

## College Academic Performance of Teacher Education Students in a State University of Northern Philippines

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**Abstract** - The study determined the factors that influence the college academic performance of the respondents. This study used the descriptive and correlational survey methods of research with document scanning. It was found that gender and degree/course of the respondents were not significant factors in college academic performance; HS GPA was a significant factor that influences college academic performance; Admission Test Score in English and Science had no significant relationship on the college academic performance but in Mathematics, however, the higher the overall Admission Test Score, the higher is the college academic performance; male respondents did not differ in college academic performance when compared with their female counterparts and the BEED respondents did not differ in college academic performance when compared with their BSIE and BSED counterparts; and there was no significant difference between Admission Test Scores in General Information and Science when compared with their academic performance; however, when grouped

according to admission test in English, those who obtained average and above average scores performed better in college than those who got failing and below average scores while in Mathematics, those who obtained average and above average scores performed better in college than those who failed and got below average scores.

*Keywords* - academic performance, grade point average, admission test score

## INTRODUCTION

College life is nothing more than a tough challenge to beat. It entails rigorous academic work that would separate the “chaffs” from the “grains,” the “able and “unable.” It’s a whole new world that high school graduates who are dreaming to finish a degree would enter with much excitement and apprehension.

In order to thrive in college, freshmen acquaint themselves with strategies that would help them survive their university years. These strategies are boosted by the quality of basic education that they bring with them in the University. Facility in the tool subjects Mathematics, English and Science provide the incoming college students the necessary knowledge, skills as well as the relevant attitudes in beating the rigors of academic work. As students push themselves towards achieving their goals, their ability and proficiency in dealing with every academic endeavor, may give them an edge over those with lesser ability and lower in proficiency level.

Predictors of a freshmen’s survival in university education needs to be determined. These may provide decisions on classifying freshmen students and fitting them to courses that suits their abilities and inclinations.

## FRAMEWORK

Grade Point Average (GPA) as one of the main factors associated with the admission test result of student measures how well one is doing in his academic studies. It is the average obtained by dividing the total quality hours for course for which one is registered for any

state or period of time. GPA ensures that a student's performance is easily understood by many institutions around the world that rely on GPA in the assessment of the performance of students prior to, and during their course of studies. All good grading systems recognize and reward multi-skilled students. Under GPA, performance in a given set of courses summarizes overall performance ([tru.ca/policy/allpolicy.html](http://tru.ca/policy/allpolicy.html)).

High school GPA is considered a reliable gauge of future college achievement because it measures academic performance over a four-year period. Students in college preparation classes gain familiarity by studying some of the same liberal arts classes they will encounter in college, including English and the social sciences. Similar approaches to teaching that rely on lectures, tests, term papers, labs and final exams also make the transition to college classes easier (Briggs, 2011).

Moreover, Admission Test Scores (ATS) measures a high school chance of academic success on their college studies. The Educational Testing Service (ETS) also claims that the test measures not just how capable individuals answer questions but how they will perform in the academic world (<http://www.philippineeducation.edu>).

Students can take the Scholastic Admission Test (SAT) subject test to show colleges their mastery of specific subjects like English, History and Social Science, Mathematics, Science and Language. The SAT subject test gives students an additional opportunity to distinguish themselves and showcase their skills in a particular subject area (<http://www.collegeboard.com/parents/tests/testing/overview/2194.html>).

## **OBJECTIVE OF THE STUDY**

The study was conducted to determine the factors that influence the college academic performance of the respondents.

## **MATERIALS AND METHODS**

The study used the descriptive and correlational survey methods of research with document scanning. The descriptive part described the demographic profile of the respondents, and the level of college academic performance. Correlation procedure was used to determine

the relationship between the demographic profile variables and the level of college academic performance of the respondents. Comparative analysis was used to determine the differences between selected demographic profile variables and the level of college academic performance of the respondents. Document scanning was used to gather the profile of the respondents.

## RESULTS AND DISCUSSION

### Demographic Profile of the Respondents

#### Gender

The table shows that out of 211 respondents, there were 167 (79.15%) male and only 44 (20.85%) female respondents. Most of the respondents were male.

Table 1. Demographic profile of the respondents

Demographic Profile	Frequency	Percent
Gender		
Female	114	79.72
Male	29	20.28
Total	143	100.00
Degree/course		
BEED	65	45.45
BSIE	10	6.99
BSED - MAPEH	18	12.59
BSED - GS	13	9.09
BSED - TLE	5	3.50
BSED - ENG	32	22.38
Total	143	100.00
HS GPA		
75.00 - 79.99	8	5.60
80.00 - 84.99	54	37.76

85.00 - 89.99	65	45.45
90.00 - 94.99	15	10.49
95.00 and above	1	0.70
Total	143	100.00

### Degree/course

The data show that 97 (45.97%) of the respondents belonged to BEED, 45 (21.33%) were BSED English majors, 24 (11.37%) were BSED MAPEH majors and 18 (8.54%) BSED General Science, 15 (7.11%) BSIE, and 12 (5.695) were BSED TLE majors. Majority of the respondents were BEEed students.

### HS GPA

Based on Table 1, 67 (44.37%) of the respondents obtained a high school Grade Point Average ranging from 85.00 - 89.99; 55 (36.42%) got an average ranging from 80.00 - 84.99; 19 (12.58%) obtained a GPA of 90.00 - 94.99; nine (5.96%) got 75.00 - 79.99; and only one (0.66%) obtained a HS GPA of 95.00 and above.

Most of the respondents got a HS GPA ranging from 85.00 - 89.99. It implies that the college advisers concerned followed admission requirements except for few cases.

## **Level of Admission Test Score of the Respondents**

### General Information

As presented in Table 2, 78 (54.55%) of the respondents belonged to the *average* group; 47 (32.87%) were *above average*; 14 (9.79%) obtained scores under *below average* category; and only 4 (2.79%) were *superior*. Majority of the respondents got an *average* admission test score in General Information.

### English

Based on the table, 93 (65.03%) of the respondents got *below average*

scores in Admission test; 40 (27.97%) obtained *average* scores; 7 (4.90%) failed; and only 3 (2.10%) got *above average* scores. More than half of the respondents got *below average* admission test scores in English.

### Science

Table 2 shows that 87 (60.84%) out of 143 respondents belonged to score range *below average*; 44 (30.77%) obtained *average* scores; 8 (5.59%) *failed*; and only 4 (2.80%) got *above average* scores in Science component of the admission test. Most of the respondents got *below average* scores in Science.

### Mathematics

It could be gleaned on the table that, 77 (53.85%) obtained *below average* scores in Mathematics component of the Admission test; 43 (30.07%) *failed*; 20 (13.99%) got scores under *average* category; and 3 (2.09%) obtained *above average* scores.

Almost one-half of the respondents got *below average* scores in Mathematics component of the Admission test.

Table 2. Level of admission test score of the respondents

Level of Admission Test Score	Frequency	Percent
General Information		
Below Average	14	9.79
Average	78	54.55
Above Average	47	32.87
Superior	4	2.79
Total	143	100.00
English		
Failed	7	4.90
Below Average	93	65.03
Average	40	27.97
Above Average	3	2.10

Total	143	100.00
Science		
Failed	8	5.59
Below Average	87	60.84
Average	44	30.77
Above Average	4	2.80
Total	143	100.00
Math		
Failed	43	30.07
Below Average	77	53.85
Average	20	13.99
Above Average	3	2.09
Total	143	100.00

Legend:

	General Information	English	Science	Math
Failed	0-9	0-19	0-13	0-11
Below average	10-14	20-29	14-20	12-17
Average	15-19	30-39	21-27	18-23
Above Average	20-24	40-49	28-34	24-29
Superior	25-29			

## Level of College Academic Performance of the Respondents

### English

Out of 143 respondents, 66 (46.15%) got a college GPA of 2.00-2.49 which was described as *good* in their English subjects; 40 (27.97%) obtained a college GPA range of 2.5 – 3.00, described as *fair*; 31 (21.68%) belonged to GPA range of 1.50-1.99 which was described as *very good*; and 6 (1.00 - 1.49) obtained a GPA of 1.00-1.49 which was *excellent*.

Table 3. Level of college academic performance of the respondents

College GPA	Frequency	Percent
<b>English</b>		
1.00 - 1.49	6	4.20
1.50 - 1.99	31	21.68
2.00 - 2.49	66	46.15
2.50 - 3.00	40	27.97
Total	143	100.00
<b>Science</b>		
1.00 - 1.49	2	1.40
1.50 - 1.99	13	9.09
2.00 - 2.49	56	39.16
2.50 - 3.00	72	50.35
Total	143	100.00
<b>Math</b>		
1.00 - 1.49	5	3.50
1.50 - 1.99	8	5.59
2.00 - 2.49	30	20.98
2.50 - 3.00	100	69.93
Total	143	100.00
<b>Overall GPA</b>		
1.00 - 1.49	5	3.50
1.50 - 1.99	22	15.38
2.00 - 2.49	78	54.55
2.50 - 3.00	38	26.57
Total	143	100.00

Legend:

College GPA	Qualitative Description
1.00 - 1.49	- Excellent
1.50 - 1.99	- Very Good

2.00 - 2.49	- Good
2.50 – 3.00	- Fair

Most of the respondents were described as *good* in their college academic performance, specifically in English subjects.

### Science

Seventy-two (50.35%) of the respondents obtained a GPA of 2.50 - 3.00 in Science described as *fair*; 56 (39.16%) got 2.00-2.49 GPA which was evaluated as *good*; 13 (9.09%) obtained 1.50-1.99 GPA which was noted as *very good*; and only 2 (1.40%) were evaluated as *excellent* with GPA of 1.00-1.49.

The data imply that most of the respondents got only a grade of *fair* in Science subjects.

### Mathematics

It could be noted from the table that 100 (69.93%) of the respondents got a College GPA in Mathematics ranging from 2.50 - 3.00 described as *fair*; 30 (20.98%) got a GPA of 2.00-2.49 which was evaluated as *good*; 8 (5.59%) obtained a GPA of 1.50 - 1.99 which was noted as *very good*; and 5 (3.50%) got a PA ranging from 1.00-1.49 which was evaluated as *excellent*.

The data connote that most of the respondents got only *fair* marks in Mathematics subjects.

### Overall GPA

The data indicated that 78 (54.55%) of the respondents obtained an overall GPA of 2.00 - 2.49 which was noted as *good*; 38 (26.57%) obtained a rating of fair under the GPA range from 2.50 - 3.00; 22 (15.38%) obtained an overall GPA of 1.50 - 1.99 which was evaluated as *very good*; and 5 (3.50%) got an *excellent* overall GPA of 1.00 - 1.49.

This data imply that more than one-half of the respondents obtained an overall GPA which was evaluated as *good*. This further implies that the respondents are *good* in English, Science, and Mathematics.

## Relationship between College Academic Performance and the Demographic Profile Variables of the Respondents

Table 4 presents the relationship between college academic performance specifically in English, Science and Mathematics and the demographic profile variables of the respondents.

Table 4. Relationship between college academic performance and the demographic profile variables of the respondents

	GPA in College (College Academic Performance)	
	r	Sig*
Gender	0.009	0.904
Degree/Course	-0.048	0.498
HS GPA	-0.310	< 0.001
Admission Test Scores		
General Information	-0.035	0.618
English	-0.093	0.190
Science	0.044	0.537
Mathematics	-0.188	0.008
Total	-0.246	0.001

\* .05 level of significance

As presented in Table 4, the computed  $r$  value -0.310 indicated that there is significant relationship between college academic performance and high school Grade Point Average. Based from the result, the null hypothesis was rejected.

The result further implied that the higher the HS GPA, the higher is the GPA in college/ college academic performance.

The result of the study supports the findings of Briggs (2011), that grades accurately predict college GPA than standardized tests regardless of the quality or type of high school. Although standardized tests are used to estimate the performance of incoming freshman, grades attained over a four-year period in high-school most closely align with those over four years of college. These numbers are similar

regardless of academic discipline or major.

Moreover, the result of the study of Comeaux (2005) suggests that students with high GPAs in high school tend to get high GPAs in college. Likewise, Niu and Tienda (2009) in their study, found that high school class rank is a better predictor of college performance than standardized test scores.

In Mathematics, the obtained  $r$  value  $-0.188$  indicated that there was significant relationship between college academic performance and Admission Test Score in Mathematics.

It could be inferred that the higher the Admission Test Scores in Mathematics the higher is the GPA in college.

The overall computed  $r$  value  $-0.246$  indicated significant relationship between the college academic performance and overall Admission Test Score. This further indicated that the higher the overall Admission Test Score, the higher is the college academic performance.

Admission Test Scores (ATS) measures a high school chance of academic success on their college studies. The Educational Testing Service (ETS) also claims that the test measures not just how capable individuals answer questions but how they will perform in the academic world (<http://www.philippineeducation.edu>).

### **Difference on the College Academic Performance when grouped according to Demographic Profile Variables**

Table 5 presents the test of difference on the college academic performance when grouped according to gender, degree/course, HS GPA, and Admission Test Scores.

Based on Table 5, the result indicated the test of difference on the college academic performance when grouped according to the Admission Test Scores in General Information, English, Science and Mathematics.

Table 5. Difference on the college academic performance when grouped according to demographic profile variables

Demographic Profile Variables	Mean	SD	T / F	sig
<b>Gender</b>				
Male	2.241	0.355	0.015	0.904
Female	2.252	0.540		
<b>Degree/Course</b>				
BEED	2.251	0.638	2.011	0.079
BSIE	2.339	0.287		
BSED -MAPEH	2.422	0.324		
BSED – General Science	1.999	0.411		
BSED –TLE	2.474	0.271		
BSED –English	2.180	0.300		
<b>Admission Test Score</b>				
General Information				
Failed	2.173	0.261	1.781	0.134
Below Average	2.378	0.303		
Average	2.324	0.650		
Average and Above Average	2.131	0.349		
English				
Failed	2.202	0.273	3.212	0.024
Below Average	2.343	0.596		
Average and Above Average	2.086	0.394		
Science				
Failed	2.213	0.266	0.176	0.913
Below Average	2.247	0.291		
Average	2.287	0.851		
Above Average	2.226	0.578		

Mathematics				
Failed	2.307	0.660	4.206	0.007
Below Average	2.268	0.292		
Average and Above Average	2.020	0.399		

English. The computed  $t$  value of 3.212 indicated significant difference on the college academic performance of the respondents. The respondents whose scores are with *failed* category differ in their academic performance compared with those in the *average* and *above average* category. Respondents who scored under *below average* differ significantly in their college academic performance than those whose scores belong to *average* and *above average* scores category. In general, respondents who obtained *average* and *above average* Admission Test Scores in English, performed better in college than those who got *failing* and *below average* scores. This could be true since English is commonly used as medium of instruction in the classroom except for Filipino subjects.

Mathematics. Based on the computed  $t$  value of 4.206, it indicated significant difference in college academic performance when grouped according to Admission Test Scores in Mathematics. Respondents who *failed* and got *average* scores in Mathematics Admission Test differ in their college academic performance; those who got *average* scores differ in their academic performance with those who obtained above *average* scores. Those who got *below average* scores differ significantly with those who obtained *average* scores those who obtained *average* scores differ in their college academic performance with those whose scores are *above average*.

Generally, respondents who obtained *average* and *above average* scores in Mathematics component of the Admission Test, performed better in college than those who *failed* and got *below average* scores.

## CONCLUSIONS

Based on the findings of the study, the following conclusions were drawn:

High School Grade Point Average was a significant factor that influences college academic performance of the respondents. The higher the HS GPA, the higher is the GPA in college/college academic performance.

In Mathematics Admission Test Score, the higher the overall Admission Test Score, the higher is the college academic performance.

Admission Test Scores of respondents in General Information, and Science, did not differ as compared to their college academic performance.

However, when grouped according to Admission Test Score in English, respondents who obtained *average* and *above average* scores performed better in college than those who got *failing* and *below average* scores.

In Mathematics Admission Test Score, respondents who obtained *average* and *above average* scores performed better in college than those who *failed* and got *below average* scores.

## RECOMMENDATIONS

Based on the results of the study, the following recommendations are given:

1. The College of Teacher Education Screening committee should adhere to the quality standards of admission and retention set for education students.
2. There is a need to further review the items included in the Admission test given by the University Testing Center to really determine what course or specialization is suited to the student concerned.
3. Further study is recommended and to consider other variables which could be perceived to be directly affecting the college academic performance of the students and to be conducted in a wider scope.

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