

Assessment of Enrolment Pattern and Academic Achievement of Students in the selected programmes in Colleges of Education in North East Nigeria

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Abstract

The sustenance of educational development requires consistent students' enrolment as an input to the educational system. However, the persistently high rate of enrolment into various programmes in tertiary institutions especially in the colleges of education in North East Nigeria without much expansion of learning facilities requires empirical searchlight. This study attempts to determine the effect of enrolment patterns on the academic achievement of pre-service teachers in colleges of education in North East Nigeria. The study adopts a survey research design, while three colleges of education were chosen based on their willingness to be part of the research. The checklist was used as an instrument to obtain the number of enrolled students in a particular programme, while the academic achievement of graduating students was recorded across five years 2016 – 2020. Data were analysed using frequency count and percentages and linear regression analysis to answer the research questions. The results reveal that enrolment into a particular program was significantly higher than others, while academic achievement was found disproportionately across the different programmes. The outcome of linear regression reveals a significant but negative contribution of high enrolment rate toward students' academic achievement. It is recommended that the enrolment rate should be checked against learning facilities to improve the academic achievement of students in the studied colleges of education.

Keywords: Enrolment Pattern, Academic Achievement, Pre-Service Teachers, Colleges of Education,

Introduction

The pattern of students in enrolment into academic programmes in the higher institution could rather be rated unique based on different factors than assuming being coincidental. In tertiary institutions such as colleges of education, factors that influence students' enrolment into a particular programme can likely be linked with individual differences, institutional factors, admissions selectivity, costs, range of academic programs, location of institutions, and societal contexts among others. It is a known fact that certain programmes consistently have high enrolment rates while others struggle, acknowledging this fact is the first step. Geoffrey (2023) noted that it is not anormal that some programmes have more students' population than others, the only issue is whether there are enough learning facilities to cater for such student population.

Ajetomobi, Sakiyo, and Okoronka (2023) stated that students' educational progression is largely dependent on enrolment and academic achievement, and these two are significant factors that closely reflect the state of pre-service teachers' education in Colleges of Education and, by extension, the quality of education provided to learners. Nevertheless, the disproportionate observation in the students' enrolment pattern among programmes within the same institution should not be used to justify the supremacy of an educational programme over others but rather other factors that could be responsible for students' choice of a particular program over others. However, the fact that overcrowding of students in schools could affect learning has been established by various studies (Ambrose, Erasmus, & Linus, 2021; Offorma, 2019; Isiaka, 2018). However, most of these studies focused on either primary or secondary education, attentions are always not concerned with tertiary institutions such as colleges of education where pre-service teachers are being trained. The possibility of having an effect of larger enrolment in a particular programme in the college of education on the performance of students.

The rate of enrolment into different programmes in colleges of education is becoming significantly higher (Ajetomobi, Sakiyo, & Okoronka, 2023) despite clear paucity in the development of learning facilities in the colleges of education in North East Nigeria. However, the extent such high enrolment commiserates the academic achievement of pre-service teachers has not been extensively studied specifically in the Colleges of Education in North Eastern Nigeria where generally there is a dearth of empirical studies regarding the effect of enrolment rate on the academic achievement of pre-service teachers. However, there are no enough empirical studies targeting the trend of enrolment and gradation in the tertiary institutions of colleges of education. Thereby, the current study intends to trace the enrolment and graduation pattern in the colleges of education in North East of Nigeria.

Research Objectives

1. To Determine The Proportion Of Students' Enrolment Into Different Programmes In Colleges Of Education In North East Nigeria from 2016 to 2020
2. To determine the rate of students' academic achievement among different programmes in colleges of education in North East Nigeria from 2016 to 2020
3. To determine the effect of enrolment trends on students' academic achievement in different programmes in colleges of education in North East Nigeria from 2016 to 2020

Research Questions

1. What is the proportion of students' enrolment into different programmes in colleges of Education in North East Nigeria from 2016 to 2020?
2. What is the rate of students' academic achievement among different programmes in colleges of education in North East Nigeria from 2016 to 2020?
3. What is the effect of enrolment trend on students' academic achievement in different programmes in Colleges of Education in North East Nigeria from 2016 to 2020?

Literature Review

Enrolment rate refers to the percentage of eligible individuals or students who are currently enrolled in an educational institution. It is a crucial indicator that reflects the accessibility and participation in education within a given population (Offorma, 2019). The trend in enrolment rates provides valuable insights into the dynamics of educational participation over time. Various factors influence enrolment trends, including demographic shifts, economic conditions, government policies, and societal attitudes toward education. Monitoring enrolment trends helps policymakers, educators, and researchers assess the effectiveness of educational initiatives, identify areas for improvement, and address potential barriers to access (Adegbite & Omonuwa, 2021).

The enrolment rates are generally indicative of a robust education system that is accessible to a significant portion of the population. Conversely, declining enrollment rates may signal challenges such as economic constraints, inadequate infrastructure, or barriers to entry (Alimi, 2021). Analyzing enrolment rates across different educational levels or programmes, allows for a comprehensive understanding of the educational landscape in that field (Al-Husaini & Ahmad, 2023). Pandey and Taruna (2019) express that examining enrolment rates based on gender, socioeconomic status, and geographical location can uncover disparities and inform targeted interventions to ensure equitable access to education. In short, the enrolment pattern and its trends serve as vital indicators for evaluating the inclusivity and effectiveness of education systems, offering valuable insights into the educational landscape and informing strategies for improvement.

Academic achievement pertains to the educational outcomes that demonstrate the degree to which students have successfully met their learning objectives. This may involve fulfilling educational milestones like obtaining a bachelor's degree. Stajković, Bandura, Locke, and Sergent (2018) emphasize that academic accomplishment extends beyond mere completion and encompasses the proportion of students successfully transitioning from one academic level to another for educational progression. The concept of academic accomplishment encompasses both short and long-term educational goals achieved by either an individual student or an institution. The evaluation of achievement in individuals can be quantified by factors such as the final grade point average, while for institutions, graduation rates serve as a measure of achievement (Bossaert, Doumen, Buyse & Verschuere, 2019).

Given the broad scope of the academic achievement and accomplishment field, its definition is contingent on the indicators used for measurement (David, 2022). Indicators of academic achievement range from general criteria such as procedural and declarative knowledge acquired within an educational system to more curriculum-based criteria like grades or performance on educational achievement tests. Furthermore, cumulative indicators, such as educational degrees and certificates, also play a role in gauging academic achievement (Ayodele, 2018). The

academic achievement of pre-service teachers in colleges of education can be measured by the timely completion and graduating rate of the students (Ajetomobi, Sakiyo & Okoronka, 2023). It is important to note that academic achievement is multifaceted and can be influenced by various factors, including the quality of education, individual effort, teaching methodologies, and external support systems (Kharade & Wagh, 2018). Additionally, academic achievement goes beyond numerical assessments and may encompass critical thinking skills, problem-solving abilities, and the application of knowledge in real-world contexts.

The larger population of students in a program could define a lot of variables including learning space management, seating arrangement, the rate at which learners could get tutor attention, intra-student interaction, and management of out-of-class activities among others. Ismail (2022) expresses that lessons in larger class sizes are difficult to evaluate due to the population explosion and could take extra time for any tutor to achieve. Isiaka (2018) observes possible burnout among teaching staff due to extra efforts required to meet the demand of larger students' size for a particular program.

Methodology

Research Design: The research design adopted in this study is a survey research design

Study area: North East Nigeria, which is located between latitude 7⁰N and 13.5⁰N, and longitude 8.5⁰E and 14.25⁰E, and it covers a land mass of 402,159sq km. The North-Eastern part of Nigeria is comprised of six states which include: Adamawa, Bauchi, Gombe, Jigawa, Yobe, and Taraba States. North-East Nigeria shared international borders with Cameroon in the eastern part, Chad in the North-Eastern, and the Republic of Niger in the northern part. Each of the states in North East Nigeria has the presence of federal, state, and privately owned tertiary institutions including colleges of education with highly enrolled students from various parts of Nigeria.

Population: The population of the study comprises colleges of education in North East Nigeria. However, due to the pre-field survey, only three colleges were selected for this study, also their readiness to offer necessary data for this study. Therefore, Aminu-Saleh College of Education Azare, Bauchi; Federal College of Education Potiskum, and Federal College of Education Yola were chosen for this study.

Sample Size: All students enrolled in the selected colleges of education in North East Nigeria, as well as those supposed to graduate within the years 2016 – 2020, served as the sample size for this study.

Instrument: The instrument for this study is a checklist which was used to collect data on the proportion of enrolment and academic achievement of the respective students in the three selected colleges of education, in North East Nigeria.

Method of Data Analysis: Data collected in this study was analysed using descriptive analytical tools such as frequency count and percentage, presented using a simple bar chart for clarity, and regression analysis.

Results

Research Question 1: What is the proportion of students' enrolment into different programmes in colleges of education in North East Nigeria from 2016 to 2020

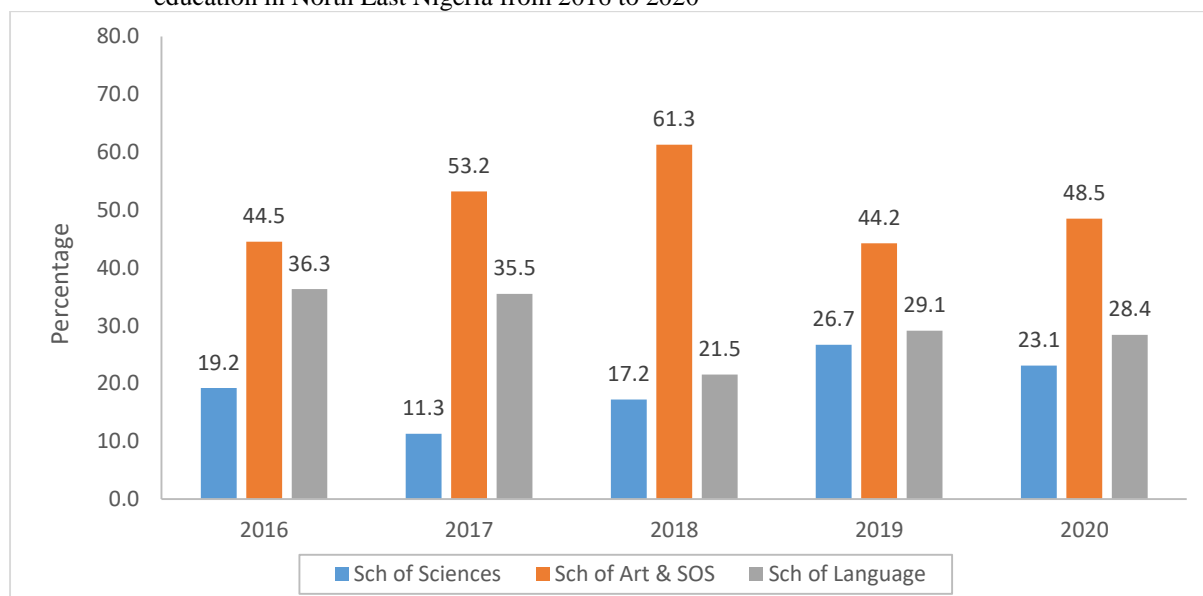


Figure 1: Proportion of Students' Enrolment into different Programmes in Colleges of Education in North East Nigeria from 2016 to 2020

The results in Figure 1 reveal the proportionate of students' enrolment into different programmes in colleges of education in North East Nigeria from 2016 to 2020. The results show that across years, the enrolment in the school of art and social science recorded the highest proportion 44.5%, 53.2%, 61.3%, 44.2%, and 48.5% for years 2016, 2017, 2018, 2019, and 2020 respectively. The enrolment pattern in the School of Languages consistently follows that of the School of Arts and Social Science across the years under the study (2016 – 2020), except in 2018 when the School of Languages reached a 21.5% enrolment proportion. However, the School of Sciences consistently recorded a lower enrolment proportion compared to other schools with 19.2%, 11.3%, 17.2%, 26.7%, and 23.1% for the years 2016, 2017, 2018, 2019, and 2020 respectively. This shows that School of Arts and Social Sciences led the enrolment rates, followed by School of Languages while the lowest enrolment rates were recorded in the School of Sciences.

Research Question 2: What is the rate of students' academic achievement among different programmes in colleges of education in North East Nigeria from 2016 to 2020?

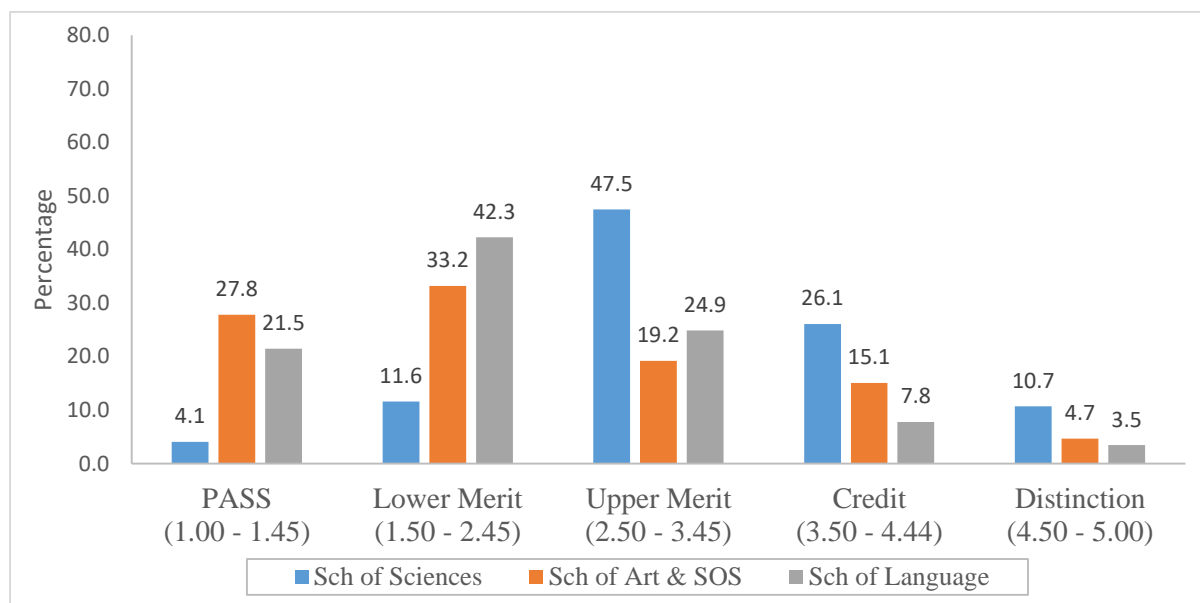


Figure 2: Proportion of Academic Achievement among Students of different Programmes in Colleges of Education in North East Nigeria from 2016 to 2020

The proportion of academic achievement of students of different programmes in Colleges of Education is presented in Figure 2. The results show fairly distribution of students' achievement across every grade. Meanwhile, those students in the science programme dominated upper merit, credit, and distinction grades, compared to those in the School of Art and Social Science and School of Languages that dominated pass and lower merit grades.

Research Question 3: What is the effect of enrolment trend on students' academic achievement in different programmes in Colleges of Education in North East Nigeria from 2016 to 2020?

Table 1: Analysis of Effect of Enrolment trend on Students' Academic Achievement in Colleges of Education in North East Nigeria

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error			
(Constant)	4.552	.591		7.702	.000
Enrolment	-.105	.022	-.564	-4.795	.000

a. Dependent Variable: Achievement

The result of regression analysis in Table 1 shows that there is a significant but negative contribution of enrolment rate on academic achievement of students in Colleges of Education, in North East, Nigeria. This implies that the enrolment rate into particular programmes is playing a significant but negative contribution towards the academic achievement of students in the colleges of education in Northeast, Nigeria. The results in Table 1 also reveal further that the coefficient value (B -.105, t=-4.795, P-value =0.000), which implies that the enrolment rate

responsible for about 10.5% reduction in academic achievement of students in Colleges of Education in North Eastern, Nigeria.

Discussion

The finding from this study shows that the enrolment pattern into programmes in the Colleges of Education in North Eastern Nigeria was disproportionate. Though earlier works by Adegbite and Omonuwa (2021), Katimus (2019), and Uwaifo (2017) have identified the disproportionateness in the patterns of enrolment, their respective studies justified the disproportionateness in enrolment based on different factors such as interest and motivation, individual learning styles, support systems, quality of teaching, peer environment, career goals, personal circumstances, advising and guidance, and personal challenges. The study by Adegbite and Omonuwa (2021) established that programme rigor is responsible for disparities in enrolment into various programmes in tertiary institutions. More so, Usman (2019) maintained that some programs may be more academically challenging than others. A highly rigorous program may demand more time and effort from students which accounts for a lesser enrolment rate in some programs while other programs have more enrolment rate. However, Uwaifo (2017) stated that a difference in enrolment rate or having a higher proportion of students in a particular programme than another does not justify the fact that such a program is superior to others.

The finding from the second research question shows that science students perform fairly better in academic grading compared to others. This result suggests some relativeness between the enrolment rate and students' achievement. Likewise, the results show that the students from the School of Art and Social Science and those from the School of Languages fall across achievement grades.

The finding from the third research question shows that there is a significant contribution of enrolment rate towards academic achievement. Specifically, the study shows that the enrolment rate contributes about 10.5% toward students' academic achievement. Meanwhile, the negative coefficient further indicates that the contribution of students' enrolment into a program toward academic achievement is negative. This implies that the more the enrolment the less the students' academic achievement could be. This finding shows some consistency with the earlier works by Levi-Doe (2019) and Usman (2019) which indicated a significant but negative relationship between high students' enrolment and students' academic performance. A similar finding was made by Henrik (2023) which established a significant but negative relationship between larger classroom size and students' academic performance, though the study focused on secondary education. Meanwhile, Barker, Grant, and Moriock (2018) have reiterated the fact that the rate of enrolment into a program is not the actual problem, the real issue is the learning facilities that can accommodate higher enrolment. This suggests that higher enrolment can be regarded as a serious issue when the required facilities to cater for such enrollment are not met. This is following the submission made by Adegbite and Omonuwa (2021), which established a strong relationship between enrolment rate, required facilities, and performance. Thus, the more the enrolment, the more the expected learning facilities ahead of securing better academic performance. This is not far from the submission made by Adejimi and Nzabalarwa (2021) that higher classroom sizes required more teaching time, and other learning facilities to yield the expected learning outcome. A similar view was shared by Bracey (2018) who maintained that even in small size classrooms the provision of adequate learning facilities cannot be compromised.

In tertiary institutions such as Colleges of Education where pre-service teachers are being trained, there is always a need for conscious programme planning including expected enrolment, adequate learning facilities, other school variables as well as an adequate supply of educators. The expected learning outcome could be a mirage if one or many learning facilities were grossly short. The proportionate of enrolment into any programme in a higher institution has to match the available or provided learning resources. This could ensure the overall effectiveness of teaching and learning. Indeed, higher enrolments into any programme do not reaffirm the supremacy of such programme over others, especially when considering the relevancy of each programme to human life and survival. However, Henrik (2023) and Levi-Doe (2019) expressed that there are societal hypes for and or against some programmes which force many students to either enroll or avoid being enrolled in a particular program. The societal hype and misconception could make many think that some programs are not suitable for certain genders while people of certain social classes should not be enrolled in a particular programme. All these misconceptions could only worsen the situation of tertiary institutions that seem closer to the people such as Colleges of Education.

Conclusion

The relevant contribution of enrolment pattern into a particular programme in colleges of education toward the academic achievement of students has been established in this study. This study through its findings has shown that some programmes recorded higher enrolment rates compared to others, whereas, the distribution of students'

achievement suggested that programmes with lesser students' enrolment rates recorded fairly well academic performance students than others.

Also, this study has reiterated that there is a negative but significant contribution of enrolment rate of students into a particular programme and students' academic achievement. This further shows that those programmes with higher enrolment rates have more students with low academic performance.

Recommendations

Based on the findings and conclusion from this study the following are the recommendations:

- i. The management in the colleges of education should set a benchmark for the enrolment pattern of students into programmes in their institution based on learning facilities
- ii. The policymakers should enact a policy that will enforce the management of colleges of education in North East Nigeria to enroll appropriate numbers of students according to facilities in their respective school

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