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Undergraduate Cohort Survival and Retention Rates: Exploring Student' Academic Resiliency in a Higher Education Institution in the Philippines

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Abstract: *Cohort and retention rates in higher education are internationally accepted as indicators of the efficiency and effectiveness of institutional functioning. Hence, this study is an initial effort to better gauge the efficiency and effectiveness of Palawan State University-College of Teacher Education through an analysis of its retention and cohort survival rates. To answer the queries raised in this study, descriptive-comparative method was employed and enrolment records were culled for the six batches (2017 to 2022) of Bachelor of Secondary Education (BSEd) and Bachelor of Elementary Education (BEEd) graduates. The findings reveal that the average cohort rate for the BSEd batches is 62.91% whereas the cohort rate for BEEd is 54.09%. Furthermore, the retention rates for both BSEd and BEEd were lowest at the first-year level, going from the first semester into the second semester and moving into the first semester of the second year due to the strict implementation of retention policy at PSU-CTE. Therefore, in order to retain more students into their later years and reduce the number of students who need to complete more than four years of study in order to graduate, the college administration may explore ways to further improve and strengthen the care and services that the university provides its students, notably to the BEED students. Another study may be conducted using the findings of this one as a starting point to delve deeper and discover explanatory factors for the existing scenario, specifically the discrepancy in retention and cohort rates between BEED and BSED students.*

Keywords—cohort rate; retention rate, academic resiliency; undergraduate survival

1. INTRODUCTION

Education plays a vital role in the economic development of a country as it increases the capacity and ability of people to be more productive economically. Most students go to college with the hope of giving themselves the foundation that they need to be successful in life or the skill that they need to find a good job in the future. Every year, a number of students attend college, but many of them often fail or drop out within less than three years. Dropping out is one of the most significant issues confronting our educational system because it deprives students of their fundamental human right to an education. It is an impediment that is bugging the educational system not only in the Philippines but also many countries around the globe.

High retention rate is one of the indicators not only of students' satisfaction in a college but most importantly, the success of an educational institution. Graduation and retention rates in higher education are internationally accepted as indicators of efficiency and effectiveness of institutional functioning (Fowler, 2003).

Retention rate refers to students' continued study until successful completion (Zerna, Cruz, & Nuqui, 2014). It measures the rate at which students persist in their educational program at an institution, and usually expressed as percentage. For higher educational institutions offering four-year curricular programs, this is the percentage of first-time bachelor's degree-seeking undergraduates from the previous semester who are again enrolled in the current semester. Likewise, for all other institutions, this is the percentage of the first-time degree-seeking students from the previous semester who either re-enrolled or successfully completed their program by the current semester.

Cohort rate, on the other hand, is the measure of rate at which a group of students enrolled in a particular course together as a batch during a particular time stayed together until they completed and graduated in the course. Cohort rate is akin to survival rate of first year students up to graduation. High retention and cohort survival rates are indicators of efficiency since both government resources and individual investments are wasted when students start college but drop out before graduate or take a longer time to finish what should have been taken in four years only.

In the Philippines, DepEd reported in 2014 that only 14 out of every 23 students who enroll in college would usually be able to graduate. This statistic reveals the challenge that an educational institution faces in keeping its retention rates as high as possible. Given the many compelling factors that keep students in and out of schools, it is to the educational institution's utmost interest to keep track, maintain and even increase its retention of students. Unfortunately, the coronavirus crisis has severely impacted education systems around the world as millions of children and students are now out of school due to shuttered institutions. As a result of school closures, many institutions are now offering online and remote learning to their students. Unfortunately, not everyone has the ability to opt for these modalities, which then highlights the

digital education divide in many developing countries like Philippines.

School closures related to the current COVID-19 pandemic clearly imply that students from diverse backgrounds who are more at risk of increased vulnerability are less likely to receive the support they need, and the gap between students that experience additional barriers and that do not might widen. Furthermore, the pandemic is likely to introduce significant new challenges for still more youth, prompting a need to continue capturing data that can help educators identify and connect with students who disengage from school or otherwise fall off track during this time.

At present, there is not much studies done yet about students' cohort and retention rates. In fact, the College of Teacher Education is the first college at Palawan State University to examine the survival rates of its enrollees. Hence, this study was conducted to examine the current retention and cohort survival rates at the PSU-College of Teacher Education, both for curriculum review and policy making purposes.

2. MATERIALS AND METHODS

To answer the research questions proposed in this research study, the researchers employed descriptive-comparative design. Through this research design, the researchers were able to determine the extent to which different variables are related to each other in the population of interest. Moreover, documentary analysis was also utilized in this study. The analysis focused on the enrolment records of the six (6) batches (2017 to 2022) of the College of Teacher Education graduates under the two curricular programs, Bachelor of Secondary Education (BSEd) and Bachelor of Elementary Education (BEEd).

Furthermore, this study used both descriptive and inferential measures. To determine the retention and cohort survival rates of the students, descriptive measures were utilized.

Moreover, Analysis of Variance was also employed to determine the differences of the retention and cohort rates of the respondents when they grouped according to their profiles. All statistical computations were tested at 0.05 level of significance using Statistical Package for the Social Sciences (SPSS).

3. RESULTS AND DISCUSSION

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CTE Cohort Rates for Batches 2017 to 2022

The following tables show the cohort rates for batches 2017 to 2022 of the two programs, BSEd and BEEd, of the College of Teacher Education.

Table 1.1. Cohort Rates for Batches 2017 to 2022
Bachelor of Secondary Education, PSU-CTE

Group Category	BATCH					
	2017	2018	2019	2020	2021	2022
Number of Students from the Batch	179	165	153	-	-	116
Number of Students who Finished	123	101	82	-	-	79
Number of Students who did not Finish	56	64	71	-	-	37
Cohort Rate per Batch	68.72%	61.21%	53.59%	-	-	68.10%
Average Cohort Rate	**62.91%**					

As depicted by Table 1.1, the lowest cohort rate for the BSEd program was obtained by Batch 2019. Out of 153 students who entered the CTE from this batch, only 82 or 53.59% finished their program. On the other hand, the highest cohort rate was recorded by Batch 2022 wherein out of 116 students from their batch who enrolled at CTE, 79 or 68.10% of them graduated on time. Furthermore, for the batch 2017, the cohort rate was found to be 68.72% whereas for Batch 2018, the cohort rate was 61.21%. It can also be noted in the table that there is no data for the cohort rate for Batch 2020 and 2021 since there are no regular BSEd students during these durations. In addition, the data also reveals that the average cohort rate for the BSEd batches is 62.91%. This implies that 6 out of every 10 first year BSEd enrollees are able to graduate on time.

Table 1.2. Cohort Rates for Batches 2017 to 2022
Bachelor of Elementary Education, PSU-CTE

	BATCH					
Group Category	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**

Number of Students from the Batch	122	115	124	70	62	70
Number of Students who Finished	59	61	54	35	29	58
Number of Students who did not Finish	63	54	70	35	33	12
Cohort Rate per Batch	**48.36 %**	**53.04 %**	**43.55 %**	**50.00 %**	**46.77 %**	**82.86%**
Average Cohort Rate	**54.09%**					

Moreover, a similar trend is also observed for the BEED group. As depicted by Table 1.2, the analysis reveals that the cohort rates of BEEd students during the six batches is lowest for Batch 2019. The cohort rate of 43.55% implies that out of 124 BEEd enrollees, only 54 of them are able to finish their degree on time. Contrariwise, the highest cohort rate was recorded for BEEd Batch 2022. Furthermore, the data depicts that the average cohort rate for BEEd six batches is 54.09%. This implies that out of 10 BEEd enrollees, 5 of them are able to finish their program on time.

CTE Retention Rates for Batches 2017 to 2022

The following tables show the retention rates for batches 2017 to 2022 of the two programs, BSEd and BEEd, of the College of Teacher Education.

Table 2.1. Retention Rates for Batches 2017 to 2022
Bachelor of Secondary Education, PSU-CTE

Batch	**Semestral Retention Rate (in %)**							
	Year 1 Sem 1 to Sem 2	**Year 1** Sem 2 to Year 2 Sem 1	**Year 2** Sem 1 to Year 2 Sem 2	**Year 2** Sem 2 to Year 3 Sem 1	**Year 3** Sem 1 to Year 3 Sem 2	**Year 3** Sem 2 to Year 4 Sem 1	**Year 4** Sem 1 to Year 4 Sem 2	Average Retention Rate
2017	83.79 %	91.33 %	97.81 %	97.01 %	98.46 %	97.65 %	98.40 %	**94.92%**
2018	75.35 %	86.06 %	96.26 %	97.08 %	98.18 %	98.00 %	94.89 %	**92.26%**
2019	80.56 %	83.45 %	94.68 %	96.92 %	97.16 %	97.46 %	95.68 %	**92.28%**
2020	-	-	-	-	-	-	-	-
2021	-	-	-	-	-	-	-	-
2022	82.74 %	84.29 %	96.23 %	97.48 %	97.16 %	97.05 %	98.19 %	**93.31%**

Table 2.1 shows the retention rates for the BSEd batches 2017 to 2022. It can be gleaned from the analysis that, on the average, the highest semestral rate was obtained by BSEd batch 2017, having an average retention rate of 94.92%. This data was followed by Batch 2022, with an average retention rate of 93.31%.

Further analysis also reveals that, for all batches, the retention rates were lowest at the first-year level, going from the first semester into the second semester and moving into the first semester of the second year. This analysis is not surprising since the College of Teacher Education implements a retention policy requiring students to maintain a general weighted average of at least 2.25 in their first year. In addition, students who are retained in the second year usually remain in the course until their graduation. Further, the retention rates from the second year and beyond are at least 94%.

Table 2.2. Retention Rates for Batches 2017 to 2022
Bachelor of Elementary Education, PSU-CTE

Batch	**Semestral Retention Rate (in %)**							
	Year 1 Sem 1 to Sem 2	**Year 1** Sem 2 to Year 2 Sem 1	**Year 2** Sem 1 to Year 2 Sem 2	**Year 2** Sem 2 to Year 3 Sem 1	**Year 3** Sem 1 to Year 3 Sem 2	**Year 3** Sem 2 to Year 4 Sem 1	**Year 4** Sem 1 to Year 4 Sem 2	Average Retention Rate
2017	70.49 %	80.23 %	94.20 %	96.92 %	98.41 %	96.77 %	98.33 %	**90.76%**

2018	79.80%	85.20%	94.94%	98.66%	94.59%	97.14%	92.71%	**91.86%**
2019	83.46%	86.89%	95.29%	97.70%	96.35%	98.62%	95.07%	**93.34%**
2020	84.16%	88.45%	93.19%	95.78%	96.24%	97.35%	98.69%	**93.41%**
2021	75.79%	83.33%	94.29%	95.36%	96.03%	97.62%	97.19%	**91.37%**
2022	82.83%	84.16%	95.66%	96.15%	95.68%	98.79%	97.46%	**92.96%**

Table 2.2 summarizes the semestral retention rates for BEEd batches 2017 to 2022. On the average, semestral retention rates were higher for batches 2019 and 2020, having average retention rates of 93.34% and 93.41%, respectively. Further analysis also reveals that the retention rates were lower in the first year, going from the first semester into the second semester and moving into the first semester of the second year. In addition, the lowest retention rate among BEED batch 2017 was obtained from the first semester to the second semester of the first year. The retention rate of 70.49% indicates that about 3 out of every 10 students fail to go further in the BEEd program and either drop out or shift to other collegiate programs. The usual reason why they leave the course is their failure to get the general weighted average required in the College's retention policy.

Significant Differences in the CTE Students' Cohort and Retention Rates

Table 3 shows the significant differences in the cohort and retention rates when the students/graduates were grouped according to year graduated and programs. Based on the analysis, it can be gleaned that there are significant differences in the cohort and retention rates when the graduates are grouped according to the year they graduated. The p-values of 0.0296 and 0.0315, respectively, confirm that the differences in the cohort and semestral rates for batches 2017 to 2022 are statistically significant. On the other hand, when the graduates were grouped according to their program, the p-values of 0.0038 and 0.0016 confirm that there is a significant difference in the cohort and retention rates of the BSEd and BEEd programs. It may be recalled in the previous analysis that the BEEd graduates had a lower average cohort rate of 54.09% as compared with the BSEd's average cohort rate of 62.91%. Added to this, they also obtained a lower retention rate of 92.28% than the retention rate of 93.19 for BSED graduates.

Table 3. Cohort Rates for Batches 2017 to 2022
Bachelor of Secondary Education, PSU-CTE

Differences According to Year Graduated	**p-value**	**Interpretation**
Cohort Rates	0.0296**	Significant
Retention Rates	0.0315**	Significant
Differences According to Program	**p-value**	**Interpretation**
Cohort Rates	0.0038**	Significant
Retention Rates	0.0016**	Significant

Legend: ** Significant at 0.05 level of significance

4. CONCLUSION AND RECOMMENDATIONS

The evidence summarized in this paper suggests that beyond the first-year level, the Bachelor of Secondary Education and Bachelor of Education students usually proceed to the third and fourth year levels and graduate in their respective degree programs. Thinking along with this statement, this is an indicator of efficiency and effectiveness. Additionally, students who might not be academically qualified for either of the two undergraduate degree programs in education only remain in the program for one or two semesters before leaving on their own or with advice to pursue other degree options. Given that Palawan State University is a public institution of higher learning that employs an open admission policy, it is good to cull through a retention policy during the first year of enrolment rather than in the later years to avoid wasting and compromising both government and individual resources.

However, it can be also depicted in the analyses that the cohort survival rates, particularly for the Bachelor of Elementary Education program, hover a low of 43.56% for batch 2019 to a high of 82.86% for batch 2022. Though the average 4-batch cohort rates for BSEd (62.91%) may be comparable to these figures, the average batch cohort rates for BEEd program is quite low at 54.09%. Auxiliary to this, they also obtained a lower retention rate of 92.28% than the retention rate of 93.19 for BSED graduates.

Elliot (2002) cited several determinants influencing students' decision to drop-out such as but not limited to economic factors, enrollment at another school, academic difficulties, family responsibilities, personal problems, dissatisfaction with residence living, academic dissatisfaction, low GPA, and poor advising or teaching. It is thus recommended that PSU-CTE or any future researches to focus on the factors influencing the students' decision to stay or not in the course or college. Using the results of this study as basis, another study may be undertaken to probe further and find explanatory variables for the current situation, particularly the disparity in retention and cohort rates between the BEED and BSED students. The College administration

may find ways and means on how best to further improve the care and services that the College provides its students, especially to the BEED students, so that more would be retained going into the higher years and less would have spent more than four years to be able to graduate.

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