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# Teacher Education Graduates' Performance as Predictor of Licensure Examination for Teachers Results

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#### **ABSTRACT**

High percentage of passers in the Licensure Examination for Teachers (LET) indicates the competence of the Teacher Education Program (TEP) graduates of State Colleges and Universities. Licensure tests are usually one of the several criteria necessary to qualify an entry into the teaching profession. This government examination is designed to identify professionals who have the desired level of competency to teach basic education. The study determined the extent of implementation of the TEP of Carlos Hilado Memorial State College (CHMSC) in relation to the academic achievement and performance of graduates in the LET. The descriptive correlational method specifically documentary analysis, with the mean, Pearson Product Moment (PPM) and ANOVA were used in this study. Findings revealed that the Teacher Education Program of CHMSC was

well implemented. This concludes that the Bachelor in Elementary Education (BEED) group showed greater confidence in academics, indicating the need to enhance the level of academic preparation of the BSED group underscoring general education and major subjects during pre-service years. It further revealed that a significant relationship existed between the LET performance and the academic achievement of the BEED graduates. This means that the teacher graduates' academic performance is a significant predictor in the LET.

*Keywords* - Education, academic achievement, licensure examination, Talisay City, Philippines

### **INTRODUCTION**

Teacher Education Programs (TEPs) play a crucial role in the preparation of globally competitive teachers empowered with exemplary professional and personal characteristics, equipped with knowledge, skills and attitude necessary in transferring learning to the students.

There is no perfect ingredient or one best way to produce instant well-balanced teacher educators during the pre-service years (Usher & Pajares, 2008). With this, an analysis of the Teacher Education Program, pre-service teachers' knowledge, creativity, flexibility and ability to transfer their learning to practical teaching experiences has to be given utmost importance.

The focus of this investigation is to determine the extent of implementation of the Teacher Education Program of CHMSC in relation to the academic achievement and performance of graduates in the Licensure Examination for Teachers. Subjects of the study were the BEED and BSED graduates from SY 2011 to 2013. Respondents of the study were the regular faculty of instruction the College of Education and the pre-service teachers of SY 2012- 2013.

Like most Teacher Education Programs, Carlos Hilado Memorial State College offers Bachelor of Secondary Education (BSED) and Bachelor in Elementary Education (BEED). The BSED specializes English, Mathematics, Physical Science, Technology and Livelihood Education (TLE), and Music, Arts, Physical Education, and Health(MAPEH), while the BEED offers specialization in General Education, Early Childhood, Home Economics, and Special Education. Students in these programs undergo four years of academic preparation in teaching consisting of general and professional education as well as major courses that provide the needed concentration in a particular discipline.

The four-year academic preparations of teacher education students are capped with a clinical experience known as pre-service teaching – the most suitable vehicle for preparing pre-service teachers for the world of work. During this time, students are exposed to practical field experiences, practice teaching and real classroom interactions under the close supervision of a competent and seasoned professional teacher inside the classroom. The students who have completed academic preparations and pre-service teaching are then the finished products of many factors that have strongly molded them into better teachers. They learn to appraise themselves both socially and academically in terms of attitude towards other people.

Academic preparations and pre-service teaching will be gauged by performance statistics from the Licensure Examination for Teachers. The Professionalization of Teachers requires teacher education be of the highest quality standards and strong enough to respond to the needs of a fast changing society (PD N0.1006). The policy goal was promulgated to ensure that all school children have access to skillful teachers who are products of high quality teacher education program.

As a Teacher Education Institution, CHMSC believes that the educational system today should respond to the needs of a fast changing society through introducing a system of effective teaching strategies to improve the teaching-learning process. Thus, it strives to commit itself to quality education and academic excellence through improved standards and policies to be able to achieve high performance in the licensure examination.

At present, the College of Education of CHMSC enjoys the prestige of being awarded the level 3 accredited status by the Accrediting Agency of Chartered Colleges and Universities of the Philippines (AACCUP). The BEED Program was awarded Second Top Performing School in the National Level, and likewise, one of its graduates was one of the top 10 in the LET. To find out what else could be done to improve the program, and produce more quality teacher graduates, the study was conducted to assess the performance in the licensure examination for the Teacher Education Program graduates of CHMSC.

#### **FRAMEWORK**

The study on the extent of implementation of the Teacher Education Program of Carlos Hilado Memorial State College (CHMSC), Academic Achievement and Performance of Graduates in the Licensure Examination for Teachers was anchored on the self- efficacy theory popularized by Albert Bandura. In this

theory he stated that one can successfully engage in specific academic tasks and achieve a passing grade and meet the requirements to be evaluated at a level that is specific to the outcome domain (Bandura, 1986). Thus, in the academic setting in the College of Education of CHMSC, students' confidence in academics will be evaluated if these academic tasks will be carried out in preparation for similar tasks like the licensure examination. To find out if the academic achievement of the graduates contributed to their performance in the licensure examination, their academic grades in the components of general education, professional education and major subjects were analyzed. To find out the factors that influenced their performance in academics, the implementation of the teacher education program was assessed by the faculty members of the College of Education and the preservice teachers who are currently enrolled in SY 2012-2013. The assessment of the program implementation was correlated to the academic achievement of the graduates and performance in the licensure examinations.

Presidential Decree No. 1006 states "No one can be appointed to a regular teaching profession unless he passed the LET". This decree places the teacher on the same level with other professionals because of the many responsibilities expected of him.

Certification examination has been conducted to provide licensing graduates of specific courses for the professional practice. Licensing is a way of assuring that practitioners meet the minimum qualifications required for the proper practice in their area of training. Such test adequately assesses the particular domain that it intends to measure, its scores should be significantly related to other indices of the individual's past training.

### **OBJECTIVES OF THE STUDY**

The study aimed to determine the extent of implementation of the Teacher Education Program of CHMSC in terms of instructional goals and objectives, curriculum, teaching methodology and instructional resources. It also aimed to find out the significant difference between the level of program implementation and academic achievement and the significant relationship between the different components in academics and LET performance of the BEED and BSED graduates.

#### **METHODOLOGY**

The researcher employed the descriptive-correlational method as it deals with conditions that exist, practices that prevails, and beliefs or points of view that are held. To find the level of the performance of the BEED and BSED graduates in the licensure examination, it was interpreted in the scale as follows: 100 - 80.2 "Very High"; 80.1 -60.4 "High"; 60.3 -41.6 "Average"; 40.5 -20.8 "Low" and 20.7 and below "Very Low. It was hypothesized that the academic achievement of the BEED and BSED LET takers is significantly related to their performance in LET.

The specific technique used was a documentary analysis since investigation made used of the data on the LET performance of graduates that were obtained from the Professional Regulation Commission in Manila. The data on the graduates' academic achievements were sourced from the Registrar's Office where their grades since first year until fourth year were tallied and tabulated for statistical treatment.

The study was conducted at the CHMSC, Main Campus located at Mabini Street, Talisay City, Negros Occidental, Philippines that offers BEED and BSED programs. The subjects of the study composed the 788 BEED and BSED student graduates from 2011 to 2013. The regular faculty members of the Teacher Education Program and the pre-service teachers of SY 2012-2013 were the respondents of the study. The study made use of a researcher-made questionnaire that has been validated by the panel of experts under the Teacher Education Program. The instrument is designed to determine the extent of implementation of the Teacher Education Program in the areas of instructional goals and objectives, curriculum, teaching methodology and instructional resources. During the data gathering procedure, the researchers sought permission to conduct this study from the College President. When approved, the questionnaires were forwarded to the Dean of the College of Education and were distributed to the regular faculty of instruction of the department and likewise to the pre-service teachers.

The questionnaire is a checklist type with five possible responses where the respondents are to rate the extent of implementation of the Teacher Education Program. The researcher used the following tools in analyzing and interpreting the data collected. Average weighted mean was used to determine the level of implementation of the Teacher Education Program and the graduates' academic performance. One-Way Analysis of Variance (ANOVA) and Pearson Product Moment Coefficient of Correlation (PPM) were utilized in the study.

### **RESULTS AND DISCUSSION**

In determining the extent of implementation of the Program, the faculty of instruction and the pre-service teachers assessed the provision of instructional services offered by the Teacher Education Program.

Table 1. Extent of Implementation of the Teacher Education Program

Level of Implementation						
Variable		Instruc- tional Goals And Objec- tives	Curricu- lum	Teaching Method- ology	Instruc- tional Re- sources	
BSED	Mean	4.3229	4.4064	4.3136	4.1621	
N	140	140	140	140		
Std. Deviation	.44871	.42565	.44499	.59209		
INTERP	RETATION					
	Mean	4.5453	4.6020	4.5327	4.2933	
BEED	N	150	150	150	150	
	Std. Deviation	.33789	.28177	.30947	.43576	
INTERPRETATION						
	Mean	4.6703	4.6622	4.5622	4.4197	
FACULTY	N	37	37	37	37	
	Std. Deviation	.43196	.39885	.49461	.55803	
INTERP	RETATION					
	Mean	4.4642	4.5251	4.4422	4.2515	
As a Whole	N	327	327	327	327	
	Std. Deviation	.41841	.37684	.40954	.52735	
INTERP	RETATION					
Scale 1.00 -	- 1.79 VLE					

Scale 1.00 – 1.79 VLI 1.80 – 2.59 LE

2.60 – 3.39 HE

3.40 – 4.19 HE

4.20 - 5.00 VHE

It can be gleaned from the table that the extent of implementation as perceived by the respondents indicate that all the respondents believe that the Teacher Education Program of the institution as to the areas covered is well implemented having reached the "very high" implementation level. The faculty, on the other hand, feels that the Teacher Education Program is stronger in its implementation in the areas of instructional goals and objectives and curriculum. This may be attributed to the well delineated and articulated vision, mission, goals and objectives of the College of Education and the adherence to the policies and standards of CHED pertaining to the Teacher Education curriculum.

These findings imply that CHMSC is complying with the new CHED reform agenda which emphasizes that all teachers of core subjects will be highly qualified, licensed, demonstrate subject competency, vertically articulated on the subject area taught, and pursuing a graduate degree.

Teacher Education Institutions should evaluate the existing Teacher Licensure Program and require teacher candidates to demonstrate mastery learning reflecting college level study (The Teaching Commission, 2004). To address this requirement, the graduates' academic mean rating in general education, professional education and major subjects were tabulated.

# Level of Academic Achievement of the Teacher Education Graduates for 2011-2013

# **General Academic Subjects**

The level of academic achievement of the graduates had resulted to a "very good" performance in general in the three school years of assessment from 2011 to 2013.

Table 2.	Academic	Performance	According to	vear and b	v Program
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YEAR	PROGRA	M	ACAD GEN ED	ACAD Prof ed	ACAD Major
		Mean	1.9979	1.8699	2.0027
	BSED	N	159	159	159
		Std. Deviation	.17342	.18015	.25861
		Mean	1.9165	1.7839	1.8995
2011	BEED	N	184	184	184
		Std. Deviation	.14414	.18277	.14112
		Mean	1.9542	1.8238	1.9473
	Total	N	343	343	343
		Std. Deviation	.16329	.18631	.21027

		Mean	1.9908	1.8137	1.9646
BSED	BSED	N	173	173	173
		Std. Deviation	.17827	.17466	.24496
	Mean	1.9360	1.7187	1.9009	
2012	BEED	N	164	164	164
		Std. Deviation	.14215	.15110	.13288
		Mean	1.9641	1.7674	1.9336
	Total	N	337	337	337
		Std. Deviation	.16378	.17017	.20075
		Mean	2.0681	1.8575	1.9636
	BSED	N	67	67	67
		Std. Deviation	.16887	.18065	.22724
		Mean	2.0195	1.8468	1.9717
2012	BEED	N	41	41	41
2013		Std. Deviation	.13773	.15343	.13887
		Mean	2.0496	1.8534	1.9667
	Total	N	108	108	108
	Total	Std. Deviation	.15887	.17017	.19768
		Mean	2.0066	1.8434	1.9796
	BSED	N	399	399	399
		Std. Deviation	.17657	.17938	.24779
		Mean	1.9356	1.7630	1.9077
Total	BEED	N	389	389	389
Total		Std. Deviation	.14547	.17192	.13886
		Mean	1.9715	1.8037	1.9441
	Total	N	788	788	788
	1014	Std. Deviation	.16572	.18017	.20458

It is therefore then necessary that evaluation of teachers' performance in the classroom occur at many points on the teaching continuum, at various times throughout a school year, and for a variety of purposes. The teaching skills and content knowledge of teachers should be routinely observed in the classroom and evaluated throughout their career.

# **Academic Professional Subjects**

The level of academic achievement in professional subjects of the students' respondents both the BSED and BEED had resulted to a "very good" performance in general.

### **Major Academic Subjects**

The level of academic achievement in major subjects of the students' respondents had resulted to a "very good" performance level in general. A new round of studies focused on year-to-year improvements in student achievement. These studies implicitly provided better controls for student background and preparation by isolating individual student improvements in achievement. They provided some evidence for differences in teacher qualifications affecting student achievement gains. For example, Ferguson (1991) found that scores on the teacher licensing test in Texas—which measures reading and writing skills as well as a limited body of professional knowledge—accounted for 20-25 percent of the variation across districts in student average test scores, controlling for teachers' experience, student-teacher ratio, and percentage of teachers with master's degrees. Ehrenberg and Brewer (1995) found that the teacher test scores on a verbal aptitude test were associated with higher gains in student scores although the results varied by school level and students' racial/ethnic status. Using data from the 1998 National Educational Longitudinal Study (NELS), Rowan, Chiang, and Miller (1997) found that mathematics achievement was directly affected by a survey measure of teachers' mathematics knowledge, suggesting that teacher scores on subject matter tests may relate to student achievement as well. A few studies that examined pedagogical knowledge tests found that higher teacher scores were also related to higher student test performance, although many of these were dated (1979 or earlier).

# Level of Performance of Graduates in the Licensure Examinations for Teachers

### **General Education Subjects**

Table 4 is presented to visualize the performance in the Licensure Examination for teachers by year takers. Mean grade was used to treat the data. The level on general education subject's performance in LET of the students' respondents had a "high" passing mark .

To explain this observation, it could be said that the course syllabus in GE subjects in their undergraduate classes could have been completely covered. It might also be possible that the syllabus used by the instructors cover the lesson/topics prescribed by the Commission on Higher Education Reform Agenda. Which could be possible materials used by the Professional Regulation Commission in preparing the LET questions.

Table 3. Level of performance in LET by year and by program

Year	Program		LET Gen Ed	LET Prof Ed	LET Major
		Mean	71.2264	70.9245	70.3899
	BSED	N	159	159	159
		Std. Deviation	6.89425	8.32683	7.46037
		Mean	70.1793	71.1576	74.0924
2011	BEED	N	184	184	184
		Std. Deviation	7.20014	7.76585	6.38878
		Mean	70.6647	71.0496	72.3761
	Total	N	343	343	343
		Std. Deviation	7.06909	8.01974	7.13948
		Mean	73.1214	73.9711	71.4682
	BSED	N	173	173	173
		Std. Deviation	7.91174	7.69659	8.16084
		Mean	76.8720	77.3110	77.6667
2012	BEED	N	164	164	57
		Std. Deviation	3.81015	4.71074	2.97809
		Mean	74.9466	75.5964	73.0043
	Total	N	337	337	230
		Std. Deviation	6.52765	6.62452	7.70612
		Mean	77.1791	70.9552	73.4328
	BSED	N	67	67	67
		Std. Deviation	5.59200	8.66975	6.03832
		Mean	76.0488	75.0488	
2013	BEED	N	41	41	
		Std. Deviation	4.69548	5.03960	
		Mean	76.7500	72.5093	73.4328
	Total	N	108	108	67
		Std. Deviation	5.27580	7.73570	6.03832
		Mean	73.0476	72.2506	71.3684
	BSED	N	399	399	399
		Std. Deviation	7.43685	8.23782	7.61756
		Mean	73.6195	74.1620	74.9378
Total	BEED	N	389	389	241
		Std. Deviation	6.59774	6.99573	5.95891
		Mean	73.3299	73.1942	72.7125
	Total	N	788	788	640
		Std. Deviation	7.03650	7.70462	7.24392

Legend: (100-80.2 = Very High; 80.1-60.4 = High; 60.3-41.6 = Average; 40.5 – 20.8 = Low; 20.7- below = Very Low)

### **Professional Subjects**

The level on professional subject's performance in LET of the students' had resulted to "high" passing mark.

### **Major Subjects**

The group of examinees in terms of general ratings, the BSEd and the BEEd takers obtained "high" passing marks. BEEd garnered higher percentage than the BSEd.

This implies the adequacy of the preparation of the teacher graduate takers both in the pre service education (college level) and LET review before taking the LET.

Strauss and Sawyer (1986) reported a modest and positive relationship between teachers' performance on the National Teacher Examination (NTE) and district average NTE scores, after controlling for size, wealth, racial/ethnic composition, and number of students interested in postsecondary education in the district. Aaronson, Barrow and Sander (2007) looks at teacher quality and student achievement in Chicago public schools. Their study uses a gains score approach with controls for student and teacher fixed effects. The results show strong effects of teachers on student achievement, but traditional measures of teacher qualifications like education, experience, and credential type have little effect on classroom results. Koedel and Betts (2007) use a value-added gains model to look at student achievement of elementary students in San Diego. Like several of the other studies, they find that teacher quality is an important predictor of student achievement, but measured teacher qualifications (experience, quality of undergraduate college, education level, and college major) have little effect on student achievement.

### Differences in the Implementation of Instructional Services

There are significant differences in the implementation of the Teacher Education Program in terms of instructional goals and objectives, curriculum, teaching methodology and instructional resources and academic performance of the graduates. Both the faculty of instruction and the BEED respondents have higher assessment in all of the four areas compared to the BSED group. In academics, the strength of both graduates was found to be on the professional

education subjects while general education and major subjects are components that need to be strengthened by the program implementers.

Table 4. Significant Difference in the Implementation of the Teacher Education Program

ANOVA		Sum of Squares	Df	Mean Square	F	Sig.
INSTRUCTION-	Between Groups	5.355	2	2.678	16.776	.000
AL GOALS AND OBJECTIVES	Within Groups	51.716	324	.160		
	Total	57.071	326			
	Between Groups	3.554	2	1.777	13.470	.000
CURRICULUM	Within Groups	42.741	324	.132		
	Total	46.294	326			
TEACHING	Between Groups	4.076	2	2.038	13.051	.000
METHODOL- OGY	Within Groups	50.601	324	.156		
	Total	54.678	326			
INCEDITOR	Between Groups	2.428	2	1.214	4.457	.012
INSTRUCTION- AL RESOURCES	Within Groups	88.233	324	.272		
	Total	90.661	326			

# Relationship between the LET Performance of the BEED Graduates and the Academic Performance

An important factor to consider that affects the teacher education graduates' performance in the LET is the general education subjects, professional subjects and major subjects' performance. The Pearson Product Moment of Correlation was used to treat the data.

Looking into the figures in table5, the academic achievement of the LET takers graduates' in BEED is significantly related to their performance in LET because the computed value reaches the required tabular values at 0.01 level. The researcher accepted the null hypothesis stating that there is a significant relationship between the LET performance and the academic achievement of the BEED graduates. This means that the teacher graduates' performance is significant predictor of their performance in LET. It shows that whether the students obtained high or low academic performance, their LET performance is affected.

# Relationship between the LET Performance of the BSED Graduates and the Academic Performance

An important factor to consider that affects the teacher education graduates' performance in the LET is the general education subjects, professional subjects and major subjects' performance. The Pearson Product Moment of Correlation was used to treat the data.

Table 6. Relationship between Academic Achievement of the BSED and Licensure Examination for Teachers

	LET			
ACADEMIC ACHIEVEMENT	r-value	Significance	Decision	
ACTIL V LIVILIVI	488**	p < .01	Reject Ho	

# Relationship between the LET Performance of the BEED Graduates and the Academic Performance

An important factor that affects the LET performance of teacher education graduates is their academic achievement in the general, professional and major subjects during the pre-service years. To find out the relationship of these variables, the Pearson Product Moment of Correlation was used to treat the data.

The result showed that the academic achievement of the BEED LET takers is significantly related to their performance in LET because the computed value reaches the required tabular values at 0.01 level. The researcher accepted the null hypothesis stating that there is a significant relationship between the LET performance and the academic achievement of the BEED graduates. This means that the teacher graduates' academic performance is a predictor of their LET performance.

# Relationship between the LET Performance of the BSED Graduates and the Academic Performance

Another important factor affecting the teacher education graduates' performance in the LET is their academic achievement in general, professional and major subjects during the pre-service years. To confirm the relationships of these variables, the Pearson Product Moment of Correlation was used to treat the data.

Table 7. Significant Relationship between Academic Achievement of the BSED and Licensure Examination for Teacher

		LET	
ACADEMIC	r-value	Significance	Decision
ACHIEVEMENT	488**	p < .01	Reject Ho

The table shows that the academic achievement of the BSED LET takers is significantly related to their performance in LET because the computed value reaches the required tabular values at 0.01 level. The researcher accepted the null hypothesis stating that there is a significant relationship between the academic achievement and LET performance of the graduates. This means that the teacher graduates' academic performance during their pre-service years predict their performance in LET.

#### CONCLUSIONS

The extent of implementation of the Teacher Education Program of CHMSC is well implemented having reached the "very high" extent. On the other hand, the respondents as a whole feels that the Teacher Education Program is stronger in its implementation in the areas of instructional goals and objectives and curriculum, teaching methodology and instructional goals. This may be attributed to the well delineated and articulated vision, mission, goals and objectives of the College of Education and the adherence to the policies and standards of CHED pertaining to the Teacher Education curriculum.

The level on general education subject's performance of the BEED and BSED in LET had a "high" passing mark. Meanwhile, the level of professional subject's performance in LET had resulted also "high" passing mark. The two group of

examinees in terms of general ratings, the BSED and the BEEd takers obtained higher percentage passing marks. Further, the academic achievement of the two groups of LET takers is significantly related to their performance in LET. This means that the teacher graduate's academic performance is a predictor of their LET performance.

The only national assessment which can be used to gauge the quality output of an accredited Teacher Education Institution is the Licensure Examination for Teachers. The high percentage of LET passer's indicates the competence of graduates who are the finish products of a well-aligned teacher education program. In the research investigation, findings revealed that correlational issues exist between program implementation and students' academic achievement. In the same manner, performance in academics also determines LET results. This implies that the success in LET begins from how the Teacher Education Program is implemented going to the academic preparation of the students and involving teachers who have majored in the subject they teach. The same is true with teachers who have considerable experience in teaching. Those who have longer teaching experience in the subject they teach are likely to make a greater contribution to the students learning (Fallon, 2003). The more the students learn important facts, concepts, best practices and principles in teaching and learning, the more chances of hurdling licensure examinations.

### TRANSLATIONAL RESEARCH

A major component in screening prospective teachers is the licensure examination. It is a way of assuring that practitioners meet the minimum qualifications required for proper practice in the teaching profession. Even Mc Allister (2013) mentioned that Licensure determines teacher candidates who are equipped with knowledge and skills deemed important to transfer learning. Licensure establishes a floor, but it does not ensure excellent practice. An ideal teacher education program requires vertically aligned teacher recruits possessing sterling personal and professional characteristics in imbued with knowledge, skills and highly committed attitude would undoubtedly produce quality teacher graduates who will become future gatekeepers to the road of excellence. In this investigation, several factors were considered to arrive at a conclusion- that is the more the teacher education students are academically prepared; the more likely they will succeed in LET.

#### LITERATURE CITED

- Aaronson, D., Barrow, L., & Sander, W. (2007). Teachers and student achievement in the Chicago public high schools. *Journal of Labor Economics*, 25(1), 95-135.
- Bandura, A. (1986). Social foundations of thought and action: A social cognitive theory. Prentice-Hall, Inc.
- CMO #30. S. 2004. Revised Policies and Standards for Undergraduate Teacher Education Curriculum.
- Ehrenberg, R. G., & Brewer, D. J. (1995). Did teachers' verbal ability and race matter in the 1960s? Coleman revisited. *Economics of Education Review*, 14(1), 1-21.
- Fallon, D. (2003). Case Study of a Paradigm Shift The Value of Focusing on Instruction. *Education commission of the states. Richmond, Virginia.* November, 12.
- Ferguson, R. F. (1991). Paying for public education: New evidence on how and why money matters. *Harv. J. on Legis.*, 28, 465.
- Koedel, C., & Betts, J. R. (2007). *Re-examining the role of teacher quality in the educational production function* (pp. 2007-03). National Center on Performance Incentives, Vanderbilt, Peabody College.
- Mc Allister, P. (2013). Where We Stand in Teacher Qualityhttp://www.ets.org/Media/Education\_Topics/pdf/teacherquality.pdf
- Presidential Decree No. 1006. Provision for the Professionalization of Teachers, Regulating their Practice in the Philippines and other Purposes
- Rowan, B., Chiang, F. S., & Miller, R. J. (1997). Using research on employees' performance to study the effects of teachers on students' achievement. *Sociology of Education*, 256-284.

- The Teaching Commission. (2004) Tending at Risk. A call to Action (New York: The Teaching Commission, 40-1.http://www.ets.org/Media/Education\_Topics/pdf/teacherquality.pdf
- Usher, E. L., & Pajares, F. (2008). Sources of self-efficacy in school: Critical review of the literature and future directions. *Review of Educational Research*, 78(4), 751-796.