Effect of Day-Studentship on Study of Geography among Female Students in Secondary Schools in Owerri, Nigeria

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Abstract
The purpose of this study is to investigate the effect of day – studentship on the study of geography among female students in the secondary schools in Owerri metropolis. Data from school records were categorized and broken into appropriate descriptive statistics some of which were presented on frequency tables. Percentages and Chi square model were also used in the analysis. The findings include the following; there is significant variation in the performance of geography candidates in geography in the WASSCE, the schools in the inner city / core area have better performance than those in the fringes. Some of the recommendations include, the making of fieldwork compulsory for both day students and boarders alike, the teaching of geography in secondary schools from J.S.S.1 to S.S 111, the re-invigoration of guidance and counseling in schools to encourage girls with a flair for exploration to study geography, the institution of prizes on a yearly basis to best performing girls’ school by the Association of Nigerian Geographers to foster competition in geography among females in secondary schools, and the sending of female children to secondary schools in the municipality which is the core area for better performance in geography WASSCE by parents/wards.
Keywords: female students; geography; day-studentship; WASSCE; Owerri.

Introduction
Day-studentship system has gained so much ground in recent times in Imo State in particular and Nigeria as a whole. This system was carried over from the former East Central State Administration as post-Nigeria Civil War event in the admission policy into secondary school.

Geography as a discipline is the study of the earth in space – the living place of man. It has a very long history as it started with the Greeks in 580 BC and reached Nigeria only in the 19th Century AD (1850) (High and Richards, 1970). The philosophical problem of what is worth teaching and the psychological considerations of what to teach and how to teach it, problems of sociological origins in getting children to learn, are all undermining the teaching and learning of Geography in schools. With the society rapidly undergoing transformation and the latter gaining a more global focus, there is the need to get the female students amidst her male counterparts into the depths of the study of geography as a discipline. But how this cumbersome discipline could be taught to the day students under a congested time-table as well as how the girl-child can cope with this subject faced with an apathy towards general education of females, is indeed a problem.

Theoretical Background
According to Okeke (1985), organizational efficiency of secondary education depends on proper school environment (boarding-houses and classroom blocks). Secondary education has passed through tremendous changes in Nigeria. The changes are still taking place and we must completely face the truth that we cannot dodge the moral responsibility for changes. That man, the individual, and man in general, get increased power and meaning from the changes is the greatest challenge of education (Okeke, 1985). Thus, there is need for a systematic arrangement of human and material resources and programmes that are available for education. That is why scholars (Kimbrough and Nunnery, 1983; Peretomode, 1991) concerned with the administration of complex organizations view an organization as a system.

Sherlekar (1984) defines system as “an organized complex whole, combination of things or parts forming a complex or unitary whole”. A systems approach to educational administration attempts to view the school as a unified, purposeful organization or as a system composed of interrelated parts. If one is to assess the health of a secondary educational system in order
to improve its performance and probably plan for its future meaningfully, the relationship between its critical components must be examined as an entity (Onuoha, 1995).

There is so much to cover within a space of time, a situation further aggravated by the introduction of the 6-3-3-4 system (Onuoha 1995). This is why Uboegbulam (1986) opined that the logical reaction of students to the extensive content of geography is the reduction in the number of candidates offering geography for West African Examination Council examinations.

Uboegbulam (1986) in a study carried out in Imo State discovered that map work and physical geography are the most difficult aspects of geography. He attributed this to loss of interest by students due to defective methods of teaching, nature of subject matter and time available for the subject matter. Thus it confirms that teachers shy away from some aspects of geography. Onuoha (1995) and Emetarom (1987) strongly believe that concepts, theories and ideas are internalized only when they have been represented and illustrated with real life situations and advocated for it.

Yalokwu and Amadasun (1990) claim that often times, the duration of the geography period does not allow the teachers and students time to really interact with the local environment under study. The geography teachers presently are finding it difficult to integrate all these aspects of geography within three years. It is a situation caused by the innovation of 6-3-3-4 system which has caused a chain reaction in the whole system. Invariably, this will directly affect the quality of the students output. Generally, all these go to confirm that the processes involved in the system are very important for reliable, qualitative teaching and for greater productivity.

**Day-Studentship in the Post-Primary School System**

A study conducted by Onyemesim (1997) revealed that neighbourhood schools were introduced to help reduce the amount of money spent on secondary education by parents. With the economic depression from then on, government has not been able to increase its allocation to secondary education to the level that was commensurate with the increase in number of enrolment, teaching staff and provision of other amenities (Osuji, 1998). This has caused the parents to spend more on areas that should have been the responsibility of the government. Parents also discovered that it was cheaper for the male/female students to attend school as day students rather than as boarders. With the girl-child in view the question to ask is “what is the
performance in external examinations of female day students and boarders in geography as a subject?” That way one can ascertain which option is currently the best in the secondary school system since according to Ekeada, Nkwegu, and Nwaimoh (2005) the tone of the school and status of the learner are veritable variables for good performance in public examinations.

**Geography as a Discipline**

Kolars and Nystuen (1975) defined geography as the study of man environment systems from the viewpoint of spatial relationships and spatial processes. Geography according to Majasan (1995) is the dynamic science that describes the earth as the home of man and the stage on which he carves permanent features to aid his growth and development. As a subject, it is versatile, expressive, creative and intellectually stimulating. It is foremost in developing critical thinking in children among all school subjects and facilitates correlation of experiences. From this it becomes clear how geography enhances understanding of the world around man. To do this, physical and social systems and the interaction between them are discussed in relation to their spatial qualities. Field-work which is an integral part of geographic teaching, allows the students during fieldtrips to observe and experience things by themselves especially in their surrounding/environment (Onyenechere, 2001). Then, could spatial variation be responsible for the nature of performance of the female geography students in geography external examination in schools as seen today? The need to rationalize location is anchored on the need to reduce inequalities. In this study therefore the researchers sought to find out the influence of location and day studentship on performance in geography among female students.

**Objectives of the Study**

1. With particular reference to Bishop Lasbrey Girls Secondary School where sufficient data is available; to ascertain if there is any relationship between performance of boarders and day students and geography.

2. To identify if the location of school affects the performances of female students in geography West African Senior School Certificate Examination (WASSCE).

**Hypotheses**

The following research hypotheses guided the research.
Effect of Day-Studentship on the Study of Geography among Female Students...

1. There is no significant difference in performance of day students and boarders in Bishop Lasbrey Girls Secondary School.

2. There is no spatial variation in performance of female students in West African Senior School Certificate Examination (WASSCE) in Owerri metropolis.

Methodology
The study was carried out in Owerri metropolis. Owerri metropolis consists of Owerri North L.G.A, Owerri Municipal Council and Owerri West L.G.A. and they possess seven State Government-owned Female Secondary Schools that offer geography (of which five have boarding facilities). Using stratified sampling procedure three of these schools were randomly selected at one per L.G.A. Their names are Owerri Girls Secondary School, Bishop Lasbrey Girls Secondary School and Our Lady of Mount Carmel Girls School. Summary sheets showing the results of the schools in West African Senior School Certificate Examination for two years, 2005 and 2006 were collected from the principals of the three schools. The performances were categorized as: Good for aggregate results of A1, A2, and B3; Credit for aggregate results of C4, C5 and C6; Pass for aggregates P7 and P8 and Fail for aggregate F9. The list of boarders was collected from some hostel mistresses, while the list of the students that offered geography was obtained from the subject teachers of only two schools which to some extent facilitated the collation of the data. The dearth of records restricted the study to recent results for two years only. The selected schools are shown in Table 1.

All these students from the sampled schools form the sample of this study. The percentage ratio was used as a statistical tool for data analysis. Where the percentage ratios proved unsatisfactory in establishing the relationship sought. Further statistical analysis using the Chi-square test was employed to probe the relationship as satisfied and used for analysis as Ekeada, Nkwegu, and Nwaimoh (2005). In summary the design of this research work was comparative in approach, as performances of female students in geography were compared with respect to their school location.

Result and Discussion
The tables in this sub-section present the analyses of data collected on academic performance of female students in geography. When this study was conceived, the interest was to ascertain the performance of boarders and day-
students’ (non-boarders’) performance in W. A.S.S.C. geography examinations and use same to make a case for or against the continued existence of boarding houses in the Imo State School system.

During the data collected exercise, it was noticed that the girl schools with boarding facilities are only three in Owerri metropolis. Of the three, only Bishop Labrey Girls Secondary School has records of result decoded into boarders and non boarders. This revelation paralyzed the initial trust and paved way for the spatial variation analysis used in this study.

The data from bishop Lasbrey, Irete show that in 2005, two boarders took the W.A.S.S.C Geography examination and the two had aggregate 9 known as F9 (see Table 2) There were 34 non- boarders, 4 of whom passed in aggregate 7 while 30 failed. In 2006, 6 boarders took the examination recording 4 credits and 2 passes while 49 Day – students sat for the same examination and had 12 in the Alpha (Good ) grade, 20 credit, 7 pass, 4 failures, 2 pending and 4 withheld ( see Table 3).

In a situation such as this no meaningful analysis that can culminate in a generalization can be made. It is equally not viable to base a policy issue on what is got from one school. However, the revelation exposes the dearth of record keeping among school administrators in Imo State school system.

Similarly in Table 4, the results as published by West African Examination Council were collapsed into Good, Credit, Pass and Fail. In Table 4 aggregates 1, 2 and 3 are labeled Good; 4, 5 and 6 are labeled Credit; 7and 8 are labeled pass; and aggregate 9 is labeled Fail. However, Absent, Pending and Withheld results are labeled No result .It may not be enough to identify the spatial variation of the performances without adducing possible reasons for the observed scenario. This calls for a closer study of the results (See Table 4). Under the good cadre Bishop Lasbrey Girls Secondary School Irete, Owerri West has 13.5 percent of the candidates in this group, for Our Lady of Mount Carmel, Emekuku, Owerri North, the ratio is 27.0 percent while Owerri Girls Secondary School has 43.6 percent of its candidates in this cadre.

The disparity of these ratios is disturbingly glaring. Academic performance is a synthesis of many variables which include tone of the school, qualifications and adequate number of the teachers, intelligent quotient (I.Q) of the candidate, school environment, instructional materials availability, status whether model school or not, among others. The investigation under review
assumes that the location of a school is an index for measuring the school environment. If other variables are kept constant, the contribution of the environment in the performance of students can be mirrored. It is based on this premise that analysis on spatial variation (locational analysis) is undertaken in this study. It has to be borne in mind that Emekuku and Irete are in the fringe zone of Owerri Metropolis while Owerri Girls Secondary School is located in the inner city. The spatial variability is therefore indicative that the school located in the core area of Owerri has better results. In the failure category, Bishop Lasbrey Irete has 38.2 percent failure, Our Lady of Mount Carmel Emekuku 4 percent while Owerri Girls Secondary School Owerri has 2.6 percent of its candidates in this cadre. Again, statistically Owerri Girls Secondary School has the lowest rate of failures in West African Senior School Certificate Examination in Geography. The same trend is maintained in the credit category as the percentage ratios are 27, 34 and 34.9 respectively (See Table 4).

From Table 5 above the computed Chi-Square statistic is 155.146. Testing at 95, 99 and 99.9 percent confidence limits at 8 degrees of freedom, the critical values at these levels of significance are 15.507, 20.090 and 26.125 respectively. Since the computed Chi-Square statistic is higher than all the critical values, the null hypothesis is rejected. The alternative hypothesis that there is significant variation in the performances of geography candidates in West Africa school Certificate examination based on the 2005 and 2006 results among female secondary schools in Owerri metropolis is accepted.

It is pertinent to note that Owerri metropolis spans across Owerri Municipal council Area, Owerri West L.G.A. and Owerri North L.G.A. The three school whose 2005 and 2006 West Africa School Certificate results are used in the analysis are locationally representative of each local Government Area.; Owerri Girls’ Secondary School is in Owerri Municipal Council Area; Bishop Lasbrey Girls Secondary School is in Owerri West L.G.A. while Our Lady of Mount Carmel Girls Secondary School is in Owerri North L.G.A.

**Testing of Hypothesis**

H₀: There is no significant spatial variation in the performance of geography candidates in West African School Certificate Examination among female secondary schools in Owerri Metropolis.
Conclusion
The research has revealed the interrelationship that exists between the study of geography as a cognate discipline in the female secondary schools and the status of the learner/school environment (location) has been identified. The results showed that there is significant variation in the performance of geography candidates in the West African Senior Secondary School Certificate Examination based on the 2005 and 2006 results among female secondary schools in Owerri Metropolis. That schools in the inner city/core area have better performance than those in the fringes was also revealed. Since academic performance is a synthesis of many variables our recommendations are broad based. This study recommends further study on the issue of Day-studentship and Geography as a discipline in secondary school perhaps in non-government owned school which may have better record keeping. In addition, the following recommendations are made: fieldwork should be compulsorily made an integral part of geography teaching in which every student whether boarder or day student should avail himself and there is need for a re-invigoration of guidance and counseling in schools to encourage girls with a flair for exploration to study geography. The study of geography as an academic subject which is currently being taught in the senior secondary school should be taught from J.S.S. 1 to S.S.111. The utilization of these six years will help the student whether boarding student or day student to cover the topics in the syllabus. By implication of this study parents should send more of their female children to schools in the municipality which is the core area, for better performance in geography. The State Ministry of Education is also encouraged by result of this study to open more female secondary schools. The Association of Nigeria Geographers (A.N.G.) and state government should encourage competition in geography among female secondary schools by giving prizes on yearly basis to best performing school, to teachers with the best result in geography and university scholarship to overall best students in geography WASSCE.

References
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Table 1: Female schools with both Day- students and Boarders in Owerri Metropolis that offers geography in WASSCE

<table>
<thead>
<tr>
<th>S/N</th>
<th>Schools</th>
<th>Total number of student for 2004/2005 and 2005/2006 sessions</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Owerri Girls Secondary School, Owerri</td>
<td>390</td>
</tr>
<tr>
<td>2.</td>
<td>Bishop Lasbrey Girls Secondary, Irete</td>
<td>89</td>
</tr>
<tr>
<td>3.</td>
<td>Our Lady of Mount Carmel Girls School, Emekuku</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 2: 2005 West African Senior School Certificate Examination results in Geography from Bishop Lasbrey Girls Secondary School in Owerri West Local Government Area.

<table>
<thead>
<tr>
<th>Category</th>
<th>Good A1 - B3</th>
<th>Credit C4 - C6</th>
<th>Pass P7 &amp; P8</th>
<th>Fail F9</th>
<th>Pending</th>
<th>Absent</th>
<th>Withheld</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boarders</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td>Day-students</td>
<td>-</td>
<td>-</td>
<td>4</td>
<td>30</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>34</td>
</tr>
</tbody>
</table>
Table 3: 2006 West African Senior School Certificate Examination Results in Geography from Bishop Lasbrey Girls Secondary School in Owerri West Local Government Area.

<table>
<thead>
<tr>
<th>Category</th>
<th>Good A1-B3</th>
<th>Credit C4-C6</th>
<th>Pass P7 &amp; P8</th>
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<th>Pending</th>
<th>Absent</th>
<th>Withheld</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boarders</td>
<td>-</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>6</td>
</tr>
<tr>
<td>Day-student</td>
<td>12</td>
<td>20</td>
<td>7</td>
<td>4</td>
<td>2</td>
<td>-</td>
<td>4</td>
<td>49</td>
</tr>
</tbody>
</table>

Table 4: Frequency Distribution of 2005 and 2006 West African Senior School Certificate Examination Results in Geography in some Schools in Owerri Metropolis.

<table>
<thead>
<tr>
<th>School</th>
<th>Frequency Percentage</th>
<th>Good A1-B3</th>
<th>Credit C4-C6</th>
<th>Pass P7-P8</th>
<th>Fail F9</th>
<th>No Results (Pending &amp; Withheld)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bishop Lasbrey</td>
<td>F 12 (13.5)</td>
<td>24 (27.0)</td>
<td>13 (14.6)</td>
<td>34 (38.2)</td>
<td>6 (6.7)</td>
<td>89 (100.0)</td>
<td></td>
</tr>
<tr>
<td>Our Lady of Mt. Carmel</td>
<td>F 27 (27.0)</td>
<td>34 (34.0)</td>
<td>33 (33.0)</td>
<td>4 (4.0)</td>
<td>2 (2.0)</td>
<td>100 (100.0)</td>
<td></td>
</tr>
<tr>
<td>Owerri Girls Sec. Sch.</td>
<td>F 170 (43.6)</td>
<td>136 (34.9)</td>
<td>54 (13.8)</td>
<td>10 (2.6)</td>
<td>20 (5.1)</td>
<td>390 (100.0)</td>
<td></td>
</tr>
</tbody>
</table>

Table 5: Relationship between Performances in WASSCE Geography and Female Secondary School in Owerri Metropolis with respect to Location

<table>
<thead>
<tr>
<th>School</th>
<th>Good (O)</th>
<th>Credit</th>
<th>Pass</th>
<th>Fail</th>
<th>No Result</th>
<th>X² – Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lasbrey</td>
<td>12 (32.1)</td>
<td>24 (29.5)</td>
<td>13 (15.4)</td>
<td>34 (7.4)</td>
<td>6 (4.3)</td>
<td>155.146</td>
</tr>
<tr>
<td>Mt. Carmel</td>
<td>27 (36.1)</td>
<td>34 (33.5)</td>
<td>33 (17.3)</td>
<td>4 (8.3)</td>
<td>20 (18.9)</td>
<td>15.507</td>
</tr>
<tr>
<td>Ow. Girls Sec. Sch.</td>
<td>170(140.8)</td>
<td>136 (130.7)</td>
<td>54 (67.3)</td>
<td>10 (32.3)</td>
<td>20 (18.9)</td>
<td>20.090 (26.125)</td>
</tr>
</tbody>
</table>

\[
X^2 = \frac{(O - E)^2}{E}
\]

\[
X^2 (0.05)_8 = 15.507
\]

\[
X^2 (0.01)_8 = 20.090 \quad \text{and} \quad X^2 (0.001)_8 = 26.125
\]