

Demand and Supply of Primary School Teachers in Ekiti State

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Abstract

The study surveyed supply and demand of teachers of primary schools in Ekiti State. The study adopted the ex-post facto and descriptive research design of the survey type. The study population comprised of all primary school pupils and teachers' enrolled in the state form the total population for the research. Two sets of instruments were used. They are an inventory titled; Demand and Supply of Primary School Teachers in Ekiti State Inventory (DSPSTESI) and a questionnaire titled; Demand and Supply of Primary School Teachers in Ekiti State Questionnaire (DSPSTESQ). The Inventory was used to collect available data from the Universal Basic Education Board of the state while the questionnaire was developed to elicit opinion on determining factors of teacher demand. The researcher ensured face and content validity of both instruments while test-retest was used to test the reliability of the questionnaire. Data collected in this study were analysed using frequency, ratio, percentages, trend analysis and correlation Matrix to test the hypothesis at 0.05 level of significant. The results showed that there was excess supply of teachers in primary schools and indicated fluctuating in the trend analysis of the growth rate in teachers' enrolment as well as that of pupils' growth rate. There were relationships between teacher demand and determining factors of supply in primary schools in Ekiti State. Based on the findings it was recommended among others that government should make a policy to address the required number of annual growth rate of pupils and teachers in primary schools and that recruitment of teachers should be done based on needs to maintain balance in pupils' teacher ratio.

Keywords: Teacher Demand, Teacher Supply, Teacher, Primary School, SUBEB

1. Introduction

Ekiti state in Nigeria is known for sound education and concentration of intellectuals. This may necessitate constant and decisive policy to improve the education sector and particularly primary education., Expansion in the demand for teachers in Ekiti may not be unconnected with the tourism potentials and the free education programme already in operation in the first nine years of education, coupled with the high unemployment rate especially among the university and colleges of education graduates and the high need for skilled labour by employers of labour and a rise in students' enrolment (Eyibe, 1990). The adequate provision of skilled manpower (qualified teacher) must have been a considerable factor and adequately put in place. As all-encompassing and robust as the objectives of any education programme may be, its success is revolving round adequate and qualified teachers. The quantity and quality of teachers put in place will have great influence on the kind of school products produced to the society. A sound educational system is accepted across the world over as the bedrock of human development. According to Federal Republic of Nigeria (2004), it is stated that no education system that can rise above the quality of its teachers and that no nation can raise above the level of its quality of education. This statement has proved the key role that teachers plays in any progressive society. Hence, teachers play very significant role in the attainment of the objectives of education policies and programs. Ocho in Nwangwu (2007:3) observes that in recruiting adults to bring up our children no sensitivity was shown with regards to the growth and needs of the children. Illiterate and half literate market women, men who failed to make it in any trade or work, motor park touts who were no longer strong enough to keep their positions, crooks of all types flocked into the teacher training colleges and within one or two years crashed through to become teachers of our children and models to be initiated. The result is a national without scruples or morals.

This statement may not be totally true as applies to Ekiti state but that required quantity of teachers may still be insufficient in our schools.

Ekiti State like other states in Nigeria placed high premium on quality education and has therefore been putting in place series of programmes and efforts all geared towards improving the educational system. Some of these efforts include the establishment of the state University of Education, Science and Technology, support in accrediting more education-based courses in the universities, College of Agriculture, and reformation of the four Technical Colleges, supporting the existing university in needing areas, strengthening the inspectorate services in the state ministry of education, regular capacity building, renovation of school buildings and fencing of the primary schools for better security and much more. However, the attainment of the objectives of initiating and implementing these lofty programmes depends greatly on the quality of teachers in the school system. Aggarwel, (1981) noted that, “the destiny of a nation is shaped in its classroom and it is the teacher who is very important instrument in molding the nation”. In the report of The United Nations Educational, Scientific and Cultural Organizations (UNESCO, 2020) on twenty years of service to peace, the teacher is described as the spark that forced the whole development process, the key man in the drive to progress

The fact that primary school education remains the foundation and the key that warrants the success or failure of the other levels of education, hence, a sound and well equipped teaching force is needed. In stressing the main position of teachers in any educational system, Onuorah (2007) notes that they (teachers) decide to a very great extent the quality of outputs of any educational system. These outputs project the growth and development of any society. Therefore, lack of qualified teachers for quality instructional delivery in our schools will at the same time have negative impact on the society. Nwangwu (2007) in Chukwu (2011) observes that:

In recruiting adults to bring up our children no sensitivity was shown with regards to the growth and needs of the children. Illiterate and half literate market women, men who failed to make it in any trade or work, motor park touts who were no longer strong enough to keep their positions, crooks of all types flocked into the teacher training colleges and within one or two years crashed through to become teachers of our children and models to be initiated. The result is a national without scruples or morals.

Demand as a basic concept in economics is generally described as the quantity of goods required at a given price during a certain period of time. Yakubu, (2000), posited that demand is the willingness of consumers to buy particular goods. The most important factor influencing the consumer’s buying decision is the price of the product. The demand for a particular product would be higher if its price is lower than the other related products. Therefore, the price of a product and the quantity demanded are inversely related to each other. Adu and Abegunde (2023) opined that demand for teachers refers to the number of teachers that are required to take appointment in a given educational institution and in a given academic session. Relating this to the demand for teachers would not be an easy, as explained by Mereka (2000), demand for teacher cannot be easily and adequately defined as the demand for other types of labour required in production system. Mereku (2000), defined teachers’ demand as the number of qualified and trained teachers necessary to produce specific output from an educational system. In other words, without teachers of a certain number and description, the output targets of an educational system cannot be achieved. Also demand for teachers refers to the amount of teachers that the government is willing, ready and able to employ over a given period of time. Odu (2011), asserted that when the law of demand is applied to teachers’ demand, the higher the wages or salaries, the more willing, will teachers offer their services, and the less willing employers will demand for the services of teachers. Demand for teacher refers to the quality and quantity of teachers needed by an educational system {primary schools} over a given period (academic year) and location (urban or and rural) to enable her achieve her stated goals and objectives. The demand for teachers in the school system is influenced by a number of factors. Gerald and Hussar (1998) stated some determinants of teachers’ demand in any system, they are: the number of teachers leaving the system and needing to be replaced and the number required because of increase or decrease in learners’ enrolment, the subjects offered under the school curriculum. Added to this is the supply side which is the availability of the quantity of qualified teachers which also is another considerable factor determining demand for teachers. Noble as the objectives of any education programme may be, central to its success is that of adequate and qualified teachers. Indeed, before taking off of any educational programme, the adequate provision of skilled manpower (qualified teacher) must have been a considerable factor and adequately put in place. The quantity and quality of teachers put in place will have great influence on the kind of school products produced to the society. A sound educational system is accepted across the world over as the bedrock of human development. Federal Republic of Nigeria (2004), states that no education system that can rise above the quality of its teachers and that no nation can raise above the level of its quality of education. This statement has proved

the key role that teachers play in any progressive society. Hence, teachers play very significant roles in the attainment of the objectives of education policies and programs.

Teacher holds the key to nation building. The aspiration of any nation to transform into a great country can only be possible if there are competent and dedicated teachers to impart the appropriate knowledge, attitude and skills. This explains why a scholar like Lassa (2005) noted that without good teachers there cannot be good engineers or good medical doctor/accountants, scientists, politicians. Priests, Rev. Sister, pastors etc. With deficient teachers in the school system, we may have unimaginable and unpatriotic professionals or engineers that build roads that wash away after the first rains or build houses that collapse on people, Doctors that kill more than they cure, accountant that embezzle treasury and so on. The major function of the school is to provide a setting where learners can grow intellectually. Lassa, (2005) stressed further that this can only be accomplished through the learners' association with information, knowledge and facts. There stands the teacher always on the stage either in front or at the center of the classroom. What he knows can make a difference. What he does not know can be an irreparable loss. A mistake made by a teacher can cause generations yet unborn to suffer, such is the importance of the teacher (Awah, 2007).

2. Statement of the problem:

The proliferation of primary schools in all parts of Ekiti State including the remotest settlement is borne out of the government plan to make education accessible to all and sundry. Nigeria, as a result of the policy of the State government that guarantee affordable free and compulsory education up till junior secondary school 3 and the consequent rise in students' enrolment have perhaps brought about the demand for more qualified teachers in the schools and especially the primary schools. Although the State government took various measures to supply more teachers, studies by previous researchers have concluded that the supply of qualified teachers has not matched the demand for them in the schools. There is however some lopsidedness in the distribution of teachers across the local governments, towns and villages in the state.

Considering the increase in students' enrolment in the primary schools in the state, as well as the various policies on improving primary education in Ekiti State, and the observed unimpressive or non-commensurable to policy, the performance of students in competitive joint examinations, the issue of whether the supply of relevant teachers matched up with the demand for them with special focus on pupils-teacher ratio in the state primary schools constituted the problem which this study intended to examine. This can be termed the state of equilibrium in teachers' demand and supply. Aside the foregoing, similar studies conducted their study on non-current data which have made their findings appears non-addressing the current realities and were unable to come up with statistically established findings on recent developments in the primary educational system in the state which could adequately reveal the relationship between demand and supply of teachers in primary schools as well as other factors determining demand and supply of teachers. It is in the light of this that an investigation is necessary on the supply of and demand for teachers in primary schools in Ekiti State.

3. Objectives of the Study

The broad objective of the study is to analyse the demand and supply of teachers in primary schools in Ekiti State.

In specific terms, the objectives were to

- i. assess the trend of teachers' demand and pupils' enrolment in public primary schools in Ekiti State
- ii. identify the relationship between demand and supply of teachers in public primary schools in Ekiti State
- iii. find out the relationship between demand for teachers and its determining factors (Student Population, Location of school, Age of school, type of school (gender), Principal's influence and Statutory policy) in public primary schools in Ekiti State.

4. Significance of the study

This study would be based on theoretical and practical significance. The theoretical significance will be based on demand and supply theory. The price system, which is built on the theories of supply and demand, it was stated that it was the invisible hand which guides the actions of consumers and producers with the following assumption.

> The lower the price of goods and services the higher the demand and the higher the price of goods and services the lower the demand

> The higher the price of goods and service the higher the supply and the lower the price of goods and services, the lower the supply

It therefore implies that; if the wages of teachers is low the higher the demand for their services by employers of teachers. And the higher the wages or salaries of teachers the more willing, the teachers will be ready to offer their services. Therefore, to meet the demand and supply of teachers, there must be an acceptable point between the employers and the teachers in order to have a balance in the demand and supply of qualified subjects' teachers in the state primary schools.

The research will therefore be useful as it will analyse the trend of teachers’ demand and pupils’ enrolment in public primary schools in Ekiti State over the years under study. The teachers’ and pupil’s enrolment growth rate in public primary schools in Ekiti State will be determined as well as ascertaining the teachers’-pupils’ ratio in public primary schools in Ekiti State. The relationship between demand and supply of teachers in public primary schools in Ekiti State will also be revealed. Aside the above, on the policy implementation, the study will be of benefit to policymakers, government authorities and stakeholders who shall use it to regulate the production of teachers in the state to ensure that teachers are produced in the right quantity and quality to avoid shortage or surplus. It will be revealed through the research finding the composition of students’ teacher ratio so as determine the relationship between the two variables for policy purpose. It will serve as a base to other researchers who may wish to carry out similar research in the same area, as they may find it as a reference point.

5. Research Questions

The following research questions were raised:

- (1). What is the trend of teachers’ demand and pupils’ enrolment in public primary schools in Ekiti State between 2010-2021?
- (2). What is the relationship between demand for and supply of teachers in public primary schools in Ekiti State between 2010-2021?
- (3). Is there any relationship between demand for teachers and its determining factors (Student Population, Location of school, Age of school, type of school(gender), Principal’s influence and Statutory policy) in public primary schools in Ekiti State?

6. Methodology

The study adopted the ex-post facto and descriptive research design of the survey type. The study population comprised of all primary school pupils and teachers’ enrolled in the state form the total population for the research. Two sets of instruments were used. They are an inventory titled; Demand and Supply of Primary School Teachers in Ekiti State Inventory (DSPSTESI) and a questionnaire titled; Demand and Supply of Primary School Teachers in Ekiti State Questionnaire (DSPSTESQ). The Inventory was used to collect available data from the Universal Basic Education Board of the state while the questionnaire was developed to elicit opinion on determining factors of teacher supply. The researcher ensured face and content validity of both instruments while test-retest was used to test the reliability of only the questionnaire was ensured using Alpha Chronbach coefficient of 0.84 was obtained. This showed that the instrument was reliable.

Data collected in this study were analysed using frequency counts, ratio and percentages as well as trend analysis while the hypothesis generated was tested with correlation Matrix at 0.05 level of significant.

6. Results

Table 1: Teachers-Pupil’s growth rate in public primary schools in Ekiti State between 2010-2022

YEAR	PUPILS	Growth Rate	TEACHER	Growth Rate
2010	124,215		8,952	
2011	124,765	0.44	9,209	2.87
2012	125,001	0.19	8,871	-3.67
2013	133,040	6.43	9,142	3.05
2014	136,086	2.29	10,577	15.70
2015	138,101	1.48	9,919	-6.22
2016	149,729	8.42	9,528	-3.94
2017	121,696	-18.72	8,633	-9.39
2018	119,123	-2.11	8,298	-3.88
2019	124,467	4.49	7,626	-8.10
2020	140,518	12.90	7,225	-5.26
2021	141,982	1.04	7,485	3.60
2022	154,020	7.82	7,285	-2.74

Source: Field data analysis, 2023

Table 2: Relationship between demand and supply of teachers in Primary Schools in Ekiti – State, 2010-2021

YEAR	PUPILS	TEACHER	RATIO
2010	124,215	8,952	13.87
2011	124,765	9,209	13.54
2012	125,001	8,871	14.09
2013	133,040	9,142	14.55
2014	136,086	10,577	12.86
2015	138,101	9,919	13.92
2016	149,729	9,528	15.71
2017	121,696	8,633	14.10
2018	119,123	8,298	14.36
2019	124,467	7,626	16.32
2020	140,518	7,225	19.45
2021	141,982	7,485	18.97
TOTAL	1,578,723	105,465	14.97

Source: Field data analysis, 2023

Table 3: Correlation Matrix Analysis on supply of teachers and its determining factors

	variables	1	2	3	4	5	6	7
1	Teacher Supply	1.00						
2	School Location	0.297	1.00					
3	School Age	0.804	0.682	1.00				
4	School Type	0.798	.581	0.030	1.00			
5	Head Teacher Influence	0.123	.529	0.237	.226	1.00		
6	Statutory Policy	0.727	.405	0.405	.855	0.384	1.00	

$P < 0.05$, R Table = 0.288

Source: Field data analysis, 2023

Findings

Teachers-Pupil’s growth rate in public primary schools in Ekiti State between 2010-2022. Information on table 1, teachers’ enrolment was 8,952 in 2010. The enrolment rose to 9,209 in 2011 showing a growth rate of 2.87 whereas, the pupils growth rate for the same period was just 0.44. For 2011 to 2012 growth rate, teacher supply was 8,871 while pupils’ enrolment was 125,001. The teacher growth rate was -3.67 while pupils’ enrolment recorded 0.19. Moving down the enrolment ladder, teacher supply was 8,298 in 2018 and declined to 7,626 in 2019 with a growth rate of -8.10. Pupils’ enrolment on the other hand was 119,123 in 2018 and increased to 124,467 in 2019 recording a growth rate of 4.49. In conclusion, it was found out that the growth rate between the teachers’ supply and pupils’ enrolment did not follow any relationship either direct or inverse. This is to mean that there is no definite policy as regards teachers’ supply in relation to pupils’ enrolment in primary schools in Ekiti state between 2010 and 2022.

In the foregoing analysis so far, the supply of and demand for primary school teachers in Ekiti State, Nigeria was examined. It was found out that pupils and teachers’ enrolment experienced a fluctuating trend as the growth rate displays both positive and negative values. But the fluctuation appears to be more noticeable in the teachers’ demand as compared to pupils’ enrolment. The finding was not in agreement with the findings made

by Adeyemi and Aviomon, (2003) and Adegbile, (2000) where they reported an increasing rate in students' enrolment.

For instance, pupils' enrolment growth rate was 0.44 in 2011 when that of teacher was 2.87 and dropped to 0.19 for pupils and -3.67 for teachers in 2012. It picked up to 6.43 in 2013 for pupils when that of teacher grew by 3.05. The figures dropped for pupils in 2014 and 2015 while that of teacher increased for only 2014 but dropped sharply further in 2015. There was a sharp increase of 8.42 in 2016 for pupils' enrolment when teachers' enrolment was dropping further with -3.94. This inconsistent relationship persists all through the years under investigation and therefore can be deduced that there is no particular policy put in place to monitor the increase in the pupils' enrolment in relationship with teachers' demand as well as it can be concluded that there is no particular policy put in place to monitor the increase in the teachers' demand' in relationship with pupils' enrolment.

Relationship between demand and supply of teachers in Primary Schools in Ekiti – State, 2010-2021 As revealed on table 2, the average ratio for the years under study was 14.97 pupils to a teacher. The analysis in decimal is to present the result in its true result while the nearest whole number is taken as the true number of pupils as there is no fractional human being. However, the lowest ratio of 12.86 pupils to a teacher was in 2012 when the teachers supply was at the highest (10,577). The highest ratio of 19.45 was in 2020 when teacher demand was at its lowest figure of 7,225. Similarly, the finding from the ratio analysis is that the ratio of teacher to pupils did not follow particular direction as the figures are fluctuating year after year. This is to mean that there is no policy guiding the enrolment of pupils in relation to teachers' demand in primary schools in Ekiti state during the years under investigation. So also there is no policy guiding teachers demand vis-a-vis the enrolment of pupils in primary schools in Ekiti state during the years under investigation. However, one notable observation from the analysis is that Ekiti state recorded lower ratio as compared to the Nigeria average ratio of 1:38 for the years under investigation. This was when the world average was 1:23 (WDI 2022). This shows that Ekiti state has relative lower ratio of teacher-pupil's ratio comparatively on the average to Nigeria and the world.

The pupils'-teacher ratio from the analysis ranges from 19:45 to 12.86 throughout the years of study. This shows that there are not too many pupils to a teacher on the average in Ekiti State. As opined by Adeyemi (2008) in similar study, this may not apply generally to all the schools as urban schools are more often populated than the rural schools. However, the result of this finding is partly consistent to that of Adeyemi (2008) where he opined that teachers' supply did not match up with demand in secondary schools in Ekiti. The reason behind this conclusion in relation to primary school pupils and teachers' enrolment is the average ratio in Ekiti State as compared with Nigeria and UNESCO. And one can establish the fact that in Ekiti State, there is excess supply of teachers in public primary schools.

Correlation Matrix Analysis on supply of teachers and its determining factors Analysis in table 3 shows the relationship between each pair of variables examined in this study. The result shows that there is relationship between supply of teachers and its determining factors. The following pairs of variables indicated that there is significant relationship between supply of teachers and school location (0.297), supply of teachers and School Age (0.804), supply of teachers and School Type (0.798), supply of teachers and Head Teacher Influence (0.123) and supply of teachers and Statutory Policy (0.727).

The result shows that there is relationship between supply of teachers and its determining factors. The following pairs of variables indicated that there is significant relationship between supply of teachers and school location. This is in line with the report of Douglas (2016) that location determined the level of teacher supply since most of the teachers would prefer staying in urban centers where they gain access to social amenities. Also, there was significant relationship between supply of teachers and School Age. This might be as a result of influence of old students at ensuring that their schools are well favoured when it comes to resource distributions. There is significant relationship between supply of teachers and school type. This is at variance to the report of Nwakonobi and Obiagwu (2010) that there is no significant difference in the factors that contribute to the attrition of teachers of school type. The result also shows that there is significant relationship between supply of teachers and head teacher Influence. Making sure that ensuring that adequate teachers are available in their schools. This is in line with the view of Ojo and Olaniyan (2008) as cited by Suaka and Kuranchie (2018) that the duties of school heads include planning, staff personnel services, pupils' personnel services. This is because every active head teacher needs adequate number of teachers. Also, there is significant relationship between supply of teachers and Statutory Policy. This is the reason why Adedeji, Okonkwo, Adegbile-Nnaedozie and Yakubu (2022) opined that shortage of teachers in public secondary schools was one of the significant policy problems frustrating every nation of the World as skilled teachers both in the developed and developing countries are rapidly becoming the hardest segment of the teaching profession to attract and retain.

7. Discussions

In the foregoing analysis so far, the supply of and demand for primary school teachers in Ekiti State, Nigeria was examined. It was found out that pupils and teachers' enrolment experienced a fluctuating trend as the growth rate displays both positive and negative values. But the fluctuation appears to be more noticeable in the teachers' demand as compared to pupils' enrolment. The finding was not in agreement with the findings made by Adeyemi and Aviomon, (2003) and Adegbile, (2000) where they reported an increasing rate in students' enrolment.

For instance, pupils' enrolment growth rate was 0.44 in 2011 when that of teacher was 2.87 and dropped to 0.19 for pupils and -3.67 for teachers in 2012. It picked up to 6.43 in 2013 for pupils when that of teacher grew by 3.05. The figures dropped for pupils in 2014 and 2015 while that of teacher increased for only 2014 but dropped sharply further in 2015. There was a sharp increase of 8.42 in 2016 for pupils' enrolment when teachers' enrolment was dropping further with -3.94. This inconsistent relationship persists all through the years under investigation and therefore can be deduced that there is no particular policy put in place to monitor the increase in the pupils' enrolment in relationship with teachers' demand as well as it can be concluded that there is no particular policy put in place to monitor the increase in the teachers' demand' in relationship with pupils' enrolment.

The pupils'-teacher ratio from the analysis ranges from 19:45 to 12.86 throughout the years of study. This shows that there are not too many pupils to a teacher on the average in Ekiti State. As opined by Adeyemi (2008) in similar study, this may not apply generally to all the schools as urban schools are more often populated than the rural schools. However, the result of this finding is partly consistent to that of Adeyemi (2008) where he opined that teachers' supply did not match up with demand in secondary schools in Ekiti. The reason behind this conclusion in relation to primary school pupils and teachers' enrolment is the average ratio in Ekiti State as compared with Nigeria and UNESCO. And one can establish the fact that in Ekiti State, there is excess supply of teachers in public primary schools.

The result shows that there is relationship between supply of teachers and its determining factors. The following pairs of variables indicated that there is significant relationship between supply of teachers and school location. This is in line with the report of Douglas (2016) that location determined the level of teacher supply since most of the teachers would prefer staying in urban centers where they gain access to social amenities. Also, there was significant relationship between supply of teachers and School Age. This might be as a result of influence of old students at ensuring that their schools are well favoured when it comes to resource distributions. There is significant relationship between supply of teachers and school type. This is at variance to the report of Nwakonobi and Obiagwu (2010) that there is no significant difference in the factors that contribute to the attrition of teachers of school type. The result also shows that there is significant relationship between supply of teachers and head teacher Influence. Making sure that ensuring that adequate teachers are available in their schools. This is in line with the view of Ojo and Olaniyan (2008) as cited by Suaka and Kuranchie (2018) that the duties of school heads include planning, staff personnel services, pupils' personnel services. This is because every active head teacher needs adequate number of teachers. Also, there is significant relationship between supply of teachers and Statutory Policy. This is the reason why Adedeji, Okonkwo, Adegbile-Nnaedozie and Yakubu (2022) opined that shortage of teachers in public secondary schools was one of the significant policy problems frustrating every nation of the World as skilled teachers both in the developed and developing countries are rapidly becoming the hardest segment of the teaching profession to attract and retain.

8. Conclusion;

In consideration of the findings of this study, it is concluded that there was excess supply of teachers in primary schools in Ekiti State during the years under review. The results of the findings indicated fluctuating in the trend analysis of the growth rate in teachers' enrolment as well as that of pupils' growth rate. There were relationships between teacher demand and determining factors of supply in primary schools in Ekiti State.

9. Recommendations:

On the bases of the findings in this study, the following recommendations are made:

- I. The government should make a policy to address the required number of annual growth rate of pupils and teachers in primary schools.
- II. The recruitment of teachers should be done based on needs to maintain balance in pupils' teacher ratio.
- III. The determining factors should be considered while supplying teachers.
- IV. Government should make a policy that could bring out of school children schools.

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