterparts. On the other hand, male teachers are described as instigators of teacher-student interaction through display questions (Rashidi and Naderi, 2012). They also exercise greater authority (Wood, 2012) and apply a task-centered teaching style (Chudgar and Sankar, 2008). Other studies even found that men faculty members receive more respect among pupils and colleagues than women faculty members (Tasner et al., 2017).

While these studies highlight the variances between male and female teachers' performance in the classroom, other research presents no differences between male and female teachers' efficacy and that gender possesses no significant influence on teacher effectiveness (Baraiya and Baraiya, 2013). Tschannen-Moran and Woolfolk Hoy (2007) concluded that demographic factors such as gender have not been constant predictors of teaching efficacy. Some scholarly works even noted the possibility that what seemed to be gender differences among teachers might be distinct teaching styles attributed to the teacher's gender (Islahi and Nasreen., 2013).

Socioeconomic status (SES) is defined as "a measure of one's combined economic and social status and tends to be positively associated with better health" (Baker, 2014). It is commonly referred to as the monthly family income or an individual's income. Albert et al. (2018) described the different income clusters and thresholds as *per capita* income into poor, low income (but not poor), lower middle income, middle middle-income class, upper middle income, upper income (but not rich), and rich. The income ranges in these classifications are based on the monthly income of a family with 5 members.

There have been several research correlating students' school performances to that of their socioeconomic status. The results of these studies indicate that students from high-income families have

higher academic skills compared to those from low-income families (Çoban, 2020). However, there is only very limited literature on correlating teachers' performance to that of their socioeconomic status. For instance, the study by Werang (2014) examined the relationship between teachers' socioeconomic status (SES) and their job performance. The findings indicate that there is a significant relationship between teachers' SES and their work morale and job performance. Nichols (2006) in Thompson (2009) stated that teachers suffer from low work morale due to the gap between low pay and high cost of living.

Moreover, Romero (2019) cited that the Philippines ranks 4th among the ASEAN countries when it comes to annual salaries with an average of $18,160 (inclusive of benefits) while the ASEAN average is $27,742. Potential teachers' choice of pursuing their careers may also be affected by other higher-paying professions available. It further implies that when teachers are given enough salary to cater to their family's needs, they can focus more on their jobs. Maslow's hierarchy of needs suggests that physiological needs are the priority and must be satisfied first. Thus, it is important to also explore the beginning teacher's SES and how this may affect their overall teaching performance.

1.2 Statement of the problem

The main objective of the study is to evaluate the quality of graduates of TEIs through the performance of the TEI graduates in the BLEPT and the teaching performance of the beginning teachers in their first three years of teaching. To achieve the objective of this study, the following questions were answered:

1 What is the performance of the TEI graduates in the BLEPT?
2 What is the quality of teaching performance of the TEI graduates during the first three years of teaching based on their Philippine Professional Standards for Teachers (PPST)-based Results-Based Management System (RPMS) ratings for public schools?
3 How do the following factors influence the teaching performance of beginning teachers?

3.1 sex
3.2 socio-economic status
3.3 type of TEI from where the teacher graduated
3.4 grade point average
3.5 classification of the school where the teacher is deployed (small, medium, large, mega)
3.6 level taught (elementary, junior, and senior high school)

4 Is there a significant correlation between the beginning teachers' scores in the BLEPT and RPMS?

2 Methodology

2.1 Research design

This nationwide survey study used a descriptive cross-sectional correlational design to evaluate the quality provisions of pre-service teacher education vis-à-vis the outcomes of the BLEPT. This investigation described the beginning teachers' performance in DepEd, their performance in the BLEPT, and identified characteristics. Furthermore, this paper determined the relationships between such performances and the aforementioned characteristics. The descriptive-correlational design has been used to analyze performance in licensure examinations vis-à-vis variables (Kalaw, 2017; see Table 1).

TABLE 1 Data included in the study.

Variable	Data involved in the study
Board licensure examination for professional teachers (BLEPT) performance	Overall rating, specific test ratings (general education, professional education, and specialization, as applicable)
Teaching performance	Overall ratings for the last three years were generated through the standardized tool from the Department of Education (DepEd) Philippine Professional Standards for Teachers (PPST)-based Results-Based Management System (RPMS) Tool
Sex	Classification as male or female
Socio-economic status	Monthly combined gross family income following 2018 Philippine Institute for Development Studies (PIDS) income brackets
Type of HEI	State-funded, non-state funded
Grade point average	Final Grade point average as reflected in the transcript of records
School classification	Basic education school classification according to DepEd (small, medium, large, and mega)
Level taught	Pre-School, Elementary, Junior High School, Senior High School
Degree program	Bachelor of Elementary Education, Bachelor of Secondary Education, and other Bachelor's Degree Programs with corresponding Diploma in Professional Education
Concentrations/specializations	General Education, Early Childhood Education, Special Education, English, Filipino, Mathematics, Biological Sciences, Physical Sciences, Social Sciences, Music, Arts, PE and Health, Technology and Livelihood Education, Values Education
Island group locale	Luzon, Visayas, Mindanao
Regional locale	Region I, II, III, IV-A, IV-B, V, VI, VII, VIII, IX, X, XI, XII, XIII, NCR, CAR (BARRM is not supervised by DepEd)
Type of higher education	State-funded, non-state funded

2.2 Participant selection

The respondents of the study were beginning teachers in the entire Philippines to help ensure comparability of the results in terms of the years of experience, curriculum undertaken, and the table of specifications set at the time they took the licensure examination. The study respondents were selected from a pool of 194,037 passers of BLEPT conducted between 2017 and 2019 in the Philippines. The selection process involved a multi-stage approach which is used for many national studies (Saleem and Bobak, 2005; Acharya et al., 2013). The researchers employed inclusion and exclusion criteria to ensure the sample's validity and representativeness. 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. A final sample of 2,680 respondents from the 7,022 who returned the survey was included in the study. The 4,342 respondents were excluded from the analysis because they were either: hired in DepEd before 2018; graduated before 2016, had incomplete data (e.g., RPMS and/or BLEPT rating); or were not licensed teachers yet. These non-licensed teachers are Diploma in Professional Education (DPE) holders who were allowed to teach at the senior high school level despite the absence of a license on the condition that they will take and pass the BLEPT within five years. Table 2 presents the distribution of respondents from the different regions. The final sample represented 16 regions of the Philippines under DepEd.

The Bangsamoro Autonomous Region in Muslim Mindanao (BARMM) was excluded because it has its own Ministry of Basic, Higher, and Technical Education and the inclusion criteria for the study are schools under the jurisdiction of DepEd.

2.3 Survey instrument

The data involved in the study were derived from the validated survey questionnaire administered online via Google Forms. Data collection consisted of an online survey questionnaire composed of three parts: (1) respondent demographics; (2) LET performance, and (3) teaching performance. The instrument was reviewed and validated by the study team, research consultants from the Technical Panel for Teacher Education (TPTE), experts from the DepEd Policy Research and Development Division, research focal persons from the DepEd regional offices, and the management team of the research team. The tool has undergone five revisions to meet content and face validity. The final version of the survey was pilot-tested by research team members to ensure that all the data needed to answer the research questions would be answered. To ensure reliability, the tool was subjected to test–retest analysis. The result ($r = 0.92$) showed that the tool yielded high reliability and consistency over time.

2.4 Data analysis

The data were managed in Microsoft Excel 2016 and analyzed through the Statistical Package for Social Sciences (SPSS) version 26. The categorical data were analyzed through absolute counts and percentages, while the continuous data were described as mean and standard deviations. The researchers undertook a thorough examination of the assumptions integral to the soundness of the regression analysis: namely, linearity, normality, and homoscedasticity. The assessment of linearity involved comprehensive exploratory data analysis, entailing the creation of scatterplots and residual plots. To evaluate the normality assumption, the researchers employed a Shapiro–Wilk and Anderson-Darling normality tests and engaged in graphical scrutiny of residuals' distribution. The validation of homoscedasticity encompassed the

TABLE 2 Distribution of respondents by region.

Origin	No. of Respondents	No. of Included Respondents	%
Region I – Ilocos Region	168	45	26.79
Region II – Cagayan Valley	64	38	59.38
Region III – Central Luzon	469	203	43.28
Region IV-A – CALABARZON	667	158	23.69
Region IV-B – MIMAROPA	101	22	21.78
Region V – Bicol Region	687	296	43.09
Region VI – Western Visayas	922	320	34.71
Region VII – Central Visayas	300	121	40.33
Region VIII – Eastern Visayas	646	255	39.47
Region IX – Zamboanga Peninsula	394	138	35.03
Region X – Northern Mindanao	745	291	39.06
Region XI – Davao Region	834	399	47.84
Region XII – SOCCSKSARGEN	240	109	45.42
Region XIII – CARAGA Administrative Region	220	115	52.27
Cordillera Administrative Region	44	13	29.55
National Capital Region	521	157	30.13
TOTAL	7,022	2,680	38.17%

TABLE 3 BLEPT passing percentage of elementary and secondary teachers from 2017 to 2019.

BLEPT schedule	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%
Average	23.21%	35.90%

utilization of scatterplots depicting standardized residuals as well as the application of the White's test. Despite minor observed deviations, the study's substantial sample size and the execution of sensitivity analyses collectively underpin the robustness of the outcomes, consequently affirming the overall validity of the conducted regression analysis. The continuous data were compared across different categorical strata using the one-way analysis of variance (ANOVA) with conditional *post hoc* Tukey HSD test. On the other hand, correlation analysis was performed using multiple regression analysis and Pearson product–moment correlation. All tests were conducted at 95% confidence intervals, and statistics with $p \leq 0.05$ are considered significant.

2.5 Ethical considerations

The manuscript was submitted to the University Ethics Research Committee for review and was approved with the CNU-REC Code 1019/2021-10. When the ethics certification was given, research permissions were then obtained. Consent was sought from the teacher-respondents and participating in the study is purely voluntary. The researchers have also collaborated with DepEd in the dissemination of study objectives and distribution of the survey questionnaire. To ensure confidentiality, excel and SPSS files were encrypted for data security not only to minimize risks but also to maximize the benefits derived from the study results. This study is part of a research project funded by the Commission on Higher Education. The terms of this arrangement have been reviewed and approved by CHED and Cebu Normal University, following its policy on objectivity in research.

3 Results

The main objective of the study is to evaluate the quality of graduates of the TEIs through the performance of the graduates in the BLEPT and the teaching performance of the beginning teachers in their first three years of teaching. The sections that follow discuss the results of the survey study in answer to the specific questions of this investigation.

3.1 Board licensure examination for professional teachers

This study looked into the licensure examination performance of beginning teachers. To put the discussion in context, Table 3 shows

the passing percentages in the BLEPT in the Philippines for three years from March 2017–September 2019 along with six examination schedules.

It can be noted that the graduates' BLEPT performance from 2017 to 2019 is never more than 50% with the lowest performance at 10.39% (BEEd) in March 2017 and the highest at 48.03% (BSEd) in September 2018. The three-year running averages for BEEd and BSEd takers are 23.21 and 35.90%, respectively. These figures reveal the collective passing rates of the graduates of Philippine TEIs in the country's teacher licensing examination. Specifically, among all BEEd graduates in the Philippines, only 23.21% possess the necessary competence to become qualified and licensed professional teachers (Abdallah and Musah, 2021). Similarly, among all the BSEd graduates, only 35.90% are deemed capable to enter the teaching profession (Abdallah and Musah, 2021).

Focusing on those who successfully acquired the competencies, skills, and content of a teacher as measured in the BLEPT, the survey results revealed the performance of teacher graduates from 2017–2019 in Table 4. The trend shows that there is an improved performance in the general education component of both the elementary and secondary levels while professional education and specialization examinations have varying levels of performance across the years. This increasing trend in the General Education examination performance of both levels can be attributed to the improving quality of general education courses offered in TEIs. Nonetheless, a closer inspection is still needed in order to generate a meaningful interpretation of the results.

The elementary beginning teachers' performance in the BLEPT is improving (Table 5). Despite the decline in professional education performance in 2019, the big improvement in the general education examination (Table 4) accounted for the increasing trend. Still, the general performance remains to be satisfactory. On the other hand, the secondary teachers' performance appears to remain consistent all throughout the years. The differences can be deemed negligible and like the elementary teachers, performance remains satisfactory.

3.2 Teaching performance of beginning teachers

This study looked into the teacher performance of beginning teachers in their first three years of teaching in DepEd using the Results-Based Management System (RPMS) assessment instrument (Table 6). Since 2019, the beginning teachers are rated Very

TABLE 4 BLEPT performance of research respondents.

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

[a]Legend: 75–83.33 (Satisfactory), 83.33–91.66 (Very Satisfactory), 91.67–100 (Outstanding).

TABLE 5 Overall BLEPT performance of teacher graduates from 2017 to 2019.

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

[a]Legend: 75–83.33 (Satisfactory), 83.33–91.66 (Very Satisfactory), 91.67–100 (Outstanding).

TABLE 6 Performance of beginning teachers in the RPMS evaluation in 2019–2021.

Year	n	Values	Description	95% CI
2019	871	4.07 (0.58)	Very satisfactory	[4.03, 4.11]
2020	1,286	4.17 (0.55)	Very satisfactory	[4.14, 4.20]
2021	2,654	4.22 (0.59)	Very satisfactory	[4.20, 4.25]
On Average	2,680	4.17 (0.57)	Very satisfactory	[4.15, 4.19]

Values are presented in Mean (Standard Deviation); CI means Confidence Interval; 4.50–5.00: Outstanding, 3.50–4.49: Very Satisfactory, 2.50–3.49: Satisfactory, 1.50–2.49: Unsatisfactory, and Below 1.49: Poor.

Satisfactory with an increasing trend. This can be interpreted as the improving quality of beginning teachers employed in the public school system or a better orientation of the beginning teachers of what is deemed to be teacher quality in the assessment instrument.

Concerning the BLEPT discussed in the previous section, passing it is not just a minimum qualification when hired in the department, but also given 15 ranking points based on teachers' BLEPT rating

(DepEd Order 7, s. 2015). This further implies that the results on the teacher performance provide insights into the effectiveness of licensure examination as a component in screening teacher education graduates' readiness to teach as they can meet the requirements of DepEd.

Nonetheless, it is noteworthy to mention that a segregated score according to the different areas in the RPMS is not available for

analysis in this investigation. Considering this limitation, the data implies that teacher training must also look into the parameters of the RPMS which in theory, is also in line with the Philippine Professional Standards for Teachers (PPST), the latter being the same anchor for the teacher education curriculum. As input to the reframing of teacher education in the country, an area of inquiry could be the consistency of what is deemed as teacher quality from training to licensing down to performance.

3.3 Factors influencing the teaching performance of beginning teachers

Considering the limitations of standardized examinations, this study also looked into other factors that could influence the teaching performance of beginning teachers (Table 7).

The respondents of the study are young professionals averaging an age of 26 with half of the sample aged in the range of 25 to 28 years old. The majority are females, in the lower middle-class income bracket, who graduated from state-funded TEIs, and have above-average college performance. Most of them are from the secondary education program, have no experience in private school, assigned to large schools and at the junior high school level. This description reveals that the sample is beginning teachers as defined in the study as teachers in their first three years of teaching experience. The respondents of the study were taken from the population of beginning teachers in the entire Philippines using a systematic sampling process. The researchers employed inclusion and exclusion criteria to ensure the sample's validity and representativeness and included those who have expressed consent for participation in the study (Table 2).

Table 8 shows that the value of R^2 is 0.034, or 3.4% of the total variance in teaching performance has been "explained" by the regression model. This can be considered relatively low but in some fields such as social sciences, this can be expected. An attempt to predict human behavior typically has R^2 lower than 0.50. While the physical processes are easier to predict than human behavior the significant F-change in Table 8 means that the predictors added in that step significantly improved the prediction. The Analysis of Variance (ANOVA), which provides the analysis of the variance in the regression model, is presented in Table 9.

The value of p is less than 0.05, indicating that a significant relationship exists between the dependent variable and predictors. In this case, the teaching performance represented by the beginning teachers' RPMS ratings is affected by the identified factors of the model. Even though the R^2 is low, statistically significant predictors are noted which are associated with changes in the average RPMS scores. Upon further analysis, socioeconomic status, grade level taught, and teacher training performance (Table 10) are significant predictors of the teaching performance of beginning teachers in the Department of Education.

Putting all of the discussions in this section together, the coefficients of these significant predictors suggest that after-effects of the other predictors are taken into account, (*a*) teachers with higher socioeconomic status income will score 0.061 higher in the RPMS than the reference group (teachers with income Php 21,914-Php 43,828); (b) as one unit of the GPA increases, the teacher's RPMS

score increases by 0.003; (c) teachers in Elementary and Secondary levels will score 0.103 higher in the RPMS than the reference group (Pre-School teachers).

3.4 Relationship between licensure and teaching performance of beginning teachers

To determine indicators of high-quality graduates in teacher education institutes, the relationship between beginning teachers' teaching performance throughout their first three years of teaching

TABLE 7 The newly hired teachers' profile (*n* = 2,680).

Characteristics	Values
[3]Age in years	26.00 (25–28)
[2]*Sex*	
Male	640 (23.88)
Female	2040 (76.12)
[2]*Socio-economic status*	
Php 21,914 – Php 43,828	2,416 (90.15)
Php 43,828 – Php 76,669	171 (6.38)
Php 76,669 – Php 131,484	60 (2.24)
Php 131,483 – Php 219,140	21 (0.78)
Above Php 219,140	12 (0.45)
[2]*Type of TEI where the teacher graduated from*	
State-funded	1,356 (50.60)
Non-state funded	1,324 (49.40)
[1]Grade point average (GPA)*	60.38 (15.40)
[2]*Education bachelor's degree program*	
Bachelor of elementary education	1,015 (37.87)
Bachelor of secondary education	1,454 (54.25)
Diploma in professional education	211 (7.87)
Teaching experience in private school	
[2]With	1,200 (44.78)
[1]Length of experience	2.01 (1.86)
[2]Without	1,480 (55.22)
[2]*Classification of the school where the teacher is deployed*	
Small	603 (22.50)
Medium	877 (32.72)
Large	960 (35.82)
Mega	240 (8.96)
[2]*Level taught*	
Pre-School	67 (2.50)
Elementary	1,088 (40.60)
Junior high school	1,269 (47.35)
Senior high school	256 (9.55)

Values are presented in [1]Mean (Standard Deviation), in [2]Frequency (Percentage), and in [3]Median (Q1 – Q3); * GPA = (|grade minus minimum passing grade|/Range of the minimum and highest possible passing grade) * 100.

TABLE 8 Model summary.

R	R^2	Adjusted R^2	Std. error of the estimate	Change statistics				
				R square change	F change	df1	df2	Sig. F change (p-value)
0.183a	0.034	0.029	0. 56,096	0.034	7.727	12	2,667	0.000*

*Significant at 0.05; a. *Predictors*: (Constant), Type of TEI, Grade Level Taught, Overall Rating in Licensure Examination, GPA, Socio-economic status, Teaching Experience in DepEd, Length of Service in DepEd, DepEd Region, Age, Sex, DepEd School Category, Education Bachelor's Degree; b. *Dependent variable*: Average RPMS Scores.

TABLE 9 Analysis of variance (ANOVA).

Model	Sum of squares	df	Mean square	F	p-value
Regression	29.176	12	2.431	7.727	0.000b*
Residual	839.236	2,667	0.315		
Total	868.412	2,679			

*Significant at 0.05; a. *Dependent variable*: Average RPMS Scores; b. *Predictors*: (Constant), Type of TEI, Grade Level Taught, Overall Rating in Licensure Examination, GPA, Socio-economic status, Teaching Experience in DepEd, Length of Service in DepEd, DepEd Region, Age, Sex, DepEd School Category, Education Bachelor's Degree.

TABLE 10 The factors of beginning teachers' performance ($n = 2,680$).

Model	Unstandardized coefficients		Standardized coefficients	T	p-value	95% confidence interval for beta	
	Beta	Std. error	Beta			Lower bound	Upper bound
Sex *Reference group: Male*	−0.006	0.026	−0.004	−0.219	0.826	−0.057	0.045
Socio-economic status *Reference group: Php 21,914-Php 43,828*	0.061	0.021	0.056	2.924	0.003*	0.020	0.102
Type of TEI *Reference group: Non-state funded*	−0.010	0.022	−0.009	−0.458	0.647	−0.053	0.033
Grade point average	0.003	0.001	0.085	4.417	0.000*	0.002	0.005
DepEd school category *Reference group: Small*	0.011	0.013	0.018	0.861	0.389	−0.014	0.037
Grade level taught *Reference group: Pre-School*	0.103	0.024	0.124	4.216	0.000 *	0.055	0.150

Dependent variable: Average RPMS Scores; *Significant at 0.05.

TABLE 11 The correlation analysis between the beginning teachers' scores in the BLEPT and RPMS.

Variables	R-value	p-value	Interpretation
BLEPT and RPMS	0.084	0.000	Significant

and their success on the licensure examination was examined. Correlation analysis reveals a significant relationship between teachers' performance in the licensure examination and their performance in the first three years of teaching (Table 11). This means that the teachers with satisfactory performance in the licensure examination have very satisfactory teaching performance in their first three years in the Department of Education. The BLEPT is an effective measure of gaging the competencies of prospective teachers for effective teaching. As input to the ongoing discussion on what constitutes quality graduates in Philippine TEIs, the results suggest that quality graduates hinge on the alignment of the competencies in the written and tested curricula, effective program delivery, and qualified faculty. These indicators render a high passing percentage of graduates in the BLEPT that

ultimately results in better teaching performance as beginning teachers which supports the findings of Acosta and Acosta (2016) wherein teacher licensure is a significant factor in the implementation of basic education reform in the Philippine education system and is a good predictor of teachers' performance. They added that teacher licensing justifies the current education reform agenda, which is tailored to achieving teacher quality and excellence.

As ways forward, a similar study can be done for teachers who have served in the Department of Education for more than three years to ascertain if the findings would be the same or otherwise. In addition, other measures of teacher quality can be investigated to shed light on the dimensions of teacher quality in the country.

4 Discussion

According to Antiojo (2017), the BLEPT has become a reliable tool for indicating the quality of education the TEIs provide in that it determines whether the TEIs have fully delivered the competencies, skills, and content that the graduates were expected to possess based on the CHED mandates. Subscribing to this notion, the dismal performance of TEI graduates in the BLEPT plainly reflects the poor performance of TEIs in making sure that their graduates are "ready" to become professional teachers. Taking this into consideration, a careful and thorough investigation of the factors behind the huge failure rate of TEI graduates is not only warranted but strongly called for.

Focusing on those who successfully acquired the competencies, skills, and content of a teacher as measured in the LET, there is an increasing trend in the general education performance of both groups from 2017 to 2019. It can also be observed that those taking the licensure examination for the secondary level consistently outperform those at the elementary level in both general and professional education examinations. In addition, the secondary BLEPT passers consistently score above 80 for both the professional education and general education examinations with the specialization dipping only slightly at 79.53 in 2017. This generally good performance of secondary BLEPT passers implies that the design of content, the program competencies and delivery relating to the Bachelor of Secondary Education(BSEd) courses are in line with what is tested in the licensure examination. The same may not be said for the graduates of the Bachelor of Elementary Education (BEEd). The stark difference between the performance of both groups most especially in the general education examination reveals this disparity. In effect, a review of the general education table of specifications vis-à-vis teacher training curriculum could be done to carefully analyze what accounts for the consistent lower performance of elementary BLEPT passers. Nonetheless, the beginning teachers' performance shows an increasing trend implying that there must have been improvements in teacher training delivery leading to a closer alignment to what the licensure examinations measure to be evidence of teacher quality.

In terms of teaching performance in their first three years of teaching, the very satisfactory results could be attributed to the best practices of the DepEd in the areas of induction, performance management, and provision of teacher support. Induction programs are important in increasing retention rates, minimizing stress, and addressing immediate problems which ultimately promote teacher development leading to quality teaching (Flores, 2019). In 2020, the Philippine National Research Center for Teacher Quality (RCTQ) together with Philippine Normal University and its partner, the SiMERR National Research Centre of the University of New England Australia, worked with the DepEd in the review and enhancement of the department's Teacher Induction Program (TIP). This enhanced program has provided beginning public school teachers with a more holistic induction package, aiding them to transition, thrive, and progress in their careers anchoring on the professional teacher standards [Philippine National Research Center for Teacher Quality (RCTQ), 2021]. The strengthening of the TIP in the department has provided more relevant support and a smooth transition into the profession among beginning teachers which is supported by their increasing overall performance based on their RPMS results.

Additionally, the teaching performance of beginning teachers is described as their capacity to meet the primary outcome areas in curriculum and planning, assessment and reporting, learning environment and variety of learners, topic knowledge and methodology, and additional factors. The department's PPST-RPMS highlights these major result areas. All 37 PPST indicators are integrated into teachers' performance using the PPST-RPMS, ensuring the delivery of "quality, accessible, relevant, and liberating basic education in the country" (Department of Education, 2022). These reform initiatives in the department have not only contributed to the alignment of teacher activities, initiatives, and efforts toward achieving a common goal, but also put a premium on teachers' professional accountability to continually advance and grow in the profession and uphold standards for quality instruction.

Teacher support also matters considerably and impacts teachers' performance (Kuriloff et al., 2019). Support has been provided to teachers through the conduct of national (virtual in-service trainings – VINSET) and localized in-service trainings. The provision for school-based teacher support like the School Learning Action Cell (SLAC) has given avenues for beginning teachers to listen to the classroom experiences of the tenured teachers, share their encounters, seek advice, adopt best classroom practices, and form camaraderie. Several studies have pointed out the importance of a positive school environment and relevant school trainings to teachers' motivation and work performance (Nie et al., 2014; Ronfeldt and McQueen, 2017).

Looking into the factors influencing the performance of beginning teachers, the analysis revealed that socioeconomic status, grade level taught, and teacher training performance are significant predictors of the teaching performance of beginning teachers. This could be related to Maslow's hierarchy of needs which espouses that when physiological and safety needs are met, a person can desire self-esteem needs which include performing well in one's job (Stewart et al., 2018). This is supported by Werang (2014) and Nadeem et al. (2011) who claimed that socioeconomic status is deemed contributory to teaching performance. The results suggest that an increase in the salary of the teachers in the Department of Education can lead to better performance as Nichols (2006) in Thompson (2009) stated that teachers suffer from low work morale due to the gap between low pay and high cost of living.

The variable of grade level taught can be interpreted as the higher the level taught, the higher the teaching performance with the baseline at the pre-school level. This suggests that those at the high school level report higher scores than those at the elementary. Since high school teachers focused on the teaching of their specialization, they are expected to be the most knowledgeable in the field, thus affecting their teaching performance. This is affirmed by the study of Batuigas et al. (2022) which found out that teachers would do effectively if they have a broad knowledge of their subject or specialization.

Lastly, the grade point average is deemed an indicator of the beginning teachers' performance. The data reveal that the higher the grade point average, the higher is the teaching performance of the teacher. This implies that there is consistency in the assessment of quality in TEIs and the DepEd. This highlights the influence of pre-service training on quality teaching in the field. Mufidah (2019) concluded that one of the most important aspects of teacher education curriculum is pre-service training and Ulla (2016) added that it equips the education students to become effective and qualified educators. This supports the claim of Goe (2007) that teacher qualifications,

which comprise college grades, content expertise, and others are primary variables of teacher quality investigations. Hence, this finding further necessitates the TEIs to work closely with the DepEd in articulating and aligning a teacher knowledge base required by the latter and provided by the former.

The variables on the teacher's sex, type of TEI graduated from, degree program, length of experience, and school classification according to size have no bearing on the beginning teachers' teaching performance. This supports the notion that there are no differences between male and female teachers' efficacy (Baraiya and Baraiya, 2013) and that although TEI classification affects performance in the licensure examination, (David et al., 2018), it is not significant to teaching performance. Additionally, performing well in the first three years of teaching is not affected by the program they graduated from which may prove to be a significant input to those teaching at the high school level with a diploma in professional education instead of a bachelor's degree in education. A premium on content expertise more than pedagogical expertise could account for this result (Batuigas et al., 2022). The size of the school does not matter also and so future investigations can look at student-teacher ratios as a measure of class size (Saloviita and Pakarinen, 2021).

The results of the study place the spotlight on TEIs with a very low passing percentage in the BLEPT. It should also be noted that the respondents of this study underwent the old curriculum for teacher education as outlined in Commission on Higher Education, (2005) and the findings could provide valuable input in the implementation of the new programs. To improve BLEPT performance, studies suggest that TEIs should think about benchmarking with successful institutions, select the best faculty members to teach a course, ensure the validity and/or reliability of instructional materials and assessment tools with BLEPT competencies, strictly enforce the admission and retention policy, and regularly evaluate the effectiveness of the course audit in all areas (Visco, 2015; Dagdag et al., 2017). In addition, the recent study by Generalao et al. (2022) suggested the establishment of additional Centers of Excellence (COE) in Teacher Education in all areas of the Philippines, as it could be a promising strategy to assist other TEIs to reach the standards for teacher quality and quality tertiary education established by CHED.

Since the licensure examination is an overall assessment of teachers' readiness for the field of teaching, there is a need for institutions with a dismal performance in the licensure exam to revisit, review, assess curricular outcomes, institute curricular mapping, and alignment of competencies, enhance program delivery by qualified faculty, and implement sound assessment measures. David et al. (2018) also suggest that the policy framework that governs the licensing process for teachers needs close review and updating since the law was passed in 1994 (R.A. 7,836) through close coordination between providers, regulators, and stakeholders in the basic and higher education sectors.

5 Conclusion and recommendations

The concept of teacher quality is a vast domain of inquiry which remains to interest education researchers. Factors like teacher education preparation, teacher characteristics, licensure examinations, and teacher evaluation among others are believed to be contributory

to the characterization of teacher quality. This study sought to contribute to this ongoing investigation by exploring the quality of graduates of Philippine TEIs relative to the country's licensing mechanism and standardized field evaluation.

First, only less than half of TEI graduates pass the BLEPT for both elementary and secondary categories. On the one hand, it opens another window of inquiry focusing on the efficacy of TEIs in producing quality graduates with an emphasis on why only a third of the graduates pass the licensure examination. On the other hand, it recognizes the significance of teacher licensing. It has been revealed that the BLEPT reliably measures the indicators of quality from among the TEI graduates and that it predicts very satisfactory teaching performance in their first three years of service. Socioeconomic status, grade level taught, and GPA during their undergraduate studies are factors that also influence their teaching performance as beginning teachers.

In conclusion, the dimensions of teacher quality in the country are anchored on the alignment of the outcomes and competencies in the written and tested curricula, effective program delivery, and qualified faculty which contribute to the high probability of passing the BLEPT that ultimately results in better teaching performance of beginning teachers. The performance of graduates in the BLEPT affects performance in the first three years of teaching.

As input to teacher quality as ways forward, it is therefore recommended that the government, through its appropriate agencies, identify and address peculiarities in the curricular offerings of the elementary and secondary teacher training, aggressively pursue monitoring and mentoring programs for TEIs with a low passing percentage in the BLEPT, consider further incentivizing high-performing TEIs and high-performing teachers in the Department of Education, prioritize collaborative partnerships and engagement between and among stakeholders on what constitutes teacher quality in pre- and in-service education. The results and findings of this study can also help inform the changes and innovations in the BLEPT vis-a-vis the implementation of the new curriculum for teacher education. An analysis of the scores of those who failed the BLEPT can also be done to improve pre-service training. Evidence-based policy review on the professionalization efforts for teacher education should be conducted. Lastly, further studies to validate the claims of this study may be subjected to grounded theory research, further developing the evidence of practice through narratives coming from real people, real teachers, and real professionals.

Data availability statement

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

Ethics statement

The studies involving human participants were approved by the University Ethics Research Committee of Cebu Normal University (CNU-REC Code 1019/2021-10). The participants provided written informed consent for participation in the research.

Author contributions

MO led the conceptualization of the study along with FD and RA. They ran the final plagiarism test and grammar check before submission. MO and FD wrote the introduction, while RA and BU wrote the study's literature review. KR focused on the methods. After the data gathering, all authors took one subproblem each and wrote the discussion. All authors wrote sections of the manuscript and contributed to the manuscript revision, reading, proofreading, and approval.

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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.

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