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New Century

JOURNAL of EDUCATION

Volume 1, 1998.



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C/O NATIONAL SECRETARY
NIGERIAN ASSOCIATION OF PROFESSIONAL EDUCATORS (NAPE)
FACULTY OF EDUCATION
UNIVERSITY OF LAGOS

New Century

Journal of Education

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EVALUATION OF THE USE OF MODERN INFORMATION TECHNOLOGY FOR EDUCATIONAL PLANNING IN LAGOS STATE.

BY

ADEKUNLE BELLO (Ph. D.)

Abstract

This study examines the use of computer based information technology for educational planning in Lagos State. The research was carried out at two levels. Lagos State Ministry of Education and Post Primary Teaching Service Commission (PPTESCOM). The sampling techniques used were purposive and random sampling. The findings of the research suggest that awareness of modern information technology is not adequate both at the management and staff levels. However, the backgrounds of the most of the personnel favour easy computer training. The research recommends that reliable information needed for educational planning can be obtained through the adoption of relevant softwares, which should be network to allow for the easy transfer of information.

Introduction

Education planning is all about preparing for the future. Decisions taken are based on the information available. The need to process voluminous data to extract small amount of information had led to increased recognition of Information Technology (IT) especially in education. This may be as a result of considerable success already recorded in banks and other industrial settings.

Nwankwo (1985) views information as the most important tool and indeed the essence of management especially in education. This implies that an organization's performance is threatened if its capacity for receiving and processing information is low.

Aiyepeku (1978) support this view that efficient decision making is dependent on the quality and accuracy and timeliness of relevance information utilized in decision making process.

Although the costs of information technologies to build information infrastructures are high, the costs of not doing so are likely to be much higher (Adegbenro 1998).

In creating a computer based information system, a large initial cost is usually incurred for design and development before the system can be implemented and begin

to produce useful information. Benefits from gain in productivity and quality of information off sets the initial and on going running costs of the information system.

Educational planning should therefore be made easy through the use of modern Information Technology. This is the focus of this paper. Evaluation of the use of Modern Information Technology for Educational Planning.

Statement of the Problem

The study examined the techniques used in data collection, processing and the skill of personnel in using Information Technology for Educational Planning. The study therefore aimed at making planning more precise, reliable and efficient for future educational forecasts or predictions through the proper utilization of existing and potential modern information technology.

Specially, the study sought to answer questions such as:

- (1) What type of information is required for secondary school planning?
- (2) Are these information obtained from the right sources?
- (3) Are these sources reliable?
- (4) What facilities are available for the management of information obtained?
- (5) Do the personnel have adequate knowledge of operation of the available computers?
- (6) What are the specific attitudes of educational planners in Lagos State towards the adoption of Modern Information Technology.

Research Hypotheses

- H₁ The major problem affecting the use of MIT will be perceived to be both administrative and lack of adequate resources
- H₂ Inadequate trained man-power to handle the MIT is perceived as limiting the development of MIT.
- H₃ There is a significant relationship between MIT output, programme input and development procedure.

Research Design

Descriptive design method was used in this study. In order to obtain first hand and reliable information from the personnel and management staff at the Lagos State Ministry of Education and Post Primary Teaching Service Commission (PP-Tescom) questionnaires and structures interview adopted.

Sample

Population for this study was made up of management personnel in the Lagos State Ministry of Education and PP-TESCOM.

The subject for this study included all directors of departments who were purposively chosen based on a non-probability sampling techniques other members of each department involved in the study were selected using stratified sampling method.

Instrumentation

A review of the past studies was carried out to provide the actual background for this study. Data were collected through the use of questionnaires and interview schedule.

A modern Information Technology for Educational Planning Questionnaires (SUMITEPO) was constructed and used for this study.

SUMITEPQ is a fifty-item questionnaire, which consists of the three parts A, B, and C. Part of A was designed to collect background information of respondents such as management unit, sex, age. Part B sought responses on Information Management vis-à-vis frequency and methods of collection, processing, retrieval, adequacy of information, and the perceived need for adequate training of the use of Modern Information Technology (MIT). Part C focussed on major issues considered necessary to promote supportive data on the hypotheses of the study.

Data Analysis

The data for this study were described, recorded, analysed and interpreted as demand using appropriate descriptive and inferential techniques.

Average spread of scores, Chi-square, standard deviation Pearson product moment correlation statistics were used to analyse the data based on the hypotheses of the study.

Results.

Table 1

Problem Affecting the use of Modern Information Technology

Variables	SA	Resources Oriented				Total	Xcal
		A	D	SD			
Non availability of Tools	2(1.73)	1(1.04)	1(3.81)	2(2.2)	9		
Inadequate funding	2(1.92)	1(1.15)	5(4.23)	2(2.7)	10		1.58
Poor communication	1(1.35)	1(0.81)	2(2.96)	3(1.88)	7		(NS)
Total	5	3	11	7			

NS = Non Significant at 0.05;

df = 6, Critical $\chi^2 = 12.5$

Figures in brackets are the expected frequencies, other figures are the observed frequencies.

Table 1 above shows a lower calculated χ^2 value (1.58) then critical χ^2 table value (12.59). This implies the major problem/of information technology is both administrative and resources oriented. Hypothesis 1 is therefore accepted.

Table 2**Trained Manpower to Handle MIT**

Variables	Man power				
	SA	A	D	SD	Total χ^2_{cal}
	2(1.62)	2(2.31)	1(2.31)	1(0.92)	6
First Degree	3(2.42)	1(1.73)	4(3.5)	1(1.4)	9 2.6
Below first degree	2(2.96)	2(2.12)	5(4.23)	2(1.69)	11
Total	7	5	10	4	26(NS)

NS = Non Significant at 0.05, $df = 6$

Critical $\chi^2 = 12.59$.

Table 2 above shows that χ^2 – value calculated (2.6) is lower than critical χ^2 table value (12.59). This implies that inadequate trained manpower to handle the MIT is significantly perceived as limiting the development of MIT. Hypothesis 2 is therefore accepted.

Table 3**Relationship between MIT output, programme, input and development procedure**

Variable	N	X-Score	SD	r cal	r critical
Output/input		2.73	2.02		
	26			0.58	.388
Development procedure		2.69		1.09	

Significant at 0.05, $df = 24$, critical $r = .388$

Table 3 above shows that the calculated r value (0.58) is greater than critical – table value (0.388). This implies that there is a significant relationship between MIT output programme input and development procedure.

Hypothesis 3 is therefore rejected.

Discussion of Findings

The result of the first hypothesis shows that the major problem affecting the use of MIT is significantly administrative and resources oriented. This observation is consistent with the Morales Gomes (1989) who found that the quality of information on development and education available to planners and policy makers must be examined to determine what type of educational planning would be needed in the future.

Moreover, the result of the second hypothesis shows that inadequate trained manpower to handle the MIT is significantly perceived as limiting the development of MIT. In recognition of this finding and the role of computer as an indispensable tool for development, the need to acquire computer technology and integrate it into our

education set-up, the Federal Government at the time of setting up the Committee in 1987 had spent about ₦1m. in training personnel who would handle the take off. (Omosebi, 1992 p. 13).

Bello (1985), also suggests that it has become imperative for the government to inject into the Nigeria National Consciousness, the need for a well articulated computer educational programme. Otherwise, our country would be left behind in the race.

Furthermore, the result of the third hypothesis also revealed that there is a significant relationship between MIT output programme input and development procedure. This hypothesis is strongly supported by Ferbado (1995) who believes that the problems will not be resolved by providing everyone with expensive large memory, high speed computer but also require an elaborated conceptual framework that identifies what data is useful for information and what kind of information is useful for policy.

Once the input is flawed, then the corresponding output will be wrong no matter how good the processing steps used may be.

Conclusion

Based on the findings of this study it can be concluded that procedures adopted in educational planning are not significantly adequate. This inadequate trained manpower to handle MIS is significantly perceived as limiting the development of modern information technology.

The application of Modern Information Technology to educational planning would reduce costs, improve the speed and accuracy of information and contribute to the quality of decision making required for effective educational planning.

However, in order to develop the use/of modern information technology for educational planning, the Federal Government should endeavour to adopt the use of relevant software's which should be net-work to allow for easy transfer of information; include the study of modern information technology in the curriculum content at all levels of education and train workers especially educational planners how to use modern information technique.

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