# Entry-to-Exit Academic Variables as Predictors of Board Licensure Examination for Professional Teachers (BLEPT) Ratings

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**Abstract** This study analyzed the entry-to-exit academic profiles and licensure ratings of teacher education graduates in a state university in the Cordillera Administrative Region in three academic years from 2014 to 2016. It also explored which of these academic variables can predict the graduates' ratings in the Board Licensure Examination for Professional Teachers (BLEPT). The entry variables were high school grade point average (HSGPA), Intelligence Quotient (IQ), and general scholastic aptitude (GSA). College performance included overall and subject GPAs, while exit performance was the scores in the competency appraisal summative test (CAST). Results showed that the teacher education graduates entry-to-exit profiles range from satisfactory to very satisfactory. Their licensure ratings were within average. As to the relationship among the variables and BLEPT ratings, the exit variable (CAST scores) and entry variable GSA entered as significant predictors of ratings of the graduates from both degrees. Professional education (Prof.Ed.) and general education (Gen.Ed.) GPAs emerged separately as significant BLEPT rating predictors of the elementary education graduates. Meanwhile, the BLEPT ratings of secondary education graduates were predicted by either their Prof.Ed. GPAs, or their college GPAs, with the addition of their IQ scores. From these results, important policy recommendations are proposed.

*Keywords:* admission variables, Board Licensure Examination for Professional Teachers (BLEPT), competency appraisal summative test (CAST), grade point average predictors

#### Introduction

The graduates' employability and licensure examination performance are the main indicators of effectiveness of curricular practice and innovations in higher education institutions (HEIs) (Tan, 2016; Visco, 2015). Thus, institutions exert all efforts to increase their graduates' licensure performance.

To increase the likelihood of graduates passing the licensure examinations, many institutions employ quality assurance mechanisms. One of the strategies employed is the analysis of licensure performance of alumni, and the exploration of some factors that could determine and predict the licensure ratings of future examinees. Other strategies include implementation of a strict admission and retention policies, and the adoption of competency appraisal program and similar strategies.

For many teacher-education institutions (TEIs), the graduates' performance in BLEPT, formerly the Licensure Examination for Teachers (LET), is an indicator of high quality and standard (Gerundio & Balagtas, 2014). The metric is regarded as "an achievement test for aspiring teachers, and it is presumed that those who pass have acquired the necessary skills and knowledge required of future teachers" (p. 106).

#### Predictors of BLEPT Performance

Because of the popularity of teacher education programs in the Philippines (Tamba, 2013), and the prestige and greater government allocations on better-performing TEIs (Ladia & Nool, 2012), studies on the predictors of the BLEPT performance abound in literature. In many of these studies, various factors are correlated with licensure performance to discover the factors that

best determine or predict BLEPT ratings. These explored factors include the examinees' socio-economic variables (such as age, sex, and home and family background), traditional measures of intelligence (e.g., IQ, high school and college grade point average, and mock-board or pre-board scores), non-intellectual measures (such as learning styles) and attendance to review classes.

Several studies reveal that college GPA is a significant predictor of BLEPT ratings (Ballado, Basierto, Dalucapas, Hena, & Ubane, 2014; Chan-Rabanal, 2016; Puertos, 2015). Among the admission variables, there was significant association between HSGPA (Ferrer, Buted, & Ferrer, 2015), IQ (Hena et al., 2014), and admission test scores (Gerundio & Balagtas, 2014) on BLEPT ratings. Finally, exit performances such as pre-board or mock board scores are significant predictors as well (Gerundio & Balagtas, 2014; Montemayor, Roxas, & Panayon, 2009; Puertos, 2015, Tarun et al., 2014).

Other studies indicate that attendance to review classes appeared to favor the BLEPT examinees (Ferrer, et al., 2015; Tan, 2016; Visco; 2015), and so with the sex of science majors (Ferrer, et al., 2015). On another note, learning styles were not important determinants of BLEPT rating (Tarun et al., 2014).

There are other factors believed to predict BLEPT performance which are not explored in previous studies. These other factors are general scholastic aptitude (GSA) scores, and scores in the competency appraisal summative tests (CAST). The GSA is one of the components of the National Career Assessment Examination (NCAE) given to Filipino students. It measures the learners' aptitude on the following areas—scientific ability, reading comprehension, verbal ability, and mathematical ability. The learners' aptitude along these areas can suggest what fields they are more inclined to (Pagudpud, Palaoag & Padirayon, 2017). According to Richardson, Abraham, and Bond (2012), the GSA is one of the traditional measures of intelligence that predicts college GPA. As such, GSA can potentially predict ratings in the BLEPT, as the latter have a general education component that is

basically a measure of aptitude in the different content areas.

Complementing the idea on BLEPT prediction is the competency appraisal program (CAP), also called course audit, as a strategy that HEIs employ to increase their graduates' licensure performance. Mandated by the Commission on Higher Education (CHED), the program serves as a crash course cum review for graduating students taking up degrees with licensure examinations. The program will then culminate with a summative test that determines students' progress and mastery of competencies (Bansiong, 2015). The competency appraisal summative test (CAST) mimics the actual BLEPT items, hence, serving as a mock-board examination. A score of 75% in the CAST indicates mastery of the minimum competencies required of prospective teachers, and in the BLEPT.

Few studies investigated on the predictive potential of the CAP program on graduates' licensure examination results. One study showed that the CAP was a good predictor of graduates' performance in the Licensure Examination for Agriculturists (Dagdag, 2018), but can only predict performance in the specialization area in the BLEPT (Dagdag, Sarmiento, & Ibale, 2017). It is then worthwhile to verify such relationships between CAP and BLEPT performance on a different setting.

Thus, this study attempts to fill in the gap of knowledge on the predictive potential of GSA-NCAE and CAST scores on BLEPT performance. These procedures will inform policy makers as they craft more stringent admission and retention policies. Also, it will inform stakeholders on whether or not to continue the CAP, and to propose measures that will further improve the implementation of the program. This study will likewise provide information as to whether the influence of students' academic performance from entry, to college, and exit, are consistent across time in predicting their BLEPT ratings.

# **Purposes of the Research**

Informed by the aforementioned gaps, this study determined the discipline-and time-specific strength and consistency of association among the teacher education graduates' admission data, college, and exit performances, and their BLEPT ratings. Specifically, it sought to accomplish the following objectives:

- 1. To describe the profile of the teacher education graduates in terms of their entry (admission data), college and subject GPAs, and exit performances (CASTS).
- 2. To profile the teacher education graduates in terms of their ratings in the Board Licensure Examination for Professional Teachers (BLEPT).
- 3. To determine the relationships among their entry, college, and exit academic performances and BLEPT ratings.

# Methodology

## Research Design

This study employed descriptive-conditional-correlation and methods to profile the entry, through college and exit performance of teacher education graduates, and to determine the relationships among these variables and their BLEPT ratings.

# **Locale of the Study**

The case institution is the main campus of the state-run University in the Cordillera Administrative Region. The institutions' College of Teacher Education offers two teacher education programs (Bachelor in Secondary Education [BSE], and Bachelor in Elementary Education [BEE]). There are nine specializations

under the BSE program (Biological Sciences [Bio.Sci.], English [Eng.], Filipino [Fil.], Mathematics [Math], Physical Education, Health, Music, and Arts [PEHMA], Physical Sciences [Phy. Sci.], Social Studies [Social Stud., Technology and Livelihood Education [TLE], and Values Education [Values Ed.]). The BEE program offers two strands: General Elementary Education (GEE) and Early Childhood Education (ECED).

## **Participants**

This study involved the teacher education graduates of three academic years (2013-2014, 2014-2015, and 2015-2016) who took the BLEPT immediately after graduation. However, in compliance with the data-privacy act, only the graduates who willingly expressed their consent were included in this analysis. Hence, 314 of the 472 graduates (66.53%) of BEE, and 438 out of the 646 (71.10%) of BSE were subjected to this analysis.

The BEE-GEE group (33.51%) comprised most of the samples, followed by the BSE-English group (12.10%). Samples who are graduates of BSE-Values Ed. (2.26%) were the fewest.

#### **Data Collection**

The researcher wrote to the university vice president for academic affairs a request letter, seeking permission for access to the admission and college academic records of the participants who earlier consented to take part in this study. Upon approval, the researcher presented the request letter to the director of the institution's office of the registrar. The researcher personally gathered the data from the participants' academic records. As for the exit academic performance, the CAP facilitators provided the CAST scores of the participants.

The entry variables were the graduates' high school grade point average (HSGPA), intelligence quotient (IQ), and general scholastic aptitude (GSA). The GSA is reflected in the graduates' report of scores in the NCAE.

The graduates' college grade point average (CGPA) and their individual GPAs in general education (Gen.Ed.), professional education, (Prof.Ed.), and specialization (Sp.GPA) indicated their college academic performance. Since the case institution follows the 5-point scheme in reporting GPAs, with 1.00 being excellent and 5.00 being poor, the author transformed the GPAs so that highest marks would indicate higher academic performance, and vice versa. This procedure ensured that GPAs were consistent with the other variables explored. Hence, all GPAs were subtracted from six, adopting the procedure of Madinno (2018). The subjects' scores in the competency appraisal summative test (CAST) indicated their exit performance. This variable is henceforth called competency appraisal summative test scores (CASTS).

#### **Data Analysis**

This study used means to report the entry to exit academic performance of the teacher education graduates. It also utilized the stepwise multiple regression analysis to investigate the relationships among the entry to exit academic variables and BLEPT performance. The author analyzed the data using the Statistical Program for the Social Sciences version 20 (SPSS 20).

#### Results and Discussion

This section presents the admission data, college academic performance, and competency appraisal summative tests scores of the subjects. It also presents the strength and consistency of association among the entry to exit academic performances.

# Entry to Exit Profiles of the Subjects in terms of Entry Variables

The performance of the graduates along the admission variables are high as they are above the minimum points required for admission in college (Figure 1). The mean HSGPA (86.80%) is higher than the minimum entry requirement set for both degrees, which is 80%. The mean IQ (107) and GSA scores (81.37) are indicative of average intelligences and aptitudes. These are indications that the students entering teacher education possess the ability and aptitude to cope with the academic demands required of teacher trainees.

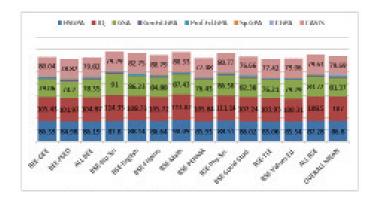


Figure 1. Entry to exit profiles of the graduates compared according to discipline.

Comparing the scores along the entry variables in the two programs, the BSE group had higher marks in all the three variables. Such difference can be explained by the lower score cut-off requirements for HSGPA and ATS in the BEE group. As per college policy, the admission cut - off scores in the ATS is 90 for BEE, and 95 for BSE.

Analysis of the graduates' admission data reveal that those going to BSE-Bio.Sci. (97.72), BSE-Math (96.85), BSE-Phy.Sci. (95.34) and BSE-English (94.37) are relatively better academically. Those from BSE-PEHMA (89.40), BSE-TLE

(88.40), BSE-Values Ed. (88.38), and BEE-PSED (87.05) bring lower entry scores. Incidentally, this trend along entry variables (i.e., the satisfactory to very satisfactory admission variables, and the higher entry data among those in the fields of science, math, and English), is consistent with the findings of Gerundio and Balagtas (2014). This observation seems to suggest that in choosing a specialization, prospective high school teachers consider the cognitive demands required in some fields.

#### College Academic Performance

The overall mean CGPA of the samples is satisfactory (2.05). The mean CGPA is higher among the BSE (2.03) group. As a whole, the samples had highest mean grades in Prof.Ed. (1.93), and lowest in Gen.Ed. (2.17). This trend of performance in the three areas is reflected in the BSE subgroup. For BEE, the samples had highest grades in Prof.Ed., but lowest in specialization. Gerundio and Balagtas (2014), and Arenillo and Arenillo (2009) also reported that their respective graduates performed best in Prof. Ed. This high GPAs in Prof.Ed. could be explained by the more focused nature of the area, compared to the Gen.Ed., where there are greater variations in the students' grades. Also, according to Corpuz and Quinon (2009), the approach in the teaching of most Prof.Ed. courses is generally situational, which requires a more flexible grading system.

When performances are compared according to specialization, the CGPAs of the samples from the languages, sciences, math, and values education were higher than the group mean. In contrast, those from BEE, BSE-PEHMA, BSE-Soc. Stud., and BSE-TLE groups were relatively lower.

The two BEE subgroups performed differently along the three areas. The GEE had lowest grades in Sp., but this is the area where the PSED subgroup was strongest. Such difference can be explained by the nature of courses in the two strands along the Sp. area. The GEE subgroup have to take 21 units of math and

science in their Sp. These difficult subjects are not parts of the PSED curriculum.

The graduates of BSE - Math, Sciences, and English had higher grades in Gen.Ed. and in Prof.Ed., but they struggled in Sp., which appears to be the strength of PEHMA, TLE, and Values Ed. subgroups. Interestingly, these observations are very similar with the findings of Gerundio and Balagtas (2014) who noted the higher Prof.Ed and Gen.Ed. GPAs of the science majors and the lowest GPA among the PE and Home Economics majors. The high Gen.Ed. and Prof.Ed. GPAs among the math, science, and english majors can be attributed to their higher admission data, which might imply their possession of the basic competencies necessary to understand the two fields (Corpuz & Quinon, 2009). On the other hand, the higher specialization GPAs among the Home Economics majors could be due to the practical and hands-on nature of their core courses. In most cases, a flexible system of grading is employed for practical works (Gronlund & Waugh, 2009).

### Exit Performance

The overall exit performance of the graduates is 79.69, which is higher than the cut-off score of 75 (Figure 2). This result



Figure 2. Three-year BLEPT ratings of the graduates according to discipline.

could indicate that the graduates have acquired the minimum competency required of them in their future profession. As such, they are mentally prepared to take and potentially pass the BLEPT. Moreover, the two groups also performed very similarly in their exit performance.

Among the BSE group, those from the fields of languages, math, and physical sciences had higher CAST scores. However, the results could be influenced by the content and psychometric properties of the summative test given in the various fields. In the analysis of Bansiong (2015), many of the items in the teacher-prepared CAST need to be improved or revised.

#### **BLEPT Performance of the Graduates**

The average BLEPT general rating (GR) of the graduates is fair (78.24%), but higher than the passing score of 75% (Figure 2). The mean GR of the BSE graduates is slightly higher than that of the BEE. Interestingly, this trend opposes that of their GPAs along the three areas. While they had highest GPA in Prof.Ed., they scored lowest in this area in the BLEPT. It appears that the graduates' grades did not translate to their ratings. The BEE graduates could have become overly confident in the Prof.Ed., which could have affected their preparation in the BLEPT. Such trend of result contradicts the result of Puertos (2015), who noted that her samples rated highest in Prof.Ed. but lowest in Gen.Ed. However, in Puertos (2015) study, only a single examination was used in the analysis, which could explain the difference. Had she considered more examinations, she could have arrived at a different result.

The graduates of the two programs performed differently in Prof.Ed. and Gen.Ed. The BEE graduates scored slightly higher in Prof.Ed., but the BSE group scored lowest in Prof. Ed. and highest in Gen.Ed. These results are consistent with the five-year trend in the licensure performance of BEE graduates of the same institution from 2010-2014. However, the trend was

reversed among the BSE graduates (Botengan, Bansiong, & Kudan, 2018).

# Relationship among Entry to Exit Performances and BLEPT Ratings of BEE Graduates

To find out whether or not the relationships are consistent with time and degree, the author conducted a separate analysis. For the 2014 graduates, only the college and exit performances of the samples were available for analysis. For the 2015 graduates, the three admission variables, but not CASTS, were included. Finally, in the 2016 BLEPT, this study included all entry to exit variables, except GSA. For the three examination years, different set of variables came out as significant predictors of the BEE graduates' BLEPT ratings (Table 1). Prof.Ed.GPA and Gen.Ed.GPA first emerged as significant predictors during the 2014 and 2016 examinations, respectively. In the 2014 BLEPT-Elementary, Prof.Ed.GPA contributed 33.90% of the variance in the BLEPT-Elementary ratings. But when combined with CAST, the total contribution rose to 39.40%

As for the 2016 BLEPT-Elementary, Gen.Ed.GPA accounted for 31.50% of the variance in the graduates' BEPT ratings. However, with the addition of CASTS, their total contributions increased to 35.30%.

Table 1. Regression analysis for determining predictors of BLEPT performance of the BEE graduates from 2014 to 2016

Model	R	$\mathbb{R}^2$	Adjusted	SE	F	Sig.	
			$\mathbb{R}^2$				
2014 Graduates							
1	.583ª	.339	.334	4.070	65.252	.000ª	
2	.628b	.394	.384	3.913	40.959	$.000^{b}$	

a. Predictors: (Constant), Prof.Ed.GPA

b. Predictors: (Constant), Prof.Ed.GPA, CASTS

Y = 7.255 + 9.692(Prof.Ed.GPA) + 0.404(CASTS)

2015 Graduates								
Model	R	$\mathbb{R}^2$	Adjusted	SE	F	Sig.		
			$\mathbb{R}^2$					
1	.635ª	.403	.397	2.9399632	71.435	.000ª		
2	.725 <sup>b</sup>	.526	.517	2.6313377	58.249	.000b		

a. Predictors: (Constant), GSA

b. Predictors: (Constant), GSA, Gen.Ed.GPA

Y = 41.975 + 0.118(GSA) + 6.580(Gen.Ed.GPA)

2016 Graduates

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	SE	F	Sig.
1	.561ª	.315	.305	3.2005622	34.425	.000ª
2	.594b	.353	.336	3.1300136	20.207	.000b

a. Predictors: (Constant), Gen.Ed.GPA

b. Predictors: (Constant), Gen.Ed.GPA, CASTS

Y = 35.31 + 8.06 (Gen.Ed.GPA) + 0.153(CASTS)

Finally, during the 2015 BLEPT, the graduates' GSA scores was the first to emerge, accounting to 40.30% of the variance in their BLEPT ratings. When combined with Gen.Ed. GPA, however, their contribution to the variance on the graduates' BLEPT ratings rose to 52.60.

It appeared that CASTS and Gen.Ed.GPA were the more consistent predictors of BLEPT-Elementary ratings. CASTS emerged as a significant BLEPT predictor in all the years it was entered in the regression analysis. Gen.Ed.GPA, meanwhile, did not come out as a significant predictor in just a single year (2014). Such result underscores the importance of mastering the the Gen.Ed. and Prof.Ed. competencies, and being serious in the competency appraisal program, as BLEPT ratings are attributed best from the performances in these variables.

Because of the differential ability of the academic variables to predict BLEPT performance in each of the examination years, different regression equations were derived (Table 1). This spells some difficulty in predicting BLEPT performance based on the graduates' academic variables.

As an illustration of the derived formula during the 2014 BLEPT-Elementary, a BEE graduate with a mean Prof.Ed. GPA of 2.05 (transformed to 3.95), and a CASTS of 88, then his/her BLEPT rating will be predicted to be 81.09%. Also, a graduate could have failed the BLEPT if his/her mean Prof.Ed.GPA was 2.50 and his/her CASTS was 80.

To illustrate the derived regression equation during the 2015 BLEPT, a graduate will obtain a 80.56 BLEPT rating if his/her GSA is 90, and his/her Gen.Ed.GPA is 1.75. Finally, illustrating the 2016 regression equation, if a BEE graduate's Gen.Ed.GPA is 2.00 and his/her CASTS is 85, then his/her predicted BLEPT rating is 80.56%.

The ability of the GPAs in the Gen.Ed. and Prof.Ed. to predict BLEPT performance, especially among the BEE graduates is in place as the content of BLEPT-Elementary comes only from Gen.Ed. (40%) and Prof.Ed. (60%). This could explain why the specific GPAs along these areas are significant predictors of BLEPT Elementary ratings.

The ability of Prof.Ed.GPA to predict elementary BLEPT ratings is consistent with Gerundio and Balagtas (2014), but contradictory to Chan-Rabanal (2016). However, Chan-Rabanal (2016) reported on the positive correlation between Gen.Ed.GPA and BLEPT ratings, but Gen.Ed.GPA did not come out as significant predictor (Gerundio & Balagtas, 2014).

The predictive potential of exit academic performances such as CASTS on BLEPT performance is supported by some studies (Gerundio & Balagtas, 2014; Montemayor, et al., 2009; Puertos, 2015; Tarun et al., 2014). For instance, Puertos (2015) reported highly positive correlation between pre-board scores and BLEPT performance. Pre-board exams (Gerundio & Balagtas, 2014) and mock-board examinations (Montemayor, et al., 2009; Tarun, et al., 2014) were found as signicant predictors of BLEPT ratings.

Finally, the predictive power of the GSA scores can be explained by the fact that GSA measures knowledge in science, math, verbal ability, and reading comprehension. Such content areas are similar to the general education component of the BLEPT, which accounts for 40% of the content of the licensure examination. Apparently, a high general scholastic aptitude translated to a high Gen.Ed. score, which ultimately affected the overall BLEPT rating. It is unfortunate, though, that GSA data is only available among the 2015 graduates. Even then, it seems logical to consider GSA scores as one of the criteria in admitting prospective entrants in elementary teacher education. The problem, however, is that the NCAE is not regularly administered, and not all secondary schools are mandated to take this standardized examination.

# Relationship among Entry to Exit Performances and BLEPT Ratings of the BSE Graduates

This study used the same variables entered as predictors of the BEE graduates' BLEPT ratings for the BSE graduates. Consequently, the entry to exit academic variables that significantly predicted the BSE graduates' BLEPT ratings were different with those variables that predicted the BLEPT performance of the BEE participants. CASTS (R² = .467) was the sole significant predictor of the BSE graduates' 2014 BLEPT rating. It also emerged as one of the predictors during the 2016 BLEPT. Unfortunately, CASTS data was not available among the 2015 graduates, limiting the conclusion on its consistency as a predictor of BLEPT ratings. The graduates' college academic performance did not positively associate with the independent variable.

During the 2015 BLEPT, CGPA, IQ, and GSA scores entered as significant predictors. The graduates' CGPA alone accounted for 36.7% of the variance in their BLEPT ratings. Together, these variables contributed 45.6% of the variance in the BSE graduates licensure ratings.

Together with CASTS, Prof.Ed.GPA emerged as significant predictor of the 2016 BLEPT. Prof.Ed.GPA alone accounted for the highest variance in the BLEPT ratings at 45.50%. When combined with CASTS, the contribution of Prof.Ed.GPA on the BLEPT rating variance is increased to 50.60%. Other factors would explain the remaining variance.

Because of the difference in the set of predictors emerging in the three examinations, three different equations emerged. The next section illustrates each of the derived regression equations from the three examination years.

Table 2. Regression analysis for determining predictors of BLEPT performance of the BSE graduates from 2014 to 2016

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	SE	F	Sig.		
2014 Graduates								
1	.684ª	.467	.464	3.0312925	128.955	.000ª		

a. Predictor: (Constant), CASTS

Y = 16.533 + 0.786(CASTS)

2015	Graduates
2015	Graduates

Model	R	$\mathbb{R}^2$	Adjusted	SE	F	Sig.
			$\mathbb{R}^2$			
1	.606ª	.367	.362	2.5659020	80.532	.000ª
2	.660 <sup>b</sup>	.436	.428	2.4305998	53.327	$.000^{\rm b}$
3	.675°	.456	.444	2.3957843	38.272	$.000^{\circ}$

a. Predictors: (Constant), CGPA

2016 Graduates

Model	R	R <sup>2</sup>	Adjusted	SE	F	Sig.
			$\mathbb{R}^2$			
1	.675ª	.455	.451	3.1764352	121.990	.000ª
2	.711 <sup>b</sup>	.506	.499	3.0348877	74.286	$.000^{b}$

a. Predictors: (Constant), Prof.Ed.GPA

b. Predictors: (Constant), CGPA, IQ

c. Predictors: (Constant), CGPA, IQ, GSA

Y = 35.098 + 8.151(CGPA) + 0.069(IQ) + 0.048(GSA)

b. Predictors: (Constant), Prof.Ed.GPA, CASTS

Y = 2.375 + 11.079 (Prof.Ed.GPA) + 0.382(CASTS)

From the BLEPT 2014 equation, a BSE graduates' BLEPT rating could be predicted as 83.34% if his/her CASTS is 85. Similarly, if a student wants to obtain a 95% rating in the BLEPT, his/her CAST must be at least 99.83. With the absence of CASTS data, three academic variables predicted the BLEPT 2015 ratings. From the BLEPT 2015 formula shown in Table 2, the predicted BLEPT rating of a BSE graduate is 78.92% if his/her CGPA, IQ, and GSA is 2.00, 100, and 90, respectively. As for the 2016 BLEPT regression equation, a BSE graduate can pass the licensure examination if his/her CASTS is at least 80, and his/her Prof.Ed.GPA is at least 2.20.

The ability of the CASTS to predict the BLEPT ratings of the BSE graduates is similar with the BEE graduates, and is consistent with research literature. The predictive potential of exit variables such as pre-board or mock board examination scores on prospective secondary teachers' BLEPT ratings finds support in Puertos (2015), Gerundio and Balagtas (2014), and Tarun and colleagues (2014). These results suggest the continued offering of competency appraisal program to graduating education students. Such programs must then culminate with a well-prepared summative test that acts as pre-board or mock examinations to graduating students. This way, the graduates can be assured of an increased chance of passing the examination.

Of the admission variables, IQ and GSA scores came out as significant predictors of the BSE graduates' ratings during the 2015 BLEPT. While the BLEPT predictive value of GSA was consistent with the BEE cohort, IQ scores only emerged among the BSE group. In contrasts, HSGPA did not significantly predict BLEPT ratings. This could be explained by differences in grading systems among feeder schools, and that the grading systems in the basic education and tertiary education are different.

Of the college academic performances, CGPA and Prof. Ed.GPA were the significant predictors of the BLEPT ratings of the BSE graduates. The ability of the Prof.Ed.GPA (Gerundio & Balagtas (2014) and CGPA (Puertos, 2015) to predict secondary

education graduates' BLEPT rating is supported in teacher education research literature. The result can be explained by the nature of the BLEPT, where 40% of the items are obtained from professional education courses. As for CGPA, it is supposed to be a reflection of the graduates' overall achievement across general education, professional education, and fields of specialization. As such, these overall academic performances are able to provide a combined, accumulated effect on the BLEPT.

The subjects' Gen.Ed. GPAs and Sp. GPAs did not significantly predict the BSE graduates' BLEPT ratings. The inability of the two GPAs to predict BLEPT ratings could be explained by the smaller contribution of general education in the components of BLEPT secondary, and by the variations in the content on the various fields of specialization. These results contradict that of Tarun and colleagues (2014), who reported that GPAs in Gen.Ed. and major core were significant predictors of the BLEPT performance of both BEE and BSE graduates. Also, these results were inconsistent with that of Castillo (2011), who disclosed that the Gen.Ed.GPAs were the best determinants of the BLEPT ratings of their BSE alumni.

In the above results, the difference in the set of significant predictors of BLEPT rating across examination years implies the difficulty in coming up with a single regression equation that will predict such ratings. However, some patterns emerged from the analysis. For example, the academic predictors which are in written form and/or standardized, such as GSA, IQ, and CASTS, have emerged as predictors. Such trend of results can affect the BLEPT ratings of those from the more practical, and hands-on fields, such as TLE and PEHMA.

Also, the variables most similar to the content of the BLEPT, such as Gen.Ed. and Prof.Ed. GPAs of the BEE group, have emerged as significant predictors. In the case of BSE group, a different set of GPA predictors emerged, which can be attributed to the difference in the content and percent allocations of the components in the BLEPT secondary.

#### **Conclusion and Recommendations**

This study looked into the academic performances of teacher education graduates from entry to exit, and the BLEPT performance of teacher education graduates in a State University. These academic performances were then correlated with BLEPT ratings to find out which of these entry variables, college, and exit performances can significantly predict their ratings in the BLEPT. In turn, the results of the study may be considered for the crafting of a more strengthened admission and retention policy, and to improve instruction and review strategies.

The graduates' entry variables are average and within the level of proficient, indicating that the admission policy as to cutoff scores, is religiously followed. Moreover, the results indicate
that the entrants possessed the prerequisite knowledge, skills, and
mental aptitudes they need to succeed in the program. Similarly,
their college academic and exit performances are both satisfactory,
which could reflect their acquisition of the competencies they
need to hurdle the BLEPT and succeed in teaching.

The graduates performed satisfactorily in the BLEPT, scoring higher than the cut-off and passing scores. Those from the fields of science, math, and languages posted better performances than those from the more "hands-on" and "practical fields". Such findings could imply that the BLEPT is favoring those who are in the more "academic" areas than those from the "practical" domains. Moreover, the graduates performed well in Gen.Ed., but not as well in Prof.Ed, which might mean that Prof.Ed. is indeed more difficult than Gen.Ed., or that the graduates have not prepared equally in the two areas.

Across degree and examination years, no fixed set of academic variables came out as valid predictors of the education graduates' BLEPT ratings. As such, this paper did not come up with a single prediction formula for BLEPT ratings. This result renders the prediction of BLEPT performance difficult

for policy researchers. Among the BEE group, BLEPT ratings were predicted by their performances in the academic variables that best mirror the content of the BLEPT, *i.e.*, Prof.Ed, and Gen.Ed.GPAs. Moreover, the only admission variable that significantly predicted the BLEPT ratings of the BEE graduates is their general scholastic aptitude. Finally, CAST appeared as a consistent predictor of the BEE graduates' BLEPT ratings.

As for the BSE graduates' BLEPT ratings, CAST came out as a consistent predictor. Other predictors, albeit inconsistently, are the graduates' college and Prof.Ed. GPAs. Also, as to the entry variables, IQ emerged as a determinant of BLEPT rating in one of three examinations, while GSA was a determinant in the only examination where it was used as a predictor. Such results bear important implications on the case college's admission and retention policies, as well as on the implementation of its programs and projects.

One limitation of this study is that the academic variables explored as predictors were not similar in the three examination years. As such, the result of the regression analysis could have been affected. It would have been better if the variables explored were similar from the beginning. Other interested researchers are therefore enjoined to consider these limitations.

Based on the results, the researchers forward some recommendations. In order for the case institution to maintain its satisfactory performance in the BLEPT, it should consider strengthening its competency appraisal program. implementation of such program must be continuously monitored and periodically evaluated so that it would serve its purpose of preparing the graduates for the licensure examination. The summative tests provided at the end of the program must also be revised as necessary in order to improve its content and predictive validities. Moreover, faculty members should teach towards mastery of the competencies needed in the BLEPT, and students may strive the master the competencies, especially in

both Prof.Ed. and Gen.Ed. In addition, the admission procedures as to IQ scores must be strictly followed. The case college may also consider using the GSA scores of prospective teachers as one of the basis of selection, admission, or placement. Researchers, policymakers and stakeholders might consider conducting discipline-specific analysis on the potential predictors of BLEPT ratings in order to address the needs of the specific fields. Finally, other researchers may also consider validating the result of this study on the predictive value of GSA on BLEPT.

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#### References

- Arenillo, S.A., & Arenillo, M.T. (2009). Pre-service education and performances in teacher licensure examination among graduates of mindoro state college of agriculture and technology. *JPAIR Multidisciplinary Journal*, 2, 132-140.
- Bansiong, A.J. (2015). Selected psychometric characteristics of the course audit summative tests given to secondary education graduates. *CTE Research Journal*, (7), 12-22.
- Botengan, D.F., Bansiong, A.J., & Kudan, R.B. (2018). Five-year performance of the teacher education graduates in the Licensure Examination for Teachers. *Mountain Journal of Science and Interdisciplinary Research*, 7(1), 49-62.
- Castillo, T.R. (2011). Determinants of the success of the bachelor of secondary education graduates of Bataan Peninsula State University in the Licensure Examination for Teachers. Retrieved from www.bpsu.edu.ph.
- Chan-Rabanal, G. (2016). Academic achievement and LET performance of the Bachelor of elementary education graduates, University of Northern Philippines. *International Journal of Scientific and Research Publications*, 6(6), 455-461.

- Corpuz, B.B., & Quinon, N.V. (2009). Comparative Study of the LET and teaching performance of education and non-education graduates in the Philippines. *PAFTE Journal*, *15*(*I*), 1-13.
- Dagdag, J. (2018). Predictors of performance in the licensure examination for agriculturists: basis for a proposed plan of action. *Asia Pacific Journal of Multidisciplinary Research*, 6(2), 113-120.
- Dagdag, J. D., Sarmiento, C. S., & Ibale, J. C. (2017). Examining the factors of Licensure Examination for Teachers performance for program strategy enhancement. *Asia Pacific Journal of Multidisciplinary Research*, 5(4).
- Ferrer, R.C., Buted, D.R., & Ferrer, I.M.C. (2015). Performance of BSED science graduates in Licensure Examination for Teachers: Basis for a regression model. *Asia-Pacific Journal of Multidisciplinary Research*, 3(5), 1-6.
- Gerundio, M.G., & Balagtas, M.U. (2014). Exploring formula for success in teachers' Licensure Examination in the Philippines. *Educational Measurement and Evaluation Review*, (5), 104-117.
- Gronlund, N. E., & Waugh, C.K. (2009). *Assessment of student achievement*. (9<sup>th</sup> Ed.). New Jersey: Pearson. pp. 445.
- Hena, R.H., Ballado, R.S., Dalucapas, M.C., Ubane, S.C., & Basierto, R.C. (2014). Variates of the performance of teacher education graduates in the licensure examination for teachers (LET). *International Journal of Interdisciplinary Research and Innovations*, 2(4), 157-163.
- Ladia, M.A.P. & Nool, N. R. (2012). Analysis of the performance in the Licensure Examination for Teachers of state universities and colleges in region III. Retrieved from https://www.academia.edu/7963956/Performance\_in\_the\_Licensure\_Examination\_for teachers\_of\_State\_Universities\_and\_Colleges\_in\_Region\_III.

- Montemayor, E.S., Roxas, C.C., & Panayon, V.L. (2009). Mock examination: Its influence on performance in the licensure examination for teachers. *University of the Cordilleras Research Journal* (3), 1-11.
- Pagudpud, M.V., Palaoag, T.T., & Padirayon, L.M. (2017). Mining the national career assessment examination result using clustering algorithm. *IOP Conf. Series: Materials Science and Engineering 325* 012001 doi:10.1088/1757-899X/325/1/012001.
- Puertos, J.D. (2015). Performance on the Licensure Exam for Teachers among Liceo de Cagayan University education graduates. *Liceo Journal of Higher Education Research*, 11(1): 1-13.
- Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin*, 138, 353-387.
- Tamba, N. (2013). Most popular college courses in the Philippines, 2010. Retrieved from http://universitiescollegesphilippines.blogspot.com/2013/03/most-popular-courses-philippines.html. Universities Colleges Philippines
- Tan, C.S. (2016). *Impact of review on the performance of graduates in the Licensure Examination for Teachers, 2012-2014*. E-proceedings of the 4<sup>th</sup> Global Summit on Education. Retrieved from http://worldconferences.net/home.
- Tarun, I.M., Gerardo, B.D., & Tanguilig, B.T. (2014). Generating licensure examination performance models using PART and JRIp classifiers: A data mining application in education. *International Journal of Computer and Communication Engineering*, 3(3): 202-207.

Visco, D.A. (2015). Determinants of performance in the Licensure for Teachers of Abra State Institute of Sciences and Technology. *International Journal of Research in Management & Business Studies*, 2 (1) ISSN: 2348-6503 (Online) ISSN: 2348-893X (Print) Retrieved from http://ijrmbs.com/vol2issue1/dionisio.pdf.