





## **Demand and Supply of Teachers to Secondary Schools in Anambra State of Nigeria Due to School Type**

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### **ABSTRACT**

This study investigated the demand and supply of teachers to secondary schools in Anambra State of Nigeria due to school type. The survey design approach was adopted for this study. The population of the study comprised of all the secondary school principals, numbering 259 in the six education zones of Anambra State. Through random sampling, 137 were selected from four education zones for the research work. A questionnaire was the instrument used for data collection. Two research questions and a null hypothesis were formulated for the research work. Cronbach alpha statistical analysis was employed with a positive result of 0.72. The research questions were answered using frequency tables and percentages and the null hypothesis was tested using chi-square ( $\chi^2$ ). The results showed that teachers supplied to secondary school in Anambra State were insufficient and were far below the number demanded. Some recommendations were made.

### **INTRODUCTION**

All over the world, there has been an increased desire to reform education so as to make it qualitative and at the same time more accessible to individuals (Loith, 1999). The teacher is the basic public instrument for the guidance of the youths towards maturity and also the centre between knowledge and learning. He/she is the hub of the educational system, for the schools cannot be better than their teachers. The success of any educational system depends to a large extent on the number of teachers, their quality, commitment, and effectiveness on the job. The velocity of any educational system naturally is dependent upon the quality of teaching and the availability of teachers. The secondary education system is of strategic importance in the overall educational development since the stability and quality of higher education are built on the foundations laid in the secondary schools. The core of the problems of the quality of the schools lies solidly with the issue of the teacher recruitment, training and retention.

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Beven (2001) explained demand as total number of teaching positions funded by the schools, and that since all funded positions are not filled every year, demand is calculated by adding the total number of employed personnel to the number of the unfilled positions. The supply of teachers in schools according to Arizona Department of Education (ADC, 2002) is defined as the number of eligible individuals who are willing to work under the prevailing conditions.

On the other hand, the Centre for Business Research (2002) defined supply as the number of individuals completing approved programmes of teacher education and the number of active certificates for individuals who are not currently working in education (reserve pool).

The issue of demand and supply of teachers may vary due to time and location. In recent times, the Anambra State Ministry of Education has recruited just five hundred (500) teachers who were willing to teach in the rural areas (Anambra State Post Primary Schools Services Commission, Awka, 2005). From this same source, some schools did not field students in some subjects in the West African Senior Secondary Certificate Education from 1997 to 2003. Could this be as a result of lack of teachers in the subject areas? What are the factors responsible for the demand and supply of teachers to secondary schools in Anambra State of Nigeria? Based on these, the study therefore seeks to investigate the demand and supply of teachers to Secondary Schools in Anambra State of Nigeria due to school type.

### **Research Questions**

The following research questions were formulated to guide the study.

1. What difference exists in the demand and supply of teachers due to school type in Anambra State of Nigeria?
2. What factors account for the attrition of teachers in secondary schools in Anambra State of Nigeria?

### **Null Hypothesis**

The Null Hypothesis below was stated and tested at 0.05 statistical level of significance, to further guide the study.

1. There will be no significant difference in the factors that account for the attrition of teachers in schools based on the school type using the principals' frequency scores.

## **RESULTS**

### **Research Question 1**

What difference exists in the demand and supply of teachers due to school type?

**Table 1:** Frequency of Demand and supply of Teachers in various schools type.

S/N O	Subject	Boys only			Girls only			Co-Educational		
		Suppl y	Studen ts	Deman d	Suppl y	Studen ts	Deman d	Suppl y	Studen ts	Deman d
1	Eng. Language	167	41,949	1,050	34	5,517	137	155	23,156	578
2	Lit. in Eng	113	11,106	277	27	2,198	55	70	11,636	292
3	CRK	113	35,653	728	34	5,517	137	137	23,156	578
4	Igbo Lang.	155	41,949	1,050	40	5,512	137	110	23,156	578
5	History	0	0	0	0	0	0	12	3,854	97
6	Geography	70	10,062	253	6	104	3	24	3,803	94
7	Mathemati cs	180	41,949	1,050	27	5,517	137	104	23,156	578
8	Biology	111	24,718	618	27	3,233	82	67	10,472	262
9	Chemistry	94	15,082	378	6	944	24	67	5,888	146
10	Physics	94	14,397	360	21	1,967	49	33	5,102	128
11	Agric. Sc	125	26,316	658	21	5,194	131	94	21,329	533
12	Commerce	67	15,116	378	21	1,948	49	61	6,753	170
13	Economics	107	18,459	463	21	2,101	52	67	8,171	204
14	Accounts	15	3,318	82	0	0	0	24	4,140	104
15	P.E	82	21,533	539	18	1,620	40	167	34,277	859
16	Home Econs.	30	9,894	247	15	1,906	49	113	26,901	673
17	H. Science	46	3,653	91	0	0	0	70	5,236	131
18	Governe ment	61	9,359	234	27	2,210	55	152	16,397	411
19	French	24	12,251	308	27	2,259	58	58	10,473	262
20	F/Applied Arts	67	19,840	496	12	1,516	40	27	10,168	256
21	Add. Maths	30	4,348	110	-	-	-	12	700	21
22	Metal work	--	--	--	--	--	--	--	378	9
23	Tech. Drawing	27	4,262	107	--	--	--	18	2,076	52
24	Wood work	6	1,242	30	--	--	--	--	913	24
25	Music	61	14,994	375	9	1,644	49	15	3,379	852
26	Short hand	--	--	--	--	--	--	--	694	24
27	Typewritin g	--	--	--	--	--	--	--	--	--
28	Bookkeepi ng	--	--	--	--	--	--	9	1,370	34
29	Comp. Sc	21	15,201	381	--	--	--	--	2,557	639
	TOTAL	1,866	416,651	10,263	393	50,907	1,284	1,666	289,291	8,589

\*49 only boys' schools, 39 only girls', and 49 co-educational schools were used.

Table I indicates that 1,866 out of the 10,263 teachers demanded (18.2%) in boys' schools were supplied; 1,666 out of the 8,589 teachers demanded (19.4%) in Co-educational schools were supplied while only 393 out of the 1,284 teachers demanded (30.6%) in girls' schools were supplied. Again, it was observed that a greater number of teachers were needed in the boys' schools, followed by the Co-educational schools, and then girls' schools.

**Research Question 2**

What factors account for the attrition of teachers in secondary schools in Anambra State?

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**Table 2:** Frequency and percentages distribution of principals' responses on the factors that account for the attrition of teachers

Factors	Frequency	Percentage
Retirement	40	29.2
Resignation	6	4.4
Transfer of service	43	31.4
Poor salary/irregular payment	36	26.2
All of the above	12	8.8
<b>TOTAL</b>	<b>137</b>	<b>100.0</b>

Table 2 shows that 43(31.4%) of the principals believed teachers' attrition in secondary schools was due to transfer of service; 40(29.2%) said it was due to retirement; 36(26.2%) have it as being because of poor salary/irregular payments. 12(8.8%) believed it was due to all the factors stated in the table, while 6(4.4%) of them said it was due to resignation.

### **Null hypothesis I**

There will be no significant difference in the factors that account for the attrition of teachers in schools based on school type, using the principals' frequency scores.

**Table 3:** Chi-square ( $X^2$ ) Analysis on the factors influencing teachers' attrition due to school type.

Source of variation	Boys only	Girls only	Co-education	df	Cal $x^2$	Critical $x^2$	P>0.05
Retirement	16	9	15	8	15.10	15.51	N.S
Resignation	--	--	6				
Transfer of service	9	12	22				
Poor salary/irregular payment	12	6	18				
All of the above	6	--	6				
N=	43	27	67				

In table 3, it is observed that at 5 percent significant level and 8 df, the calculated  $X^2$  15.10 was less than the critical  $X^2$  15.51. Therefore, the null hypothesis is accepted. The researchers then concluded that the school types did not significantly influence views of the principals on factors influencing teacher's attrition.

## **METHODOLOGY**

A survey design was adopted for this study to investigate the demand and supply of teachers to secondary schools in Anambra State of Nigeria due to school type. Two research questions and a null hypothesis were formulated for the research work. The population for the study comprised all the two hundred and fifty-nine (259) principals in the six education zones of Anambra State.

Random sampling technique was used to select one hundred and thirty – seven (137) principals from four education zones. The questionnaire was the instrument used for data collection. The instrument was face validated by three experts from Nnamdi Azikiwe University, Awka – two from Educational Management and Policy and one from Test and Measurement. The questionnaire was also trial tested using twenty principals from those not selected from the two other education zones. Cronbach Alpha was used to test the reliability for internal consistency of the items, which yielded a positive result of 0.72. Copies of the questionnaire were personally administered to the respondents by the researchers.

The research questions were answered using frequency tables and percentages and the null hypothesis was tested using Chi-square ( $\chi^2$ ).

## **DISCUSSION**

The findings in table 1 revealed that the greater numbers of teachers were supplied in girls' schools, followed by the number supplied in the co-education schools than the boys' schools. From the table, it was also observed that the enrolment of students in boys schools were more and the demand for teachers in boys' schools were also more than the demand in girls' and co-educational schools. Fidler

and Haselkorn (1999) opined that the demand for teachers is of great relevance and is strictly determined not only by the factors that necessitate demand but also by the number of learners to be enrolled. To them the factors include the school leaving age, class size, number and type of subjects taught, methods of teaching, size and distribution of schools, and the teaching loads. Considering these factors, one may say that all societies are plagued with them and that they are vital gems for the demand for qualitative teachers.

Table 2 of this study shows that the factors that account for the attrition of teachers in Anambra State secondary schools include transfer of service, retirement, poor salary/irregular payments and sometimes resignation. Williams (1979) contended that the teaching force is a wasting asset subject to constant depletion in the number of teachers as a result of certain factors such as death, re-designation, retirement and resignation of teachers. Okeke's (1989) organized the following as the constraints on supply of teachers;

- Competition between the education system, other industries and occupation for supply of labour
- Net advantages attached to other occupations such as fringe benefits, promotion prospects and conditions of work
- Adverse comments and statements about the teaching profession.
- Public opinions tend to be generally unfavourably to teachers and the teaching profession.
- Apparent low economic and social status of teachers

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- Government practice of treating last, matters that affect teachers' well being.

Illinois State Board of Education (2001) stated that the overall rate at which teachers leave the profession has increased by 60 percent since 1996 that while retirement accounts for about 23 percent of teachers attrition, more than 75 percent of teachers who leave do so for reasons other than retirement, such as low salaries, negative school environment, and lack of induction and mentoring support.

The above assertions are true in terms of supply of qualitative teachers. *Education*, which is the key that unlocks the door of modernization, had been so far affected by these stipulated factors. In fact, as George (1995) rightly observed, supply of qualified teaching manpower has been a perennial problem in the education industry since the introduction of formal education.

Table 3 shows that there is no significant difference in the factors that contribute to the attrition of teachers of school type, using the principals' frequency scores, so null hypothesis I is accepted.

### **CONCLUSION**

The total number of teachers required in a particular educational set up is very important if any level of success is to be attained. Findings from this research work have shown that teachers supplied to secondary schools in Anambra State are far below the demand. The major factor being the attrition of teachers in schools due to transfer of service, retirement, poor salary and only very few were due to resignation.

Adesina (1981) stipulated that the national cumulative attrition rate has been fluctuating between 55 percent and 70 percent with variation from State to State. In Said (2004), it was observed that throughout the nation, there is a concern that public education will not have enough high-quality teachers to staff the classrooms of tomorrow. Arguably, attracting and retaining high-quality teachers is the most important challenge facing public education in the coming decade. Something serious must be done.

### **RECOMMENDATIONS**

The following recommendations were made based on the findings of the study.

- The Federal Government should increase the budgetary allocation to education to at least 26-30 percent of the entire annual budget.
- At the Federal and State levels, the conditions of service of teachers should be favourable to boost the morale, economic and social status of teachers.

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- The Government at all levels should, through the schools' Service Commission, enforce implementation of the statements in the National Policy on Education for effective school management as well as the teaching-learning process.
- In planning, educational administrators, planners and policy makers should statistically analyze the situation in the school system and plan strategies for the recruitment and retention of the adequate number of teachers required.
- The Government should try as much as possible to maintain a balance or equilibrium between demand and supply of subject teachers in secondary schools.

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