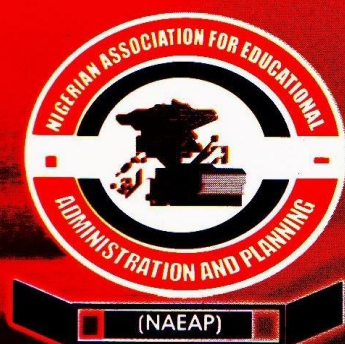


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## TEACHERS UTILIZATION AND STUDENTS ACADEMIC PERFORMANCE IN CROSS RIVER STATE PRIVATE/PUBLIC SECONDARY SCHOOLS

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### ABSTRACT

This study investigated manpower utilization and student academic performance in public secondary schools in Cross River State. The population of 2100 teachers was used for the study out of which 600 teachers constituted the sample through stratified random sampling technique. The mean and standard deviation were used to answer the research questions while the Pearson product moment correlation was used to test the hypotheses. The result showed that appropriate subjects placement of teachers has directed influence on student's academic performance; when there are a reduction in teacher's workload and class size these is the tendency for the students to perform better. Above all teachers record high task accomplishment when appropriately placed. It was recommended that additional qualified teachers be employed. There should be a redistribution of teachers to the area of need. Teachers should be appropriately placed in their teaching subject for this has capacity to get the schools back the track effectiveness.

### Introduction

#### Background to the study

The level and development of any country is to a large extent dependent on the quantum of trained and competent manpower available for the proper production and management of her resources. The day to day running of school organization is also dependent on trained manpower. Today's modern growth is predicated on technology and especially now that the world is interacting into a global system. This attempt is geared towards creating a global village. It makes the productions of technical and vocational teachers a condition necessary to shot the nations into the lead of socio-economic development through appropriate manpower development and functional curriculum. Human resource which accumulates physical capital, exploit natural resources and build socio-political structure vital to national development constitutes the ultimate basic for the wealth of nations this makes utilization of trained manpower relevant in order to attain desire productivity in any organization.

Manpower therefore is an essential factor in the production process and the entire nation economy. This explains why developing countries focus interest on manpower planning. The quest for manpower could be traced to Ashby plan which was to increase supply of enrolment ratio of technical and vocational teachers, at least six teachers to one professional engineer. It becomes necessary that developed and developing nations cannot ignore manpower trained and utilization in order to participate in globalization since it is geared toward integrating regional economic boundaries into a global system.

This position suggests, that no organization can exist without resources to enable it carry out its stated objectives, some of the resources that have been identified include capital, land, labor as well as the entrepreneur. Entrepreneur and labour constitutes the residual in human capital, while land and capital remain material forms of resources. The emphasis here the residual contribution is capable to make or mar any organization effectiveness.

Education over the year has been identified as an avenue where occupational/professional categories are produced both for socio-economic and national development. The Nigerian Government in her bid to ensure equity in educational development has gone further to disclose areas that are

educationally advantage or less developed. This decision was made by the government at their disposal.

Teaching staff in secondary schools in Cross River State form part of the essential resource in the educational provision. For years now, the issue of qualified and competent staff to fill the teaching position in arts, science, technical and vocational subjects in secondary schools in Cross River State is almost becoming a perennial problem in our numerous educational establishments especially in our educational institutions of learning. It is even worse off with the inverse relationship between teacher's demands and supply.

**Statement of problem**

One of the researcher was privileged to supervise undergraduates teaching practice. In course of this task in secondary schools he observed that the students' performance was declining. This made the investigator to move further to ascertain what could be responsible. The level of teacher usage was teachers are wrongly placed in terms of their teaching relevance. Others were over used and under used. These situations suggested that some form of wastage in manpower utilization had occurred. It became the concern of the researcher to empirically investigate manpower utilization and its relationship with student's academic performance.

**Purpose of the study**

The main purpose of this study is to assess staff utilization and its influence on institutional effectiveness from student performance in Cross River State Secondary Schools. Specifically, the purpose include:

1. To determine how subjects relevance of teachers relate with student academic performance.
2. To identify the relationship between class size on student academic performance.
3. To show how teachers workload relate with student academic performance.

**Scope of the study**

The study covered all the States Government owned secondary schools in Cross River State South and Cross River North educational zones. Private secondary schools were not included in the study. In terms of content, the study covers teaching staff utilization and its impact on institutional effectiveness. In terms of geographical location the study was carried out in Cross River State Secondary Schools.

VARIABLES	N	MEAN	SD	r-COEFFICIENT
SN				

**Research questions**

The following research questions guided the study.

1. How does teaching subject's relevance relate to student academic performance?
2. How does teacher class size relate to student academic performance?
3. To what extent does teachers work load relate to student academic performance?

**Hypotheses**

1. The following hypotheses were tested at 0.05 level of significance at the study:
  - 1. Teacher's subjects relevance does not significantly relate to student academic performance.
  - 2. Teacher's class size does not significantly relate to student academic performance.
  - 3. Teacher's workload does not significantly relate to student academic performance.

**Method of data analysis**

The population of the study comprised 2100 teachers from where 600 hundred teachers were drawn as sample size through stratified random sampling technique.

Data for this study were generated using a 44 items questionnaire and document analysis of student performance in NECO for Senior Secondary Schools Examination (SSCE) 2003 for all the schools in Cross River State in English Language and Mathematics.

The student performance in NECO was equally weighted on the 9 points scale. A1 9points, B2 8points, C3 7points, C4 6points, C5 5points, C6 4points, D7 3points, E8points, F9 1point. Total enrolment was weighed on nine points. The performance rate was then determined as a ratio of weighted performance over total weighted enrolment times one hundred over one. The data from respondent was scored as follows, using the specification below as a model. National Policy on Education recommends class size of 1.40 and the Cross River State recommends 24 teaching periods per teacher, per week.

For class size:

Appropriate Class Size is 1-40 and is scored 3, less appropriate class range from 41-50 is scored 2, inappropriate class range from 51 and above and scored 1 for workload:

Appropriate workload is 7-24 and is scored 3 less workload range 25-30 period per week, per teacher is scored 2

Inappropriate workload range from 31 and above periods per week, per teacher and is scored 1

For placement:

Appropriate placement: if teaching the subject qualified in is scored 3 less appropriate placement: if teaching in the same subject family is scored 2.

Inappropriate placement: if teaching the subject not in the same family is scored 1.

Note: subject family includes Arts, Science, Social Science, and Vocational and Technical subjects. A four point scale was used to show the influence on teaching effectiveness.

The statistical method that was used in the mean and standard deviation to answer the research questions while the Pearson product moment correlation was used to test the hypotheses as appropriate.

**Presentation and analysis of the data**

**Introduction**

The research questions and hypothesis posed at the beginning of this study are addressed here. The research questions are first addressed, then the hypotheses.

There is the characteristic distribution of research respondent preceding the discussion.

**Characteristic distribution of research respondents**

**Table 2: Frequency distribution of respondents by location**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Rural	275	45.8	45.8	45.8
Urban	325	54.2	54.2	100.0
Total	600	100.0	100.0	

**Table 3: Frequency distribution of respondents by sex**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	369	61.5	61.5	61.5
Female	232	38.5	38.5	100.0
Total	600	100.0	100.0	

**Table 4: Frequency distribution of respondents by qualification**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid NND	3.0	0.5	0.5	0.5
RCE	.3	0.05	0.05	0.55
Post	60.2	10.0	10.0	10.55
Degree	300	50.0	50.0	60.55
Master's Degree	3.50	0.58	0.58	61.13
PhD	2.20	0.37	0.37	61.50
Gen	32.3	5.38	5.38	66.88
Total	402	67.0	67.0	
Management	100.0	16.7	16.7	
Admission procedures	100.0	16.7	16.7	

Cluster X (mean) = 2.50  
 Cluster SD = 1.05

**Table 5: Frequency distribution of respondents by experience in state secondary schools**

Experience	Frequency	Percent	Valid Percent
Valid: less than 2 yrs	32	5.3	6.7
2-4 yrs	40	6.7	6.7
5-9 yrs	393	65.5	65.5
10 yrs & above	135	22.8	22.8
Total	600	100.0	100.0

Table 2 above showed that more schools in urban responded to the questionnaire than those in rural areas. This indicated a frequency of 325 against 275. This suggests that there are more schools in the urban than in the rural areas. The frequency was 398 for males and 292 for females.

Table 4 above showed that respondent with first degree the frequency of 361, closely followed by master degree with the frequency of 194.

Table 5 showed that most of the respondent has 5-9 years of experience with the frequency of 393 closely followed by 10 years and above with the frequency of 135. Then 2-4 years and lastly less than 2 years.

**Answer to research questions.**

1. How does teaching subject's placement of teachers relate to student academic performance? The relationship between of teaching subject placement and the academic performance of student was first examined. This was achieved by relating the placement of teachers in terms of the relevance of their training to the teaching job assignment to the academic performance of students in NECO examination. The result of the analysis is presented in Table 6

**Table 6: Mean standard deviation and r-coefficient of the relationship of teacher placement on student's academic performance**

S/N	CORRELATED VARIABLES	MEAN	SD	r-COEFFICIENT
1.	Student's performance	58	32.59	.05
2.	Teacher placement	60	2.02	.37

The analysis data presented above indicates. Student's performance rate 32.59 percent. The extent of teacher placement appropriate is 0.37 which indicates that teachers are job teaching subject related their field. The influence of this level of placement on academic performance of student is indicated by the coefficient of .05. This indicates a positive relationship of appropriate teachers' job placement on student academic performance. The result shows that the more teachers are appropriately placed the better students' academic prospects of doing well in their academics.

**Research question II**

How does teacher's class size relate to student academic performance?

The relationship between of teachers class size and student academic performance was also examine, this was achieved by relating the teachers class size to the academic performance of students in National Examination Council (NECO) in 2002/2003 school year. The result of the analysis is presented in Table 7

**Table 7: Mean standard deviation and r-coefficient of the relationship of teacher class size on academic performance students**

S/N	CORRELATED VARIABLES	N	MEAN	SD	r-COFFICIENT
1.	Student performance Rate	58	32.58	12.83	0.91
2.	Teacher placement	59	157.8	701.48	

The analysis presented above showed student's performance rate of 32.58. The extent of teacher's appropriateness in class size is 157.8 which means teachers are greatly over loaded with high class size. This analysis further showed a very positive correlation at 0.5 confidence interval. This reflect a positive relationship of teachers class size on student academic performance. It followed that student are likely to do well if the class size of teachers are minimal, moderate and class size large the teachers can effectively handle.

**Research question III**

To what extent does teachers workload relates to student academic performance?

The influence of academic performance was also determined by relating teacher's workload to student's academic performance in NECO examination. This result of the analysis is presented in table 8.

**Table 8: Mean standard deviation and r-coefficient of the relationship of teacher workload on academic performance students.**

S/N	CORRELATED VARIABLES	N	MEAN	SD	r-COFFICIENT
1.	Student performance Rate	58	32.58	12.83	0.054
2.	Teacher placement	60	2.18	0.42	

The analysis data presented above indicates student's performance rate of 32.58 and teachers workload of 2.18 which indicate that there is a negative correlation between teacher's workload and its influence on student's academic performance. This implies a negative correlation of teacher workload on students academic performance. This further implies that a reduction in teachers workload, the better student have prospect of performing well in their academics.

**Hypothesis I**

Subject's placement of teachers does not significantly relate to student academic

Test of significant relationship between of teacher placement and academic performance of students.

**Table 9: Test of significant relationship between teacher placement and student academic performance.**

S/N	Correlation Variables	N	MEAN	SD	r-coefficient	2-tailed sig.
1.	Student Performance Rate	58	32.58	12.84	0.052	0.710
2.	Teachers Placement	60	2.02	0.37		

**Hypothesis one**

The result of the test addressing test addressing the hypothesis is presented in table 9.

Table 9 The r-coefficient of .05 which is the level of relationship between of appropriate teacher's placement and student academic performance was subject to test of significance. The result in table (21) showed a two tail significance value of 0.710. This significant value is by far higher than the 5% at which the researcher is

prepared relationship between teacher's placement and academic performance of student. The hypothesis is therefore not rejected as the researcher (Failed to reject it) and conclude as such.

**Hypothesis 2**

Teacher's class size does not significantly relate to students academic performance.

The result of the test addressing the hypothesis was presented in table 21.

**Table 10 : Test of significant influence of teacher's class size on student academic performance.**

S/N	Correlation Variables	N	Means	SD	r-coefficient	2-tailed sig.	remark
1.	Student Performance Rate	58	32.58	12.83	0.91	.50	Sig
2.	Teachers Placement	59	157.31	.701			

The above table 10 shows an r-coefficient of .50 is higher than the r-coefficient of .05 which the researcher is prepared to reject or accept the null hypothesis thus significance influence of teachers high class size on students academic performance therefore teachers are merely over loaded in their class size. The research therefore failed to reject the null hypothesis.

**Hypothesis 3**

Teachers workload does not significant influence student academic performance.

**Table 11 : Test of significant influence of teacher's workload on student academic performance.**

S/N	Correlation Variables	N	Means	SD	r-coefficient	2-tailed sig.	remark
1.	Student Performance Rate	58	32.58	12.83	.054	.68	sig
2.	Teachers Placement	60	2.18	.42			

The result of the test addressing this hypothesis is presented in table 11. The r-coefficient of .05 which is the level of influence of appropriate workload on student academic performance was subjected to test significance, it revealed a significant value that the research is prepared to reject or accept the null hypothesis. This means that there is no significant influence of teacher's workload on student academic performance. The researcher therefore failed to reject the null hypothesis and conclude that there is a significant difference between teachers appropriate placed and those in appropriately place in their teaching task accomplishment.

**Summary of findings**

- Appropriate teachers subject placement has direct relationship with student academic performance;
- Small class size has positive direct relation with student's academic performance
- A reduction in teacher's workload has direct influence on student academic performance. The lesser workload the in creased in student performance.
- Teachers with relevant subject placement recode high task accomplishment in terms of academic performance achievement in schools.

**Discussion, conclusion and recommendations.**

**Discussion of finding**

**Research questions one, and hypothesis one:**

The study found that appropriate job assignment has direct relationship with student academic performance. This findings is in league with the views of (Ajayi 2004), (Algoture 2002) and (Olobukola 2004) who argued vehemently that teachers task accomplishment is determine by the nature of his placement in terms of subjects relevance. It was again argued by the Nigerian Education Development Council that as part of the rule in providing a foundation level support and sustainability of education is the fact that teachers in schools should be placed as appropriate. One of the entrants of such position is the lack teachers in most schools in the state and worse still is the fact that Government Education reforms of 2004 under Duke's led administration drifted the away all (NCE) teachers to the primary schools, the secondary subjects relevance which influence students performance negatively.

**Research question 2 and hypothesis 2**

In this research question and hypothesis it was found that teacher's class size has direct positive relationship with students academic performance. The finding is related to the opinion of (Enukoha 2004) and (Mkpa 2004) who at various times shared the views that class size is directly responsible for what happen in school at the end of day. The study as confirms that findings of the American Educational Research Association who discovered that small class sizes have made significant strides in California Wisconsin and elsewhere in recent years. It was concluded that class size reduction programme should reduce class size by hiring additional 100,000 new qualified teachers. The finding is also in agreement with Tennessee's (2005) longitudinal class size study on student's achievement which support smaller class size and its impact on student learning. It was also a matter of concern for the Clinton's administration to lower class size in school in USA. Before he left government house.

**Research question 3 and hypothesis 3**

The finding is this research question and hypothesis showed that a reduction in teacher workload will lead to positive influence on students.

Teacher class size and workload should be moderate in order to stimulate the learners attention and for ease in individualizing instruction.

Government and other proprietor of schools should made available electronics gadgets to assist teachers in handling large classed id the classroom reduction is not feasible in face of large enrolment.

Additional qualified and competent teachers who have interest in teaching be employed to reserves the trend of inverse relationship between teacher demand and supply in schools.

**References**

Agabi, C.O (1997). Wastage in manpower utilization. *Abstract thesis of Education University of Port-Harcourt.*

Agabi, O.G (2002). *Finance and Economic of Public Education.* Port-Harcourt, ICES.

Ajayi, K. (2004). The role government in established foundation level for support and sustainability of education in Nigeria; being a lead paper presented at 2004 Annual Conference of (NAEAP). University of Jos.

Bur, P. (1992). "The base for human Resources Development and Utilization Policy for Nigeria" in Yahaya, A. D. and Akinleye C.L (ed) *Human Resources Development and Utilization policies and issues.* Ibadan, Spectrum Books Limited for Ascon.

Cooloids F. & Postlewait, T.V (1989). Teaching and learning conditions in developing countries in P. Colloid (ed) *the prospect for Educational Planning: A workshop Organized UNESCO HEP* p. 134-147.

Enahwo, J.O. (1990). *Economics of education and the planning challenge.* India, Amol Publication.

Enahwo, J.O (2000). Education futurology praxis problems and the way forward. Inaugural Lecture Series No. 27. Port Harcourt: University of Port-Harcourt press.

Enukoha, O.I (2004). Human resource development: A case for a reexamination of teacher's education programmes in Nigeria. A lead paper presented at curriculum conference in Nigeria (CON) University of Uyo.

Eze, A (1983) *Economics of education.* The Nigeria Experience. Owerri, New Africa Publishing Company.

Mkpa, M.A (2004). Challenges of curriculum implementation, Key note address presented at the 19<sup>th</sup> curriculum organization of Nigeria CON.

Ngwenya, E.O. (2004). Access and equity in the deregulated education system in Nigeria. Being a lead paper presented at the annual conference of NAEAP university of Jos.