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Effects of Separate Campuses On The Academic Achievement of Physics Education Students of Department Of Science and Technology Education, University of Jos

[1]Ejiga Peter Job, [2]Raymond Tahdok Ibrahim & [3] Rilwanu Mohammed

[1,2] Department of Science and Technology Education,
Faculty of Education
University of Jos, Jos, Nigeria

[3]Department of Physics, Aminu Saleh College of Education Azare, Bauchi State, Nigeria
[1]petejiga@yahoo.com/08036342832
[2]myrilwan@gmail.com/08056556550
[3]ibrahimraymond80@gmail.com/08027094151

ABSTRACT
This research study investigated the influence of the separate campuses on Physics Education student's academic achievements of the Department of Science and Technology Education, University of Jos. Plateau State, Nigeria. The design adopted for the study was descriptive survey research design. The population was made up of a sample size of 100 students drawn from 3 different levels; which are 200, 300, and 400 levels all from Physics Education of the Department of Science and Technology, Faculty of Education in the University of Jos, Plateau state, Nigeria. Primary data was collected by the use of questionnaires, on the 4 Likert scale. Out of the 100 questionnaires distributed, only 99 was brought back. But before then, a pilot study was carried out to ensure reliability and validity. 10 students from another unit, though from the same department; Science and Technology Education were used. Data from the questionnaire; drawn from 4 research questions were analyzed, computed and represented in tables using mean and standard deviations while t-test was used as statistical tools to test the 2 hypotheses with 0.05 level of significance. The findings indicated that the separate campuses have significant negative influence on the student's academic achievements. In addition, it was ascertained that there is no significant relationship between gender and students' academic achievement but there is a significant relationship between student's residential location and students' academic achievement. The recommendations derived from this study include; that the administration should move biology courses offered in the main campus to a permanent site. Another recommendation is that all the general courses offered in the faculty of education should be independently handled by the various departments, e.g. art education, Physical and Health Education, social science education, science and tech. education from the point of lecture to examinations. These lectures should be held wherever these students take most of their courses to minimize stress.

Keywords: Influence, Separate Campus, Academic Achievement

INTRODUCTION

Education plays a key role for the future of individuals and the societies. It is a very pivotal process to any form of development Countries around the globe have perpetually pursued to improve the quality of education. The government has made efforts to improve the quality of education by improving the implementation of the learning process in schools. There is an increasing awareness of the importance of learner-centeredness in the teaching-learning situation which has drawn a lot of attention to understanding how to help them learn (Jegede, Alaiymota and Okebukola 1990). Dubey (2010) asserted that "a child's academic achievement is supposed to be determined by the child", incidentally, the child's performance today in schools depends on the nature of school, the environment, and his parents. This implies that the accessibility to studies and its environments, which entails a learner-friendly and adequately structured learning environment, good-quality lecturer-student relationship, appropriate and stress-minimized curriculum should be looked into, planned and structured in a way it does not interfere with student's academic achievements. If not so, despite the availability of every other facility in schools, even when appropriately utilized will do nothing or little to the enhancement of student's academic achievement which according to Egbule (2004) is the knowledge attained or skills developed in school subject by test-score indicating better academic performance. On the issue of relationship, Pianta (2003) opined that among the most influential factors that an individual relates with; parents and teachers or lecturers are pivotal and very important in developing the mental picture of one's self. Hence a child's self- esteem is the overall sense of support the child feels from the important people around, particularly parents and teachers (Tam & Fatimah, 2009). However, factors such as; stress related matters, financial issues, excessive workload, health problems, lecturer-student relationship, acclimatization to school environments and academic difficulties can hamper students' academic achievement. Stress related matters, more specifically encountered among students include difficult financial challenges, heavy academic load, lower grade, missing classes, tight examination timetable (Phinney and Hass 2003). According to them, various aspects of stress include burnout, anxiety, fear, worry and distress. All these affect the academic achievement of students. A publication on stress by the University of New York (Retrieved March 14, 2016) buttresses the notion that extreme levels of stress can hinder studies effectiveness and lead to poor academic success and attrition.

A learning institution remains an important area that should be studied, well organized and arranged bearing in mind the student in connection with the aim and objective of education ensuring that it does not disrupt or impede their academic achievement. A learning institution structured in a way that adds to or makes students undergo more physically, academically, financially stress and strain will as a result, displace the student's ability to cope and thereby loss concentration and that will have a negative effect on the student's academic achievement. This may be due to distance between lecture halls, excessive workload, financial involvement, long hours of lectures, and clashes in programs, lectures and exam timetables; due to various departments students attend lecture from, and inability to acclimatize to the school environments. On the financial aspect, the relative importance of the amount of social resources and the diversity of social resources to students learning cannot be empirically judged. This implies the finances play an important role in students' academic achievements as far as education is concerned.

Transportation problem is also seen as one of the factors eliciting from the separate campuses that Physics Education students' encounter which has an impact on students' learning. It focuses on the distance a student travels from one campus to the other on virtually daily bases. Students ought to have lectures within a specific environment to benefit from the academic program in its totality as it will discourage low attendance which affects students' academic performance. It has been observed that Physics Education Students from the Department of Science and Technology Education, University of Jos have a very alarming number of academic issues such as moving up and down from one campus to the other almost on daily basis to attend lectures; having a large number of students that have to repeat courses every semester; students on probation; students that voluntarily withdraw from the program due to inability to cope or frustration or both; students that have to be withdrawn by the school due to their inability to cope; and a very few number of students that complete a particular session without any course to repeat. This indicated there exists a high rate of failure in the unit. This issue needed to be examined in

order to understand the real causes of such massive failures so as to provide a lasting solution to it. This study had to be intended in order to look into the influence of the separate campuses on the Academic Achievement of Physics Education students, Department of Science and Technology Education, University of Jos, Plateau State, Nigeria.

Statement of the Problem

The separate campuses in the University of Jos, which results in faculties and departments in different locations has been attributed as the major influencer of students' academic achievement. Researchers such as Dubey (2010), Egbule (2004) and Pianta (2003) have established that students' performance today in schools depends on the accessibility to studies and its environments, which entails learner-friendly and adequately structured learning environment, good-quality lecturer-student relationship, appropriate and stress-minimized curriculum. This implies that factors as a result of the separate campuses such as: transportation, excess workload, inability to acclimatize to school environment, lecturer-student relationship which Physics Education students go through will have effect on their academic achievement. It was against this background that this study was intended to determine the influence of separate campuses on the Academic Achievement of Physics Education students, Department of Science and Technology Education, University of Jos, Plateau state, Nigeria.

Purpose of the Study

The study was guided by four purposes to determine:

1. the influences of separate campuses on Physics Education Students of the Department of Science and Technology Education, University of Jos;
2. the factors responsible for the stress encountered by Physics Education Students as a result of lectures in separate campuses of University of Jos, Plateau State;
3. the challenges faced by Physics Education Students as a result of lectures in separate campuses of University of Jos, Plateau State;
4. the solutions to the challenges faced by Physics Education Students as a result of lectures in separate campuses of University of Jos.

Research Questions

Four research questions were formulated in relation with the purposes as follows:

1. What are the influences of separate campuses on Physics Education Students of the Department of Science and Technology Education, University of Jos?
2. What are the factors responsible for the stress encountered by Physics Education Students as a result of lectures in separate campuses of University of Jos, Plateau State;
3. What are the challenges faced by Physics Education Students as a result of lectures in separate campuses of University of Jos, Plateau State?
4. What are the solutions to the challenges faced by Physics Education Students as a result of lectures in separate campuses of University of Jos?

Research Hypotheses

Two null hypotheses were tested at 0.05 level of statistical significance.

HO1: There is no significant difference between the mean responses of 200 and 300 level Physics Education students on the influences of separate campuses.

HO1: There is no significant difference between the mean responses of 200 and 300 level Physics Education students on the solutions to the challenges they faced as a result of lectures in separate campuses of University of Jos.

METHODOLOGY

The research design adopted for this study was the descriptive survey research design. The population of the study was 5028 Students from the various units of the Department of Science and Education, Faculty of Education, University of Jos, Plateau State. The purpose of the study was to determine the influence of separate campuses on the academic achievement of Physics Education students of the Department of Science and Technology Education, University of Jos. Four research questions and two hypotheses were formulated to guide the study. The research questions were analyzed using mean and standard deviation

while the two hypotheses were tested using z-test statistical tool at 0.05 level of significance. Four Likert scale with 2.50 as the cut-off point was used to make decision such that any item with a mean of means value greater than or equal to 2.50 was regarded agree while item with less than 2.50 was regarded as disagree. Purposive sampling technique was used to select Physics Education unit based on the fact the unit does have a lot of lectures from both campuses of the university. However, a simple random sampling technique was used in selecting two levels, i.e., 200 and 300 levels, each with 50 students, making a total of 100 students. The instrument for data collection was a structured questionnaire, made up of 30 items which were developed by the researcher titled: Influence of Separate Campuses on the Academic Achievement of Physics Education Students of the Department of Science and Technology Education, University of Jos based on review of related literature. The instrument for data collection was subjected to face validation by three experts from the Department of Science and Technology Education, University of Jos, Plateau State, Nigeria. Validates checked the suitability and clarity of the items; included some items which were relevant but not been included in the instrument and removed ambiguous in order to improve the structure of the items. The final copies of the questionnaire were produced based on the comments and suggestions of the experts. Cronbach Alpha method of calculating reliability was used to calculate the reliability index of 0.76 which was obtained by administering a single test to 60 Chemistry students; 30 students each for 100 and 400 levels from the Department of Science and Technology Education, University of Jos. The choice of respondents from the Chemistry Education unit was due to the fact that the unit also offers courses from both campuses and was not used in the study proper.

RESULTS AND ANALYSIS

The results were presented below in accordance with the research questions and the hypotheses.

***Research Question* 1:** *What are the influences of separate campuses on Physics Education Students of the Department of Science and Technology Education, University of Jos?*

Table 1

Mean and Standard Deviation of Respondents on the Influences of Separate Campuses on Physics Students of the Department of Science and Technology Education, University of Jos

S/N	Item	$\bar{T}1$	S1	T2	S2	$\bar{T}m$	Remark
1.	I frequently walk from one campus to the other to attend lectures.	3.32	0.98	3.26	1.01	3.29	Agree
2.	I walk because there is no public transport route between the two campuses.	2.12	0.90	1.88	0.72	2.00	Disagree
3.	I walk from one campus to another because walking is my hobby.	1.88	0.66	2.02	0.62	1.95	Disagree
4.	I walk to school sometimes due to financial constraint.	3.80	0.40	3.62	0.67	3.71	Agree
5.	I am usually come late for class as a result of trekking from one campus to the other.	3.58	0.61	3.52	0.65	3.55	Agree
6.	I usually forfeit lecture whenever transport is very difficult to access.	3.06	0.91	3.18	0.72	3.12	Agree
7.	I spend up to N 500 every week on transport.	3.70	0.68	3.34	0.85	3.52	Agree
8.	On transport fare only, I spend nothing less than N1000 weekly.	3.62	0.78	3.44	0.84	3.53	Agree
9.	I sometimes have to miss lecture due to lack of transport fare.	3.64	0.69	3.48	0.68	3.56	Agree
10.	All these have negative effect on me academically.	3.44	0.79	3.22	0.89	3.33	Agree
	GRAND	3.22	0.74	3.15	0.77		

Key: $\bar{T}1$ = Mean Response of 200 Level Students, S1 = Standard Deviation of 200 Level Students T2 = Mean Response of 300 Level Students, S2 = Standard Deviation of 300 Level Students,
TM= Mean of Means

The data shown in table 1 revealed that 200 level students rated the entire items within the range of 1.88 to 3.80 while 300 level students rated the items within the range of 1.88 to 3.62.

The values of mean of means of the items as rated by students from both levels were within the range of 1.95 to 3.7. The table revealed that with exception to items 2 and 3, all items were agreed with respect to the influences of separate campuses on Physics Education Students of the Department of Science and Technology Education, University of Jos. Similarly, the table revealed that the standard deviations of the items as rated by students from both levels were within the range of 0.40 and 1.01, indicating that there was a higher degree of unanimity of response among them.

***Research Question* 2:** *What are the factors responsible for the stress encountered by Physics Education Students as a result of lectures in separate campuses of University of Jos, Plateau State?*

Table 2:Mean and Standard Deviation of Respondents on the Factors Responsible for the Stress Encountered by Physics Education Students as a result of Lectures in Separate Campuses of University of Jos

S/N	Item	$\bar{T}1$	S1	T2	S2	$\bar{T}m$	Remark
1.	Many hours of studies/lectures as a source of stress to me.	3.08	0.92	3.08	0.83	3.08	Agree
2.	Lower grade as an academic factor, is a source of stress to me.	3.58	0.57	3.40	0.86	3.49	Agree
3.	Examination as an academic factor, is a source of stress to me.	3.22	0.97	3.36	0.80	3.29	Agree
4.	Increased class workload (e.g.assignment) is a source of stress)?	2.58	1.01	2.56	1.03	2.57	Agree
5.	I usually do not feel well whenever I am stressed out.	3.64	0.48	3.42	0.78	3.53	Agree
6.	I usually find it difficult to sleep at night when I am stressed.	3.20	0.95	3.14	0.88	3.17	Agree
7.	I am always unable to read or carryout assignments when am stressed.	3.52	0.65	3.38	0.67	3.43	Agree
8.	Stress itself, has negative effects on academic achievement.	3.68	0.51	3.34	0.88	3.51	Agree

The data shown in table 2 indicated that 200 level students rated the entire items within the range of 2.58 to 3.68 while 300 level students rated the items within the range of 2.56 to 3.42. The values of mean of means of the items as rated by students of both levels were within the range of 2.57 to 3.53. The table revealed that all the items were agreed with respect to the factors responsible for the stress encountered by Physics Education Students as a result of lectures in separate campuses of University of Jos. Similarly, the table revealed that the standard deviations of the items as rated by students from both levels were within the range of 0.48 and 1.03, indicating that there was a higher degree of unanimity of response among them.

***Research Question* 3:** *What are the challenges faced by Physics Education Students as a result of lectures in separate campuses of University of Jos, Plateau State?*

Table 3: Mean and Standard Deviation of Respondents on Challenges Faced by Physics Education Students as a result of Lectures in Separate Campuses of University of Jos

S/N	Item	$\bar{T}1$	S1	T2	S2	$\bar{T}m$	Remark
9.	Clashes in my timetable are due to the different timetables from the three departments in the separate campuses.	0. 80	0.40	3.76	0.43	3.78	Agree
10.	Severally, I forfeit one lecture for another due to clashes in timetable.	3.68	0.51	3.58	0.64	3.63	Agree
11.	Most times, I leave half-way into a lecture just to catch up with another lecture because of clashes in the lecture timetable.	3.60	0.57	3.46	0.76	3.53	Agree
12.	My workload is too much because of the three departments in the separate campuses from which I take courses.	3.48	0.74	3.28	0.86	3.38	Agree
13.	There are side effects of these excessive work load on my health.	3.48	1.01	2.88	1.14	3.18	Agree
14.	The excess workload from the three departments affect my academic achievements.	3.42	0.86	3.32	0.84	3.37	Agree

The data presented in table 3 indicated that 200 level students rated the entire items within the range of 3.42 to 3.80 while 300 level students rated the items within the range of 2.88 to 3.76. The values of mean of means of the items as rated by students of both levels were within the range of 3.18 to 3.78. The table also showed that all the items were agreed with respect to the challenges faced by Physics Education Students as a result of lectures in separate campuses of University of Jos. Similarly, the table revealed that the standard deviations of the items as rated by students from both levels were within the range of 0.40 and 1.14, indicating that there was a higher degree of unanimity of response among them.

***Research Question* 4:** *What are the solutions to the challenges faced by Physics Education students as a result of lectures in separate campuses of University of Jos?*

Table 4: Mean and Standard Deviation of Respondents on the Solution to the Challenges Faced by Physics Education Students as a result of Lectures in Separate Campuses of University of Jos

S/N	Item	$\bar{T}1$	S1	T2	S2	Tm	Remark
1.	Employing enough staff in the department of Science and Technology Education that teach all courses.	3.76	0.43	3.64	0.56	3.70	Agree
2.	Having an unbiased lecture venue that will also require students from natural sciences come down to P-site for lectures.	3.68	0.51	3.54	0.68	3.61	Agree
3.	Having a joint time-table committee from Both Faculties of Education and Natural Sciences to enable them draft time-table void of clashes.	3.28	0.93	3.24	0.85	3.26	Agree
4.	Providing free bus by the University management for the convergence of students from one campus to the another.	3.56	0.67	3.44	0.79	3.50	Agree
5.	Creating a forum in regular interval to address students' needs and challenges as regards lecture time.	2.82	1.16	3.02	0.96	2.92	Agree
6.	Improving student-teacher relationship.	3.60	0.53	3.46	0.79	3.53	Agree
		GRAND		3.45	0.71	3.39	0.77

The data presented in table 4 indicated that 200 level students rated the entire items within the range of 2.82 to 3.68 while 300 level students rated the items within the range of 3.02 to 3.64. The values of mean of means of the items as rated by students of both levels were within the range of 2.92 to 3.70. The table also showed that all the items were agreed with respect to the solutions to the challenges faced by Physics Education students as a result of lectures in separate campuses of University of Jos. Similarly, the table revealed that the standard deviations of the items as rated by students from both levels were within the range of 0.43 and 1.16, indicating that there was a higher degree of unanimity of response among them.

Research Hypotheses

Ho1: There is no significant difference between the mean responses of 200 and 300 level Physics Education students on the influences of separate campuses. As stated earlier, this hypothesis was tested using t-test at 0.05 level of significance. The results were presented in table 5 below.

Table 5: z-test of Difference between 200 and 300 levels Physics Education Students on the Influence of Separate Campuses of University of Jos, Plateau State

Respondent	N	Mean	S	df	t- stat	p-value	Decision
200 level Students	50	3.22	0.74	98	0.1455	0.1795	NS
300 level Students	50	3.15	0.77				

As presented in table 5, the grand means of both levels of students stood at 3.22 and 3.15 while their grand standard deviations stood at 0.74 and 0.77. The tstat. was 0.1455 and the p-value stood at 0.1795. The results indicated that the p-value was greater than the alpha at 0.05 level of significance i.e., $p > 0.05$. This means that there was no significant difference between the mean responses of 200 and 300 level Physics Education students on the influences of separate campuses. Thus the null hypothesis was accepted.

Ho2: There is no significant difference between the mean responses of 200 and 300 level Physics Education students on the solutions to the challenges they faced as a result of lectures in separate campuses of University of Jos. This hypothesis was tested using t-test at 0.05 level of significance. The results were shown in table 6 below.

Table 6 z-test of Difference between 200 and 300 levels Physics Education Students on the Challenges they Faced as a result of Lectures in Separate Campuses of University of Jos, Plateau State

Respondent	N	Mean	S	df	t stat	p-value	Decision
200 level Students	50	3.45	0.71	98	1.1078	0.3184	NS
300 level Students	50	3.39	0.77				

The data presented in table 6 showed that, the grand mean of both levels of students stood at 3.45 and 3.39 while their grand standard deviations stood at 0.71 and 0.77. The t- stat. was 1.1078 and the p-value stood at 0.3184. The results indicated that the p-value was greater than the alpha at 0.05 level of significance i.e., $p > 0.05$. This revealed that there was no significant difference between the mean responses of 200 and 300 level Physics Education students on the challenges they faced as a result of lectures in separate campuses of University of Jos. Thus, the null hypothesis was upheld.

DISCUSSION OF FINDINGS

Findings based on research question one showed that Physics Education students always walk/trek from one campus to the other to attend lectures which makes them come to class late and sometimes had to forfeit lectures due to lack of transportation fare and this by extension affect their performance in school. This finding is in agreement with the assertion of Phinney and Hass (2003) that financial difficulty students encounter lowers their academic performance. Finding based on research question two revealed that factors responsible for stress include: an increased class workload coupled with trekking from one campus to the other. Extreme levels of stress can hinder studies effectiveness and lead to poor academic success and attrition (UNY, Retrieved March 14, 2016). Findings in relation with research question three

showed that lashes of lectures such that one lecture must be forfeited for another or one had to leave a lecture half-way in order to catch up with another. This kind of scenario is attributed to the nature of lecture campuses which has so many negative influences on students' performance. In support, Dubey (2010) asserted that an individual's academics today in schools depend on the nature of school and the learning environment. The way out to these menace based research question four include: having enough staff in the Department of Science and Technology Education; having a joint time-table committee from both faculties of Natural Sciences and Education to draft a time-table void of clashes; provision of free bus by the university management, improving student-teacher relationship among others. On the issue of the relationship, Tam & Fatimah (2009) supported that a student's self- esteem is the overall sense of support the student feels from the important people around, particularly parents and teachers. The study also revealed that there was no significant difference between the mean responses of 200 and 300 level Physics Education students on both the influences and challenges they faced as a result of lectures in separate campuses of University of Jos. The two null hypotheses stated were upheld.

CONCLUSION

The study showed, judging by the responses to the items on the research questions, that the separate campuses have numerous negative influence on the academic achievement of Physics Education students such that one lecture must be forfeited for another or they have to leave a lecture half-way in order to catch up with another due to clashes of lectures. Also, trekking from one campus to the other usually drains their energy such that they always feel exhausted which by extension prevents them from their studies. All these scenarios have the capacity to make students record low academic performance that could lead to repeat of courses every semester, probation, voluntary withdrawal or withdrawal by the school.

RECOMMENDATIONS

1. Lecture halls, officers, laboratories etc., should be moved to a permanent site so that all education activities will take place there.
2. The general courses from the Faculty of Education should be independently handled by the various departments.
3. The school management should consider bringing into the University, Department of Biological Sciences, by doing so, Physics will be taught as a single.
4. There should be frequent interaction between academic staff and students from both campuses on how best to schedule intensive courses in the cause of the semester work.

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