Case Study	NEW TECHNOLOGY AND RECORD KEEPING IN EDUCATIONAL MANAGEMENT: LEVELS OF SECONDARY SCHOOL PRINCIPALS, TEACHING PERSONNEL COMPUTER LITERACY AND PHOBIA

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ABSTRACT

The role of new technology (Computer) in teaching-learning activities is rapidly becoming one of the most important and widely discussed issues in contemporary education policy. This study examined the literacy and phobia level of secondary school principals and teaching personnel in computer utilization as the new technology. Also, the study investigated how often secondary school principals and teaching personnel make use of computer for administrative purposes. The descriptive survey research design was used for the study. A total of 1600 respondents (Principals and teaching personnel) were sampled, consisting of 100 principals and 1500 secondary school teaching personnel. Data were analyzed using regression, correlation and descriptive statistics. Findings revealed that many schools are not using computer for the administrative work despite the fact that some of the teaching personnel have knowledge in the use of computer. All secondary schools should be provided with enough computers for principals, teaching personnel as well as students' usage. Likewise, to enhance the utilization, principals and teaching personnel should be well trained.

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INTRODUCTION

In realizing the educational goals, record keeping in management is very crucial. Records, according to[2] are those documents in whatever medium, received or created by an organization in the course of business because of the information contained. Record keeping is the art of keeping school records which by education law must be kept by every educational institutions at all levels for effective and smooth running of the school administration. Records give details about the students and entire staff in the schools. Record keeping in educational management and utilization are very vital to the continual existence of the school as an organization. Such records, if made available and put to use at the appropriate time will enable both principals and teaching personnel know something about their students and through this, will be in a better position to assist the students academically, morally and socially. In addition they would be able to predict the information to whoever may need it[1].

Over the years, keeping records has always been done manually. In schools, the manual record keeping in management has been characterized with a lot of problems, such as, lack of skills in the interpretation of scores from assessment instrument, lack of skills in records and preparation of reports, lack of facilities for record keeping and shortage of teaching personnel that doubles as administrative workers[7]. Principals and teaching personnel are faced with tedious task of keeping the students' attendance, record books, cumulative report cards and

students' performance in cognitive, affective and psychomotor domains. Also, it has been widely acclaimed that there are assault on papers; some countries like USA during the reign of the president Hoover established the task force on record management[2]. The goal of record keeping in management is to achieve efficiency in the creation, utilization and maintenance of records. However, these goals cannot be realized unless they are properly and adequately organized in such a way that storage and presentation allow for easy accessibility.

Computer is an electronic machine capable of input, process and output information based on a logic supply. Computer literacy is the ability to identify and operate the software and hardware of a computer so as to achieve a desired goal. Computer literacy is the ability to use computer for record keeping in educational management. the growth in the number of courses offered in secondary schools and the proliferation of students' records has generated some challenges for both the school administrators and teaching personnel. The committee on the National Policy on Computer Education recommended the procurement of at least one computer for school administration[5].

Literacy Assistance Center (LAC) is of the view that computer technology plays a role in nearly every aspect of life in assisting adult education programmes and in preparing students to become full participants in this 21st

century. The LAC's instructional technology initiatives offer resources for integrating technology into the classroom (E-learning)[9]. Observe that when computer is properly used, information holds great promise to improve teaching-learning activities and in addition, to shaping workforce opportunities. Also, in the rapidly changing world of global market competition, automation and increasing democratization, basic computer education is necessary for individual to have the capacity and capability to access and apply information.

The Economic Commission for Africa (ECA) has indicated that the ability to access and effectively utilize information is no longer a luxury but a necessity for development. It is not uncommon to find that many establishments in Nigeria including educational institutions, still keep records only in files and tucked them away in filling cabinets where they accumulate dust and that many of these files are often eaten up by rodents and cockroaches; thus, rendering information irretrievable[9]. They are of the opinion that most Nigerian schools still go through the laborious exercise of manually registering students, maintaining records of students' academic performance, keeping inventory list of supplies, doing cost of accounting, paying bills and printing examination questions and reports, among others.

Computer phobia is the fear of impending interaction with computer that is disproportionate to the actual threat presented by the computer. Researchers have carried out researches on computer phobia or anxiety as the case may be and using computer as programme or instructional management tool for teaching personnel use[3,4,6]. Results from different researches have shown that no differences existed in computer phobia among teaching personnel from various vocational fields and that level of computer skills was a significant explanatory variable of computer phobia[4,6]. Four variables were identified as a significant proportion of the variance in computer phobia, namely; principal's support of computer use, computer availability at school, perceived mathematical ability and whether the teaching personnel had received formal computer training[6].

Russell[8] explains six stages that naïve users go through when learning to use computer. These includes; awareness of the computer, what it can do, learning the process, familiarity and competency of the usage, adaptation to other context about or on the computer and creative application to new contexts. Understanding these stages of learning to use computer, empowers the learner through literacy that the feelings of tension and frustration will be overcome[8].

Statement of Problem:
Despite all research work on computer phobia or anxiety[4,8], much work has not been done on the utilization of computer for record keeping in educational management in secondary schools and the level of literacy of the school users. To this end, this study therefore, inves-

tigated how often secondary school administrators and teaching personnel make use of computer for administrative purpose and the phobia level of the school administrators and teaching personnel in computer utilization as the new technology. Hence, this study will produce answers to the following research questions:

1. What is the level of principals, teaching personnel computer literacy and phobia?
2. What is the level of availability of computer for usage in the selected secondary schools?
3. To what extent do computer literacy and phobia influence principals and teaching personnel computer utilization for record keeping?
4. Is there any significant relationship among computer phobia, literacy, principals' and teaching personnel computer utilization?

METHOD

Descriptive survey research approach was used for the study. Correlation analysis was used to compare the relationship between computer phobia, literacy, principals' and teaching personnel computer utilization, while regression analysis was used to calculate the influence of the principals' and teaching personnel computer phobia and literacy on computer usage for record keeping in selected secondary schools. Also, descriptive statistics like mean and bar chart were used to identify the availability level of computer in selected secondary schools as well as the level of principals' and teaching personnel computer literacy and phobia in the selected secondary schools.

Sample and Sampling Techniques:
Simple random sampling technique was used for selecting schools to study and respondents within the selected schools. First, a sample of 100 secondary schools was selected from 165 secondary schools in Ibadan local government area, Ibadan municipality, Nigeria. Then 1 principal and 15 teaching personnel were randomly selected from each school for a total sample of 1600 respondents (Principals and teaching personnel).

INSTRUMENT

The researcher designed an instrument named Principal/Teaching Personnel Questionnaire (P/TPQ) for data collection. P/TPQ is made up of four parts, which include background information of the principal and teaching personnel, ways of keeping records in schools, number of available computer that is functioning for usage, items on principal and teaching personnel computer literacy and phobia. Many of the items in the instrument are four-point Likert scale type, which were later coded numerically (4, 3, 2, 1), so as to facilitate the analysis. The draft of the questionnaire was randomly given to 10 principals and 10 teaching personnel for validation. Items were validated using test-retest reliability. The reliability coefficient was 0.82.

RESULTS AND DISCUSSION

Research Question 1: What is the level of principals' and teaching personnel computer literacy and phobia?

Table (1) and figure (1) above show the level of principals' and teaching personnel computer literacy and phobia. The level of teaching personnel computer literacy is higher than the principals. Also, the teaching personnel level of computer phobia is not as high as principals' level of computer phobia. This implies that principals have more anxiety to operate computer than the teaching personnel.

Research Question 2: What is the level of availability of computer for usage in the selected secondary schools?

Table (2) above reveals the level of availability of computers for usage in the selected secondary schools. The average number of computers in the selected schools is 6.45, which is rather too low for the 100 secondary schools. This implies that secondary schools are not having enough computers for utilization. The average number of the functioning ones out of the available ones is 80.78, while 19.22 are not functioning at all. Out of the functioning ones, the average number for administrative use is 21.50, while 78.50 is for students' use.

Research Question 3: To what extent does computer literacy and phobia influence principals and teaching personnel computer utilization for record keeping?

Table (3) above shows the combination influence of principals' and teaching personnel computer phobia and literacy on computer utilization for record keeping in selected secondary schools yielded a coefficient regression of 0.325, a multiple R square of 0.1513 and Adjusted R square of 0.1502. This implies that about 15% of the variance in computer utilization for record keeping can be explained by the combined influence of principals and teaching personnel computer literacy and phobia. The table also, reveals that the analysis of variance for the multiple regression data produced the F-ratio of 21.12 which is significant at 5 per cent level. This indicates that the effectiveness of the predictor variables (Computer lit-

eracy and phobia) in influencing principals and teaching personnel computer usage for record keeping could not have occurred by chance.

Research question 4: Is there any significant relationship among principals' and teaching personnel computer phobia, literacy and computer utilization?

Table (4) above reveals the inter-correlation among the variables; principals' and teaching personnel computer literacy, phobia and computer utilization for record keeping in school management. The correlation coefficients were found to be statistically significant at 5 per cent level. This implies that there is inter-relationship between principals and teaching personnel computer phobia, literacy and computer utilization for record keeping in the selected secondary schools.

CONCLUSION AND RECOMMENDATION

Computer phobia appears to be a psychological indicator for computer usage, because it affects the principal and teaching personnel in the utilization of computer for record keeping in schools. Computer literacy has significant relationship with computer phobia which reflects on the usage.

Results from this study, have further shown that for proper record keeping in secondary schools, principals and teaching personnel should embrace the utilization of computer as the new technology. Computer can also improve principals' and teaching personnel techniques of research work as well as the teaching-learning activities. The cumbersome exercise of searching by hand through the library's card catalog or periodical indexes can be made easier by typing few words pertinent to the topic into a computer and such can be retrieved in just a matter of minutes. Computer holds records in a more compact and easy accessible way than the manual processing for record keeping. Computer can generate information for decision making on students' performance or otherwise more flexibly and quickly.

It is therefore recommended that, schools should have a fully computerized record centre. Enough computers

Table 1: Description Statistics of Principals' and Teaching Personnel level of Computer Literacy and Phobia.

Items	Principals		Teaching Personnel	
	N	%	N	%
Handling of computer	22	(22)	1140	(76)
Using of e-mail	9	(9)	915	(61)
Using cyber café	2	(2)	420	(28)
Found computer confusing	81	(81)	705	(47)
Computer is difficult to learn	78	(78)	555	(37)
Computer can affect sight	84	(84)	1035	(69)
Get scared with computer	61	(61)	630	(42)

Table 2: Descriptive Statistics of the Functioning Computer in Selected Secondary Schools.

| Parameters	N	X̄
Functioning computers in the selected secondary schools.	521	80.78
Functioning computers for administrative use in the selected secondary schools.	112	21.50
Functioning computers for students to use in the selected secondary schools.	409	78.50
Available computers in the selected secondary schools.	645	6.45
Computers that are not functioning in the selected secondary schools	124	19.22
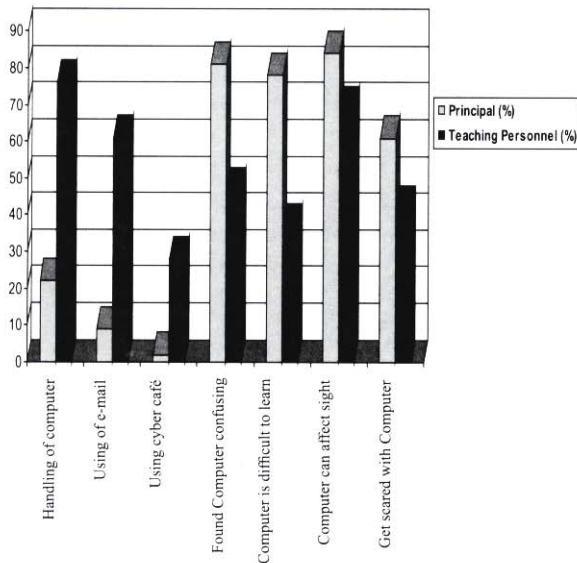
Fig. 1: Bar Chart on Principals' teaching personnel level of Computer literacy and Phobia in Selected Schools.

Table 3: Summary of the Multiple Regression Analysis.

Multiple R	= 0.325
R Square	= 0.1513
Adjusted R Square	= 0.1502

Analysis of Variance

Sources of Variation	Sum of Squares	DF	Mean of Squares	F	Sig.
Regression	1741.44	2	870.72		
Residual	65849.9	1597	41.234	21.12	.000
Total	77591.34	1599			

* significant at 5 per cent level; Predict: (Constant), computer phobia and literacy; Dependent Variables: Utilization of computer for record keeping.

Table 4: Inter-correlation among Variables:

Variables	CP	CL	CU
Computer Phobia (CP)	1	.837*	.521*
Computer Literacy (CL)	.837*	1	.451*
Computer Utilization (CU)	.521*	.451*	1

* sig. at 5 per cent level.

should be provided in schools for administrative purposes and students' use. Source of power should show more concern in the procurement of computers in schools. Schools should join the World Links of Development, a programme initiated by the World Bank in 1997. The programme has been providing computer laboratories and bringing Internet connectivity to schools in developing countries. The programme links schools around the world in order to improve education. Computer training should be organized for both principals and teaching personnel in schools.

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