

# **PROBLEMS CONFRONTING SCHOOL PERSONNEL IN EDUCATIONAL DATA COLLECTION, ANALYSIS AND STORAGE**

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## **Introduction**

Apparently, in Nigeria, the business of education is gradually getting transformed from being a mere welfarist issue to a matter of economic expediency. This calls for a data-based planning of the system. Education data are simply the numerical information gathered about the operations of the education system. Data are essential tools for educational decision-making. An educational plan may simply be seen as a set of decisions, a scheme or programme prepared for implementation in the future for the accomplishment of the educational systems objectives (Osaro, 1988). The need for planning the educational system is derived from the fact that the society is not static and education must respond and adapt to the changing technological, economical, political and social environments of the nation.

The current world-wide economic recession does not spare Nigeria. The nation is only trying to cope with the serious decline in her financial income through cut-backs on domestic expenditure on all sectors, education inclusive. The continued survival of our education system now depends greatly on the ability of our school managers and policy makers to utilize the existing resources efficiently and effectively. This justifies the current introduction of theories of economics that were in the exclusive preserves of commerce and industry into the business of education. By and large, in the contemporary sense, educational planning in Nigeria has some serious short comings. A major short coming is the inadequate data-base available to our educational decision makers. The use of quantitative methodology for decision making in education has become important for three major reasons. Firstly, there is an explosive growth in the size of the education system in recent times. For instance, primary education enrolment grew four times its original size, secondary education grew eleven times while university enrolment increased thirty times the original size between 1975 and 1980 (Adesina, 2005). Secondly, owing to our declining resources, there is increased dependency on foreign donors who in turn demand for quantitative data to ensure accountability and thirdly, there is increased complexity of the education systems, programmes and objectives. The assumption is that if better information could be made available, better management and resource allocation decisions would flow. However, there are some knotty issues and problems facing education data management in Nigeria.

## **Issues in education data collection, analysis and storage**

Several issues are associated with the management of education data in Nigeria. Conceptually, education data simply refers to numerical measures of educational phenomena at any point in time. The phenomena could relate to either human or material element of the input, process or output of education.

Education data collection is the process of gathering the various quantitative information about the educational system for the purpose of using such data to guide decision making. Education data analysis is the process of collating, presentation and interpreting the information contained in the data to aid decision making. Education data storage refers to the process of preservation of data collected in such a manner that will enable us retrieve such data when needed in future for use in decision making.

The key issues in education data collection, analysis and storage in Kwara State include non availability of data, inaccuracy of the available data, mistakes in the analysis of education data owing to the level of cognitive preparation of the data analysts, the general attitude of Nigerians to record keeping and the difficulty of retrieval of data on time when needed.

The issue of non availability of data is very disturbing to policy makers in education in Nigeria in the sense that some vital records needed are either not kept or at best poorly kept. This is quite noticeable at all levels of our educational system. It seems the majority of Nigerians don't keep records neither are they very willing to give out information for fear that such information might be used against them. Even in the schools, the needed information may not be found either because they have not been obtained by the school or they have been lost due to poor storage. Many of the schools, particularly in the rural areas suffer from natural disasters like fire, storm, flood and termites, as a result of which they loose their school records. Even in some places where such records are kept, they are placed in the care of poorly trained or totally ignorant record clerks. The data might have become mixed up to the extent that retrieval may be very difficult when required for use.

Another crucial issue in data collection, analysis and storage is that of inaccuracy of the data available. This issue of inaccuracy of data may arise in the educational system due to a number of reasons. These include that the head teachers don't keep the records accurately and deliberately in order to influence financial allocation to their schools. It may also be that owing to ignorance about record keeping, the head teachers have not collated the data for their schools accurately enough.

Moreover, some people are not very friendly with figures and errors could easily occur in adding, multiplying or subtraction of the numbers. It is often possible also to discover some discrepancies between the records of the schools and the overall summaries in the Ministry of Education. This error could occur simply in the process of transfer of the data from the school summary to the ministerial summary sheets.

In addition, there is the issue of low level of training or lack of expertise of our head teachers in the process of education data analysis. This is evident in

the usual mistakes observed in the analysis of schools data. Even in the marking of daily attendance of pupils in the register, errors could be observed in some schools. This is because some teachers are not sure of how to analyse and interpret the data. This calls for a need for training and retraining of our school teachers and head teachers in the art of data analysis. Depending on the level at which the data are required for use, the record keepers should have some basic skills of descriptive analysis of the education data. This will help the data keepers to understand why the records are kept and they will appreciate keeping the data accurately.

Further, another issue that seems to be very vital in education data collection, analysis and storage is the difficulty of poor storage and retrieval of data. In Nigeria we have a culture of poor data storage and retrieval. Until recently when we have some modern data storage facilities like computers, microfilms and tapes, our data were usually kept in files and folders and stored in drawers or even on bare floors. This method of storage result in loss of data and hinders retrieval. Even the modern data storage facilities are too costly to get to the reach of most schools. Thanks to some of our international development partners for their collaborative efforts with the federal government to improve this situation and computerizing schools data.

However, there are some major problems hindering proper educational data collection, analysis and storage. This is treated in the next section.

### **Problems associated with educational data collection, analysis and storage in Kwara State**

The problems confronting education data collection, analysis and storage in Kwara state are numerous. The problem in the area of education data collection arises because of the secrecy attached to personal matters by most Nigerians. Even some vital information, particularly those relating to educational finance, are made secret. This problem is not limited to private individuals only. Even the government too is found to be hoarding some vital information on cost of education. Also, in most states of Nigeria, there are no comprehensive digest of statistics that could supply enough data to educators, education researchers and policy makers. There are no statistics unit in the schools to help gather and store the necessary data. The school head teachers who are the primary sources of the state and national level data have insufficient data-based management information system.

The problem of data analysis is also very major for several reasons. Low data quality is a severe problem hindering education data analysis not only in Kwara state but also in most third world nations (Chapman and Boothrayd, 1988). Even where the data were of good quality the low level of training of school managers in data analysis constitute a hindrance. Imboden (1980) carried out a case study of data analysis for decision making on education in developing nations where he discovered that many of the countries even gathered more data than are analysed or even used in policy making. This occurred partly because the data

analysts don't have adequate knowledge of computer technology and are even ignorant of what analysis to do. In most cases at the school level people resort to calculators and simplistic estimation.

The problems facing educators in the area of data storage are such that people are careless with data. People don't preserve documents even personal documents such as pay slips, declaration of age, marriage certificates, receipts of payment made on school fees and even certificates are being poorly kept and lost. Another problem with data storage is that people are not aware of some modern storage facilities such as computer diskette, flash disc, microfilm and microfiche. Even where the school personnel are aware of these modern facilities, the schools are not empowered to be able to purchase them. There is also the problem of poor storage due to faulty cataloguing which makes retrieval difficult.

### **Conclusion and Recommendations**

Obviously, a vital step towards improving data-based decision making in Kwara State education system is that of finding solutions to some of the major constraints to data collection, analysis and storage. The school head teachers and teachers are the primary sources of major education data. The inadequate cognitive preparation of teachers and head teachers for their jobs constitute part of the problem of data collection, analysis and storage.

To reduce some of these constraints identified the teachers and head teachers should be trained and retrained in the modern system of data collection, analysis and storage. The teachers need to be taught the improved systems of recording school level data accurately.

Moreover, the level of challenges posed to teachers and head teachers in our schools is too little. The teachers are not involved in serious planning activities and most of the data they are made to collect are not used by them hence they don't realise their value to decision making. There is a need to involve the school teachers and head teachers in some major management decision like budgeting, project planning and execution and curriculum planning. Schools should be given some incentives to encourage honesty in data collection.

Also, there is the need to create some computer awareness at our school level by helping them to have access to computer and be computer literate. This will ensure better storage, more accurate analysis and a quick retrieval of data when needed.

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