Primary School Network and Effective Implementation of the Universal Basic Education Programme in Owerri Education Zone of Imo State, Ngeria

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Abstract

The study sought to determine the nature of primary school network for effective implementation of the Universal Basic Education programme in Owerri Education zone of Imo State, Nigeria. Two research questions guided the study. The study adopted the descriptive survey design. The population comprised all the 500 public primary schools with 14,923 basic six pupils in Owerri Education Zone of Imo State. Based on the nature of the study, the 500 public primary schools were used. This was to determine the school network. Out of 14,923 basic six pupils, a sample size of 5000 (34%) was drawn using stratified random sampling technique and they constituted the respondents of the study. The study used the Global Positioning System (GPS) instrument (proMark-3type) as the primary instrument. The instrument was complemented by a validated structured questionnaire titled: Primary School Network and the Implementation of the Universal of Basic Education Programme Questionnaire (PSNIUBEPQ) with a reliability index of 0.76. School location GPS coordinates, number of primary schools in each Local Government Area and the total area were used to determine the pattern of distribution of primary schools in the study area using Nearest Neighbor Analysis (NNA) statistics. Data collected with the questionnaire were analyzed using the simple percentage. The findings of the study revealed among others that the current primary school network in Owerri Education Zone of Imo State is of a clustered distribution pattern, this indicates that there is uneven distribution of primary schools in the area. It was recommended among others that the state government should come up with specific policies on school

mapping and ensure their strict implementation to guarantee effective and efficient school network.

Keywords: Primary School Network, Implementation and Universal Basic Education Programme

Introduction

Education is a universal practice engaged in all societies. Formal education is designed for the total development of the human person. It is a deliberate effort that ensures human capacity building. The belief in the power of education as a veritable instrument for human development has continued to enjoy global acceptance and patronage. It is a veritable strategy for the improvement of the productive capacity of individuals and the nations through the acquisition of relevant knowledge, skills and attitudes. It is no longer surprising that nations today are investing heavily in education to ensure socio-economic prosperity. This is evident in the continued rise in the level of involvement by different governments, organizations and individuals especially in the developing nations. On the strength of this conviction, the Federal Republic of Nigeria, launched the Universal Basic Education (UBE) programme to guarantee unhindered access to basic education to children of school age.

Basic education is a programme of instruction that is intended to provide students with the opportunity to become responsible and respectful global citizens, to contribute to their economic well-being and that of their families and communities, to explore and understand different perspectives, and to enjoy productive and satisfying lives (Washington State Legislature, 2019). Basic education is crucial to alleviating poverty, reducing inequality and driving economic growth. It inculcates competencies, knowledge, attitudes and values as a basis for lifelong learning. Basic education is more than an end in itself. It is the foundation for lifelong learning and human development on which countries may build, systematically, further levels and types of education and training.

The Universal Basic Education (UBE) programme in Nigeria is an educational programme designed to provide free and compulsory education to her citizenry. It is designed to expose its teeming youth to basic skills and literacy, equity and equality of educational opportunity. Equity in education is a goal everyone in education can get behind. Achieving true equity will require looking at different aspects from both a larger systems perspective and an individual student perspective. Much has been discussed about the difference between equity and equality. While equality means treating every student the same, equity means making sure every student has the support they need to be successful.

This position on equity in the provision of education is one of the cardinal basis for the introduction of the Universal Basic Education programme. Its main purpose is to equalize educational opportunities for all children of school age in order to open that vital gate to human capacity building and life opportunities without any form of discrimination. To that extent, Aja (2012) noted that the UBE

programme is an expression of Nigerian government strong desire to provide uninterrupted free and compulsory education for all her citizens from primary to junior secondary levels. The goal of the UBE programme is to serve as a prime energizer of national movement for the actualization of the nation's quest to make basic education accessible to all Nigerian children. The programme is therefore, aimed at reaching all children of school age irrespective of sex, religion, socio-economic status and geographical locations. No wonder, Tyoakaa (*2014) stated that* Universal Basic Education (UBE) programme is a Federal Government's policy to bring education to the door steps of every Nigerian. The realization of the laudable goals of the UBE programme depends very much on effective implementation.

The effective implementation of the programme requires strategic plans and actions, organizing the human and material resources of the system in order to realize the set goals and objectives. There have been different measures put in place to bring about the effective implementation of the programme. Reflecting on the Universal Basic Education Commission (UBEC) Act (2004) Tahir (2010), reiterated that the full and successful implementation of UBE is hinged on sound policy, good governance, transparency and well-thought-out plans. Others are clear implementation strategies, steady disbursement of funds, and right caliber of personnel to manage the programme, continuous monitoring and evaluation. Some governments have abolished all forms of fees and levies, formulated policies meant to provide books, uniforms, sandals and bags free to students. Payment of stipends to students is introduced. Commenting on these measures with respect to Imo State, *Offor(2013)* remarked that under these measures, street hawkers who are of school age left the street and went to school. Parents who before now did not take education of their children seriously see the need to do so. The resultant effect is the significant increase in students' enrolment. The implementation of such large scale educational programme requires not only the measures but also strategic activities in order to realize the predetermined goals and objectives in the most efficient way possible. One of such strategies is to regularly ensure an adequately balanced school network that will significantly guarantee equal access to educational institutions and efficiency in the utilization of resources.

School network is an essential ingredient for effectiveness and efficiency in the provision of education. Establishment of school networks falls within the ambient of school mapping. School mapping is an essential aspect of educational planning and a critical strategy for realizing educational goals and objectives. According to Oyebade (2009), school mapping represents the process of setting a school network, which will meet the present and future educational demands of the society in the most efficient and equitable way**.** It sets up school network for the purpose of ensuring that they are provided in a way that set educational goals are realized. This role of school mapping comes into play majorly when large-scale reform or significant expansion of an educational system takes place. It could be system-based or level specific. Adequate school network has the capacity to garner greater access and mitigate out-of-school syndrome. In other words, it seeks to

satisfy effectiveness and to minimize costs as much as possible while taking into account the overall objectives. In essence then, adequate school network has the function of ensuring greater access and equality of education opportunities and at the same time ensuring economic rationality in education provision.

The Universal Basic Education (UBE) programme is a response to the global call for unfettered access to basic education. In the light of the above, Obanya (2000) opined that the Universal Basic Education programme is to be seen as part of Nigeria's attempt to join the international community by giving effect to her commitment to the world trends in the field of basic education. The intention behind the adoption of this programme in the nation's educational system emanated from the recognition of the impacts of education in an individual's life and to the nation (Anaduaka & Okafor, 2013). It is designed not just as a right, but also for capacity building. It ensures human capacity development and consequently national development.The effectiveness and efficiency of this programme cannot be possible if educational institutions are not well planned, and educational facilities are not rationally distributed. Hence, planning is critical to the entire process, and one of the planning strategies is school mapping. The major role of school mapping is to set up rationally, a school network to ensure that school age children use educational institutions to their maximum advantage. On the basis of this position, school network has special significance for the implementation of the Universal Basic Education programme. It is against this background that the study investigated the nature of primary school network for effective implementation of the UBE programme in Imo State.

Statement of the Problem

The universalization of basic education is a global action designed to meet the basic learning needs of individuals. It is meant to help the beneficiaries to survive, develop their full capacities, live and work in dignity, participate fully in development, improve the quality of their lives, to make informed decisions and also to continue learning. The Federal Government of Nigeria in her resolve to join the international community on ensuring universal access to basic education, in 1999 launched the Universal Basic Education programme but was signed into Law in 2004. The programme is designed to ensure unfettered access to basic education and the exposure of its teeming youth to basic skills and literacy. Based on the fact that the pupils for this programme are minors, there are necessary strategies that must be put in place for the effective and efficient implementation of the programme. One of such strategies is effective school network through adequate school mapping, which must be a continuous exercise. However, a close look at the distribution of educational institutions, with particular reference to primary schools seems to appear very lopsided in Owerri Education zone of Imo State. Very sadly, it has been observed that many children trek long distances to access basic education while some stay back home as a result of distance. This is a situation that has the capacity to exacerbate the

number of children that are out of school. This situation is what bothers the researchers. The question therefore is: could it be as a result of poor level of access to education facilities? Could it be as a result of poor school network where children would have to travel kilometres to and fro school?

Purpose of the Study

The purpose of the study was to determine the nature of the primary school network for effective implementation of the Universal Basic Education programme in Owerri Education Zone of Imo State, Nigeria. Specifically the objectives of the study were to:

- ascertain the current primary school network in Owerri Education Zone of Imo State, Nigeria.
- find out the average radius covered by pupils to primary school in Owerri Education Zone of Imo State, Nigeria.

Research Questions

The following research questions were posed to guide the study

- What is the current primary school network in Owerri Education Zone of Imo State, Nigeria?
- What is the average radius covered by pupils to primary school in Owerri Education Zone of Imo State, Nigeria?

Literature Review

School location planning is a rational process of distributing the network of schools over space in relation to population, such that the targeted age groups of the population are able to use educational institutions to their maximum advantage. Ipso facto, when educational institutions and facilities are properly sited and distributed, many more school-age children will more easily access them because, distance will no longer be a barrier. Kaufman and Herman (2002) corroborated this in their view that educational facilities should be systematically located such that the age-group within the population for which it is targeted may use the facilities to their maximum advantage. Madumere as cited in Owoeye (2011) investigated the distribution of secondary schools in Ohaozara Local Government Area of Imo State. He used locational planning technique to carry out diagnostic and projection analysis on distribution of facilities in relation to education reforms, discovered among other things, that there were imbalances in the relationship between population density and distribution of secondary schools in the area. In her analysis of the distribution of public primary schools in three selected Nigerian towns, Tanimowo (1995) found out that the distribution of schools shows disorder, planlessness and inefficiency. The inefficiency here refers to pupils' participation. A study on spatial distribution of primary schools in Ilorin West Local Government Area, Kwara State, Nigeria, carried

out by Oloko-Oba, Ogunyemi, Alaga, Badru, Ogbole, Popoola and Samson (2016) revealed a clustered pattern for the overall distribution of primary school in Ilorin West local government, while the spatial distribution pattern in the different wards shows clustered pattern, dispersed pattern and random pattern respectively. The clustered pattern of distribution observed in the study area shows that there is uneven distribution of primary schools in Ilorin West Local Government as a whole. A study was conducted by Aliyu, Shahidah and Aliyu (2013) on mapping and spatial distribution of post primary schools in Yola North Local Government Area of Adamawa State. It showed that random pattern of distribution exists within the study area. The implication of the findings is that there is an unbalanced school network in these areas of study.

School location planning ensures that the distance to school is reduced. From the above assertion, one commonly used measure of access to school is the distance to be covered by children to and from school. This is technically referred to as average radius per school child.According to Hornby (2004), average suggests normal or ordinary, while radius is a round area that covers the distance mentioned from the centre point. From the description, average radius per school child suggests normal or ordinary distance or area that every pupil will cover from school to home. The description of average radius per school child will lack a scholarly touch if it is done without quantifying "the average radius" in terms of figures. Consequently, UNESCO recommendation for the average radius a pupil is to cover to and from school is 2km. This is the maximum acceptable distance a child can travel from home to school. In the implementation of the compulsory free education programme, many States in Nigeria including Imo State, stipulated that schools should be located at not more than one kilometer from the residences of the communities to be served (Duze, 2010). In support of this adoption of 1km distance, Appah-Onyekwere (2005) remarked that keeping to the UNESCO recommendation, compulsory free education may not be achieved before the year 2015 deadline. *In this study the average radius per school child or distance from home to school would be 1km distance. Therefore, when a child covers more than the above stipulated distance on a daily basis for the purpose of going to and returning from his/her school, it can be said that such a child comes to school from a far distance, thus the distance that the child covers is not normal or ordinary.* As per this standard, no pupil should have to trek more than one kilometre to the nearest school.

Research has shown that the main contributing factors to primary school absenteeism in North-West Nigeria include low levels of parental education, gender inequality, low incomes, perceived teacher performance and prohibitive distances to schools. The effect of distance is further highlighted. In a study carried out by Ellah (2012) on location factors and primary school attendance and participation in Otukpo Local Government Area of Benue State, the findings revealed that public primary school children in Otukpo Local Government Area have low radius per child meaning the pupils cover short distances to school. Duze (2010) carried out a study

on average distance travelled to school by pupils and students in primary and secondary schools in Anambra, Enugu, and Ebonyi States and effects on attendance. The findings of the study revealed that State primary schools in Anambra, Enugu, and Ebonyi States respectively, are located between one and two kilometers from some pupils' homes while a distance of more than two kilometers was covered by some pupils to school. In all the schools investigated those who travelled less than one kilometer to school every day are lower in number than those who travelled more than one kilometer to school every day. He therefore remarked that if pupils walk over one kilometer to school, the outcomes would not be in the best interest of both the child and the school because set goals and objectives may not be truly achieved. In line with this, Valineer as cited in Ellah (2012) remarked that average radius per school child as normal kilometers spreading from the child's school to his designated home which the child is required to cover on a daily basis in the course of travelling or trekking to and returning from school must not affect the child's capacity to learn effectively. This suggests that any distance that negatively affects the child's capacity to learn effectively or makes him/her show apathy towards schooling cannot be considered normal. A study in India in 2016 found that half of all girls were sexually harassed on the way to school, including being leered at, pinched or groped (Reliefweb, 2020).

Methodology

The study adopted the descriptive survey design. The population comprised of the 500 public primary schools with 14,923 basic six pupils in Owerri Education Zone of Imo State as the respondents. Based on the nature of the study, the 500 public primary schools were used. This was to determine the school network. Out of 14,923 basic six pupils, a sample size of 5000 (34%) was drawn from the nine Local Government Areas using stratified random sampling technique. The study used the Global Positioning System (GPS) instrument (proMark-3type) as the primary instrument. The instrument was complemented by self-structured questionnaire (secondary instrument) titled: Primary School Network and the Implementation of the Universal of Basic Education Programme Questionnaire (PSNIUBEPQ). It was validated and tested for reliability which yielded an index of 0.76. School location GPS coordinates, number of primary schools in each Local Government Area and the total area were used to determine the pattern of distribution of primary schools in the study area using Nearest Neighbor Analysis (NNA) statistics. To validate the result from network analysis, the distance covered by pupils to primary school was also examined from the information obtained from the respondents. The responses of pupils with respect to distance covered from their residence to their various schools were categorized based on <1-1km, >1-2km, >2-3km, >3-5km. According to the study, 1km is the walking standard distance of pupils to school. Data collected with the questionnaire were analyzed using the simple percentage.

Data Analysis

Research Question One: ***What is the current primary school network in Owerri Education Zone of Imo State, Nigeria?***

Table 1: The nearest neighbor index showing the pattern of distribution (network) of primary schools in Owerri Education Zone of Imo State, Nigeria

S/N	Local Government Areas	No of Schools	Rn	Remarks
1	Aboh Mbaise	58	0	Clustered
2	Ahiazu Mbaise	48	1	Random
3	Ezinihitte Mbaise	52	1	Random
4	Ikeduru	64	0	Clustered
5	Mbaitolu	81	1	Random
6	Ngor-Okpala	81	1	Random
7	Owerri Municipal	25	1	Random
8	Owerri North	47	1	Random
9	Owerri West	44	0	Clustered
		Weighted mean of Rn	0	Random

Source: Researchers' Field work (2021)

Key: Rn - the nearest neighbor index showing pattern of distribution (network)
Where Rn = 0: the pattern is clustered. This means that all the schools are close to the same location.
Where Rn = 1: the pattern is random. This implies that the schools do not follow any pattern.
Where Rn = 2.15: the pattern is regular. This entails that there is an accurate regular pattern where each school is equidistant from its neighbor.

Table 1 above shows that Aboh Mbaise, Ikeduru and Owerri West Local Governments have Rn=0 indicating a clustered pattern of distribution while Ahiazu Mbaise, Ezinihitte Mbaise, Mbaitolu, Ngor-Okpala, Owerri Municipal and Owerri North Local Governments have Rn=1 indicating a random pattern of distribution.With the weighted mean of Rn=0, the data show a clustered pattern for

the distribution of the primary schools in Owerri Education Zone of Imo State.

Research Question Two: What is the average radius covered by pupils to primary school in Owerri Education Zone of Imo State, Nigeria?

Table 2: Percentage responses of the average radius covered by pup ils to primary school in Owerri Education Zone of Imo State, Nigeria

S/N	Local Government Areas	No of Respondents	<1-1km	>1-2km	>2-3km	>3-5km
1	Aboh Mbasie	500	186 (37.2%)	173 (34.6%)	105 (21%)	36 (7.2%)
2	Ahiazu Mbaise	400	102 (25.5)	208 (52)	70 (17.5)	20 (5)
3	Ezinihitte Mbaise	500	132 (26.4)	265 (53)	81 (16.2)	22 (4.4)
4	Ikeduru	600	228 (38)	215 (35.8)	117 (19.5)	40 (6.7)
5	Mbaitolu	950	350 (36.8)	462 (48.6)	107 (11.3)	31 (3.3)
6	Ngor-Okpala	1000	275 (27.5)	491 (49.1)	182 (18.2)	52 (5.2)
7	Owerri Municipal	300	109 (36.3)	117 (39)	62 (20.7)	12 (4)
8	Owerri North	400	100 (25)	210 (52.5)	66 (16.5)	24 (6)
9	Owerri West	350	132 (37.7)	128 (36.6)	51 (14.6)	39 (11.1)
	Average	5000	32.3%	44.6%	17.3%	5.8%

Source: Researchers' Field work (2021)

Table 2 shows that 32.3% of the pupils, on the average, cover a maximum of 1km.The average percentage of pupils that cover between more than 1km and 2kms are 44. The table also shows that those that cover an average distance between more than 2kms and 3kms are 17.3, while 5.8 covers between more than 3kms and 5kms.

Discussion of Findings

It was revealed by the findings that the current primary school network in Owerri Education Zone of Imo State is of a clustered distribution pattern.The same clustered pattern of distribution was found out by Oloko-Oba, Ogunyemi, Alaga, Badru, Ogbole, Popoola and Samson (*2016) in* Illorin West Local Government Area, Kwara State. Clustered pattern of distribution was also found in some of the Local Government Areas: Ikeduru, Owerri Municipal and Owerri West. The clustered pattern of distribution observed in the study area shows that there is uneven distribution of primary schools. The findings further revealed random pattern of distribution for Aboh Mbaise, Ahiazu Mbaise, Ezinihitte Mbaise, Mbaitolu, Ngor-Okpala and Owerri North. The random pattern of school distribution is the same with Yola North Local Government Area of Adamawa State as found out by a study carried out by Aliyu, Shahidah and Aliyu (2013).The random distribution pattern observed in this area of study shows that primary school distribution does not follow any pattern. The results corroborated the findings of Madumere as cited in Owoeye (2011) that there were imbalances in the relationship between population density and distribution of secondary schools in Ohaozara Local Government Area of Imo State. The implication of the findings is that there is inadequate school network for the

implementation of the UBE programme. The fear is that with this type of scenario, the attainment of the very important Sustainable Development Goal (SDG) of universal basic education for all children would be jeopardized in Owerri Education Zone of Imo State.

The findings also revealed that the average radius covered by pupils to primary school in Owerri Education Zone of Imo State is above 1km with the total average record of 67.7 pupils covering between more than 1 and 5kms. This is much higher than the 32.3 pupils who cover less than 1-1km. The same result was also found out by Duze (2010) who carried out a study on average distance travelled to school by students in primary and secondary schools in Anambra, Enugu, and Ebonyi States and effects on attendance. It was found out that in all the schools investigated those who covered less than one kilometer to school every day are lower in number than those who travelled more than one kilometer to school every day. The implication of the findings is that while some pupils enjoy minimum travelling distances to acquire education, majority suffer by having to cover maximum distances to acquire education. This situation has the capacity to exacerbate the level of out-of-school children.However, the finding is completely different from what Ellah (2012) found out in his study of Otukpo Local Government Area. The study revealed that children of public primary schools have low radius per child, meaning that they cover short distances to school. The findings of Ellah (2012) gave credence to the highlight of Duze (2010) that in implementing the compulsory free education programme, many States in Nigeria stipulated that schools should be located at not more than one kilometer from the residences of the communities to be served. The situation has the capacity to guarantee greater access to basic education.

Conclusion

Based on the findings, the study concluded that the current primary school network in Owerri Education Zone of Imo State is of a clustered distribution pattern. Hence, there is an uneven distribution of primary schools in Owerri Education Zone of Imo State. Again, the average radius covered by most pupils to primary school in Owerri Education Zone of Imo State is above 1km.

Recommendations

On the basis of the findings of the study, the following recommendations were made:

- The state government should come up with specific policies on school mapping and ensure their strict implementation to guarantee effective and efficient school network.
- The government and her agencies responsible for the approval and location of schools should ensure that new primary schools are properly sited to guarantee access and ensure economic rationality.
- To address the issue of long distance covered to school by most children, the

stakeholders in education should put in place an effective transportation system to ensure that distance is not a barrier to the implementation of the Universal Basic Education programme.

- The government and the relevant agencies should ensure the regular mapping of schools in response to the dynamic population behavior.

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