ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 6 | Issue: 4 | April 2020 || Journal DOI: 10.36713/epra2013 || SJIF Impact Factor: 5.614||ISI Value: 1.188

RELEVANCE OF SCHOOL MAPPING IN EDUCATIONAL DEVELOPMENT IN NIGERIA

Dr Nzokurim, Joy. C
Department of Educational Management
Faculty of Education
University of Port Harcourt

Prof. S. O Oluwo
Department of Educational Management
Faculty of Education
University of Port Harcourt

ABSTRACT

Educational planning at the local level is referred to as school mapping. It is a rational process of identifying locations for the construction of classrooms, laboratory and workshops for the achievement of educational objectives. It is the last phase in a planning process when the physical facilities that should be provided under a given plan are actually located based on the norms and standards set up by the government. The essence of school mapping is to overcome the possibilities of inequalities and imbalance in the location of schools and provision of educational facilities. In this period of economic recession, when the government is finding it difficult to fund education, there is need to rationalize the use of existing facilities in order to optimize the limited resources provided. A situation where physical facilities are surplus in some schools at the expense of others cannot guarantee equal educational policy on education. Hence, the need for school mapping.

CONCEPT OF SCHOOL MAPPING

School mapping can be conceptualized in different ways. Kaufman and Herman (2002) see school mapping as requiring systematic effort designed to locate educational facilities in such a manner that target age groups of the population are able to use the facilities to their maximum advantage. To Kaufman and Herman school mapping is not a one-shot thing but a continuous process of ensuring that school facilities are provided where they ought to be. Also Igwe in Oboegbulem (2007) sees school mapping as a process of planning the location and spacing of educational institutions taking into consideration the demographic, pedagogical, economic, geographical, social, administrative, and political and manpower factors. For Igwe, school mapping is seen as a technique and procedure to plan the location and spacing of educational institutions with a view to achieving educational objectives. School mapping is therefore a process for collecting and recording curriculum-related data which become a tool to help teachers improve teaching and learning. It is education planning process that incorporates spatial and demographic dimension.

School mapping therefore is not an ordinary map of a school that is static showing the location of schools, it goes beyond this to show where schools can be located, the need for teachers, facilities and equipment forthe purpose of implementing education policies of a state. It is used to estimate future educational requirements and how they can be met.

PURPOSE OF SCHOOL MAPPING

The purpose of school mapping is manifold. The objectives include the following:

- To assist realize the targets set by the national policy on education.
- To set up a school network that will meet the future demand for education.
- To identify the locations for the construction of classroom, laboratories, school buildings and workshops.
- To optimize the use of physical and human resources in achieving educational objectives.
- To avert waste of scarce educational resources, human and material.
- To produce an inventory of available educational facilities and show which of the facilities are utilized, over utilized and underutilized.
- To ensure that facilities are provided where they can be utilized to the highest advantage.
- To achieve equality of educational opportunities through equitable distribution and redistribution of educational facilities.

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 6 | Issue: 4 | April 2020 || Journal DOI: 10.36713/epra2013 || SJIF Impact Factor: 5.614||ISI Value: 1.188

- To plan the demand for school at the local level and to support decision making on the planning, policy formulation, resource allocation and prioritization of future school development.
- To give a vision of how educational service should look in the future.
- To identify the most appropriate location of school or their alternatives so that more number of children can be benefited from the same level of investment.
- To ensure children attend school within their catchment areas without much effort in terms of trekking a long distance.
- To cover not only the distribution and redistribution of formal educational facilities but also the non-formal educational ones. Therefore school mapping should not be delimited to formal school sector.

SCHOOL MAPPING ACTIVITIES

To undertake a detailed school mapping activity in a locality, thefollowing stages need to be followed:

- Specification of standards and norms
- Consideration of the present stock of data
- Projection of future population of the residents
- Taking decisions on the school location
- Estimation of the required facilities in all the educational institutions
- Decisions on the financial resources to accomplish set tasks.

SPECIFICATION OF STANDARDS AND NORMS

The location of educational facilities should be guided by the standards and norms developed by the government in its investment policies. Therefore location of schools depends on the set standards and norms. Norms and standards are set after due considerations of the entire gamut of educational enterprise. Thus location of schools is based on norms and resources available. So the norms have to be set prior to the establishment of schools. Also within the norms and standards set some geographical areas may be more eligible for opening of new schools than the others. The norms and standards are set based on the threshold population in urban and rural areas as well as the minimum number of teachers based on the size of enrolment. The norms and standards are also set regarding the maximum permissible distance a child has to travel from their residence to school. Thus the catchment areas of a school can be measured based on the norms and standards set. Norms are also set regarding construction of school buildings and provision of educational facilities and their utilization. The standards are also set on the location of schools in urban and rural areas.

CONSIDERATION OF THE PRESENT STOCK OF DATA

School mapping activity also involves consideration of existing facilities to know the state of the art. The consideration and diagnosis will enable the planners know what is on ground so that rational projections can be made. This will also assist in avoiding duplication of educational facilities as well as in rationalization of what should be provided. The consideration will equally help to identify the strengths and weaknesses of the system so that equitable distribution of facilities can be ensured. Questionnaires, document analysis and interviews as instrument for gathering data can be used. Thus data on resident population enrolment, teacher supply, school buildings, facilities and equipment can be collected for this exercise. Demographic information is very necessary in school mapping and this should be given optimum consideration.

PROJECTION OF FUTURE POPULATION OF THE RESIDENTS

Here, the number of children to be enrolled is assessed based on the catchment area of the school. This has to do with the projection of total and school age specific population. Population projection gears towards estimation of the future size and age structure of the population based on midyear population estimate, fertility, mortality and migration. The projections are used for the purposes of resource allocation and planning of where educational facilities will be provided. In population projection, assumptions are made about levels of fertility and mortality as well as how many people will move into or out of an area before the date. The net population increase or decrease over the given period is added to the baseline population to project future population. Population projections are classified into three categories. They include mathematical projection, economic projection and component projection methods. Furthermore, growth rates and ratio methods of population projection can be used. Enrolment projection is essential when new schools are to be opened, the existing schools are to be upgraded as well as in the estimation of the required number of teachers. A lot of data are needed in enrolment projection like dropout rate, promotion rate, repetition rate, entry rates.

The only constraint here is lack of some of these data at the local level required to make reliable

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 6 | Issue: 4 | April 2020 || Journal DOI: 10.36713/epra2013 || SJIF Impact Factor: 5.614||ISI Value: 1.188

and precise projections. Capacity to keep accurate data in Nigeria most times is lacking and sometimes projections are made without reliable information. At times the data are scanty and not enough to make accurate population Projection, hence we depend on the most probable approximations and estimate that may not be entirely reliable.

TAKING DECISIONS ON THE SCHOOL LOCATION

Opening of new schools should be based on the set norms by government. Decisions should be taken before location of schools in line with the norms and standards set by the public authorities. Decisions are made based on the number of school going age to be enrolled; population in rural and urban areas; the number of teachers available; the permissible distance a child should travel home to school These information are necessary and can be obtained through a survey. This will help to identify the most ideal locations to open schools. In Nigeria, some schools are located based on political consideration rather than due consideration for accurate information. Most times decisions are not made to favour equitable distribution of educational facilities. Schools should not be located based on political considerations but on social demand to benefit the majority of the citizenry. Gaps on unequal location of schools should be bridged to ensure equal educational opportunities. Statistics is necessary in deciding the location of schools. Location of schoo1s should be based on the norms and resources available.

ESTIMATION OF THE REQUIRED FACILITIES IN ALL THE EDUCATIONAL INSTITUTIONS

Facilities are very essential educational institutions. As is the facility so the school. Researches have consistently shown that schools with adequate facilities perform better than those with poor facilities. However, the facilities available should be well utilized and maintained for the benefit of the students. The requirement of facilities in schools can easily be assessed in the new schools. In the existing schools, facilities can equally be assessed but not as easy as in the new schools. Additional infrastructural facilities can be required in the existing schools based on the population growth and potential growth in enrolment. In the assessment of the entire school facilities, direct observation can be used. Also questionnaire and interview schedules can be employed. The estimation of facilities requires that the number of enrolment of pupils, the total population and the number of class streams should be generated.

The facilities in question include the site, the building and the equipment, machines, laboratory, seats, blackboard, etc. The estimation of the facilities is necessary to avoid duplication, underutilization and overutilization. Therefore both the infrastructural facilities and teaching and learning material should be incorporated in the estimation.

ESTIMATION OF THE FINANCIAL RESOURCES REQUIRED FOR PROCUREMENT OF FACILITIES

Estimation of physical facilities to be procured without financial provision is a wild goose cheese. Funds are very important in every organization. Planning without due consideration for funding will definitely fail. Therefore based on the estimate of facilities required for new and existing schools, cost estimates can be made based on the prevailing market price. It is only after the cost estimation that proposals can be prepared for the purchase of the facilities required. However, costing is one thing and making money available for purchase another more especially in this era of economic recession. The process of school mapping activity therefore involves rationalization of existing facilities and provision of new or additional facilities. According to Sabix (n.d) the rationalization of existing educational facilities can be by shifting, closure or amalgamation of institution; optimal utilization of teaching and non-teaching staff; and optimum utilization of buildings, equipment and furniture. The provision of new or additional facilities should be by opening of new schools or upgrading of existing ones; providing additional teaching and non-teaching staff and providing new or additional buildings, furniture and equipment in institution. Sabix states further that school mapping has the dual function of securing greater equality of educational opportunities and at the same time of rationalizing the use of existing ones in an effort to optimize the limited material and manpower resource. Thus school mapping should cover not only the distribution of formal educational facilities but also in the non-formal educational facilities (UNESCO, 1983).

OBSTACLES TO SCHOOL MAPPING ACTIVITIES IN THE DEVELOPING NATIONS

School mapping activities have the advantages of improved information for decision making, equalization of educational opportunities, increased enrolment, equitable distribution of educational facilities, decreased incidence of drop out, enhanced capacity of field actors to plan and take action, etc. However, there are some challenges planners encounter

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 6 | Issue: 4 | April 2020 || Journal DOI: 10.36713/epra2013 || SJIF Impact Factor: 5.614||ISI Value: 1.188

in school mapping especially in a developing nation like Nigeria. They include but not limited to the following:

- Poor data supply
- Inaccurate information generation
- Lack of hardware and software for effective school mapping activity
- Poor manpower supply
- Inadequate capacity building for the planners
- Lack of collaboration between planners at the local level
- Emphasis on politics rather than the interest of the local communities
- Astronomical increase in the number of students' enrolment vis-a- vis governments' inability to fund schools.
- Lack of funds to acquire the necessary tools for effective school mapping.
- Lack of commitment on the part of the government to ensure effective school mapping at the local level.
- Poor information dissemination to teachers, parents, students, education officials, community leaders on the real situation of education at different local levels.
- Lack of cooperation of the stakeholders with the government to carry out effective school mapping activities (poor synergy).

WAYS OF IMPROVING SCHOOL MAPPING ACTIVITIES

- Collaboration on the part of stakeholders in education, the parents, students, community leaders, non-governmental organizations, the government, etc to carry out a robust school mapping. The government alone cannot do this without the cooperation of other stakeholders because school mapping activity requires synergy. Without this synergy the goals of school mapping will not be achieved.
- Collaboration on the part of the local communities to acquire the materials like Geographic information system needed for effective school mapping. Those who have the facilities can share with those that do not have. There is therefore need for networking among communities for effective school mapping.
- Need for capacity building. Training should be conducted on school mapping to all the people that will be involved in it to appreciate what it is. If those that should be involved do not know what the outcome of school mapping is, they can frustrate the activity. It is therefore important that they are well tutored about the activity to enable them give their full cooperation to it.
- Need to conduct an inventory of existing resources. At the local levels, the inventory of existing resources in terms of manpower, hardware, software, databanks etc should be conducted. The results of the inventory will determine the shortfalls, the gaps and shortcomings of the education management information system (EMIS) in meeting its current future demand and requirements (Sabix, n.d).
- Government's show of commitment to school mapping. Government should cooperate with educational planners by giving them the needed supports for effective school mapping. After costing the facilities, the government should endeaviour to provide necessary funds for the procurement of the facilities in the new and existing schools, knowing full well the benefits of educational facilities in teaching and learning. Agencies of the government should be ready to release statistics for effective school mapping when the need arises because poor data supply can mar a well-intentioned school mapping.
- Educational planners should establish a link with other government agencies to ensure that the requirements of school mapping can be fully addressed. Without this synergy, school mapping activity cannot be effectively executed.
- Existing policies, system and procedures appertaining to school mapping should be reviewed and revised from time to time for a more rational and balanced approach to upgrading schools from one level to another.
- Educational planners should be trained and retrained in the use of new technology in school mapping. Knowledge of computers and programming is essential in processing data for the purposes of school mapping. Computer literacy is paramount and should be held at a high premium.

CONCLUSION

School mapping activity helps to identify the best location of schools so that more number of children can be benefited from the same level of investment. This helps to equalize educational opportunities through effective distribution and redistribution of educational facilities in new and existing schools. To enhance school mapping activity, educational planners should see school mapping as a serious business and make use of the strategies identified in this write up.

REFERENCES

1. *Kaufman, R & Herman, J. (2002). Educational planning: strategies, tactics and operation France Littlefield Education*
2. *Oboegbunam, A. (2007). School mapping and data indicators for educational planning in institutional network in Nigerian educational situations.*

ISSN (Online): 2455-3662
EPRA International Journal of Multidisciplinary Research (IJMR) - Peer Reviewed Journal
Volume: 6 | Issue: 4 | April 2020 || Journal DOI: 10.36713/epra2013 || SJIF Impact Factor: 5.614||ISI Value: 1.188

International Journal of Educational Planning and Administration 1(3), 79-93.

3. *Sabix, M. J. (n.d). School mapping in the light of education reform in Pakistan. Education Archive 1(8), 30-34.*
4. *UNESCO (1983). IIEP advanced course in educational planning and management training materials, France.*