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Computer in Primary Education Administration in Government Schools Tanzania

Happyness Hurdson Temu[i]
Center for Information and Communication Technology Department
Saint John's University of Tanzania
P.O.BOX 47 Dodoma–Tanzania
hhurdson@sjut.ac.tz

Abstract

This article provides an analysis from a primary education system in Tanzania titled "Computer in Primary Education Administration in Government Schools Tanzania" by Happyness Hurdson Temu, which originally was written in English language. The author shows how the article could be used to see the situation of using computer in education administration in primary education schools in Tanzania. The author in this article provides alert to the government and ministry of education to take a quick action on creating a good environment in primary education for having computer labs for students to learn and teachers to have computer in their offices. The research shows that 88% of primary education schools have no computer department for preparing schools examinations like monthly test, keeping school records like students attendance, student's results while 74% of teachers in primary education have no computer in their offices to help them to perform their everyday education activities. So the government must increase the primary education budget in order to make good environment in primary education schools like building computer labs for students to learn, making sure every teacher have computer in their offices to make their everyday task easy. After having a good computer environment in schools, the computer training for teachers will impact positively on the education sector and the development of the country.

Keywords: Computer, Administration, Education, Training, Government.

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INTRODUCTION

The Education System in Tanzania is managed mainly through the Ministry of Education and Vocational Training, which currently has a minister, deputy minister, permanent secretary, chief education officer, and several directors in charge of basic education, secondary education, teacher education, policy and planning, administration and personnel, inspection of schools and vocational training.

Tanzania follows a 7-4-2-3/4 system of education. Primary schooling takes seven years, followed by four years of secondary, two years of high school (advanced level), and three/four/five years of first degree university studies. Reports from the ministry indicate that there are a total of 14,700 primary schools, 2,289 secondary schools, 20 tertiary colleges (vocational training centers), and 53 teacher-training colleges. In 2006, there were 6.7 million new enrolments in pre-primary schools, 1.3 million standard one enrolments, and 243,359 enrolments in Form one. Teacher-training colleges enrolled a total of 13,425, an increase of more than 500% from 2005. In Tanzania government schools for primary education are more than private schools.

Computers are seen to have the potential to make a significant contribution to the teaching, learning, and administration in education system. An extensive amount of investment that has gone into introducing information and communication technology (ICT) into schools including hardware, software, networking, and staff development will be considered worthwhile if there is evidence that it has made a commensurate impact on school performance and effectiveness (Condie et al., 2007).

The use of computer in educational management has rapidly increased due to its efficiency and effectiveness. School managers who use to spend large amount of time in solving complex allocation problems (e.g., staff allocation, resource allocation, timetabling) and monitoring the school operations have now better options due to enhanced computer technology. Information technologies facilitate the decentralization of tasks and their coordination in an interactive network of communication in real time (Castells, 1996). They allow for greater flexibility and networking that emphasizes interdependence, interaction, and constant adaptation to an ever-changing environment (Castells, 2001).

Management Information Systems (MIS) are used in schools to support a range of administrative activities including attendance monitoring, assessment records, reporting, financial management, and resource and staff allocation. MIS provide managers with the information required to manage organizations efficiently and effectively. These systems are distinct from other information systems in that they are designed to be used to analyze and facilitate strategic and operational activities in the organization (O'Brien, 1999).

Waston et al. (1987) describes management information system (MIS) as 'an organizational method of providing past, present and projected information related to internal operations and external intelligence. It supports the planning, control and operation functions of an organization by given uniform information in the proper time frame to assist the decision makers'. Telem (1999) defines MIS as 'a management information system designed to match the structure, management task, instructional processes, and special needs of the school'. O'Brien (1999) referred MIS as 'a term given to the discipline that focused on the integration of computer systems with the aims and objectives of an organization'.

LITERATURE REVIEW

The most initial school administrative computer applications started its development in the late 1970s. In the early1980s, several loose, non-integrated clerical and administrative applications were developed but these applications limited the possibilities for management support as the relationships among data could not be analyzed (Visscher, 1996a). During the initial stages the main purpose of software development and usage was to improve the efficiency of school office activities. The use of computers and technologies in educational institutes was mainly to store students and personnel data (Carnoy, 2004).

The value of management information was recognized during the integration stages. As a result, many projects were initiated by the governments in many developed countries that provided the stimulus to enter a higher development stage. These projects were directed toward the production of better school information systems which meant increased school efficiency and effectiveness in education administration. The focus was the development of a standard system for as many schools as possible with maximum flexibility. The professional approach to systems design was not widespread at this time (Visscher, 1996a). In the 1990s, the emphasis on using ICT to collect educational data and to improve the administration of educational systems began to increase in the developing countries.

Visscher (1996b) believes that MIS can provide administrators and teachers with the information required for informed planning, policy-making, and evaluation. Gurr (2000) claimed that MIS have changed school management in the areas of leadership, decision making, workload, human resource management, communication, responsibility, and planning.

These computer systems can assist the school manager in determining the aims of the school, formulating strategic plans, distributing resources, and evaluating staff performance as well as organizational success (Telem, 1999). Bober (2001) indicates that the growing interest in MIS's and the trend toward thoughtful, long-range planning for MIS implementation stem from the belief within the school community that such systems allow for better site and district management, empower staff at all levels, and increase a school or district's accountability to the community it serves. Efficient and quick decisions could be made possible when school managers get accurate and up-to-date information by MIS (Christopher, 2003).

METHODOLOGY

This part of the article shows the insights on how the research has been conducted. The researcher collected data that is used to assess/find out/explore the computer in primary education administration in government schools in Tanzania**.**

Primary data is the specific information collected by the person who is doing the research. The author was using 30 different primary education schools to research on how computer was used in education administration. The research design, which was applied in this study, was a non-experimental research and a cross-sectional survey. A cross-sectional study consists of asking questions to a representative sample of the population at a single point in time whereby questionnaires, observations and interviews were used (Babbie, 1990).

The sample size had a total of 150 respondents which include 30 Head teachers of the schools, 30 academic teachers and 90 teachers of different subjects in Dodoma Municipal Tanzania. A structured questionnaire was used for data collection in order to generate the information needed in this research. On the one hand, the questionnaire has been chosen as

important instrument of collecting data from the target group, partly due to its strength of capturing empirical data in informal setting (Kothari, 1990).

RESULTS AND DISCUSSION

Respondent Characteristics

According to the analysis, the output from Table 1 shows that majority of the teachers in primary education level were female (72.7%), while the male were 27.3%. therefore, the government should encourage male to join the education sector, especially in the teaching of science subjects in order to reach the millennium goals of having equal number of workers 50% in every sector.

Table1: Respondent Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	MALE	41	27.3	27.3	27.3
	FEMALE	109	72.7	72.7	100.0
	Total	150	100.0	100.0	

Table 2: Respondent Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Secondary education	34	22.7	22.7	22.7
	College	38	25.3	25.3	48.0
	Degree	78	52.0	52.0	100.0
	Total	150	100.0	100.0	

Table 2 shows that, 52% of teachers in primary education have degree level, while 25.3% have college education and 22.7% have secondary education. This implies that, half number of teachers in primary education have degree level in their education. The government should take action to encourage those with secondary education and college education to upgrade their knowledge in order to have teachers with high knowledge which will bring positive impacts to the students and to the nation.

The Use of Computer in Education Administration

As Table 3 shows, 88% of primary education schools do not have computer department at their schools. Only 12 % of primary education schools have computer department. This implies that, many schools have no question banks. By using computer based question bank manual process of question paper setting can be avoided, which is usually time consuming and tedious process.

Table 3: Availability of Computer Department in School

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	18	12.0	12.0	12.0
	No	132	88.0	88.0	100.0
	Total	150	100.0	100.0	

Many teachers in primary education sector have no computer at their office. Table 4 shows that, 74% of teachers have no computer in their office. This implies that, teachers do not use computer in their everyday duties like keeping students attendance, examination preparations, lesson plan preparations, notes preparations, results analysis and immediate results and grading. Only 26% of teachers have computer in their offices. The education activities were mostly done manually by teachers in many primary education schools. This has a huge impact on our education system and the country development in general.

Table 4: Teachers And The Availability of Computer In Offices

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	39	26.0	26.0	26.0
	No	111	74.0	74.0	100.0
	Total	150	100.0	100.0	

71.3% of teachers did not get any computer training to improve their working ability, only 28.7% get computer training as shown in Table 5. Many primary education schools have no computer department and even teachers have no computer in their offices that could help them to perform their education activities. So training teachers will not help them because they do not computer facility to practice what they are trained for.

Table 5: Computer Training and Everyday Task

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	43	28.7	28.7	28.7
	No	107	71.3	71.3	100.0
	Total	150	100.0	100.0	

CONCLUSION

The overall review of literature indicates a very positive impact of computer use in the area of educational management. Principals and teachers' skills in working with computer have developed significantly over the years and they are using computer to support a range of administrative activities at both class and school level. School management information systems have greatly improved over the last two decades and most of them incorporate several important functions required by school administration; however, every school has its own specific needs.

These computer systems are usually adopted from outside and may need further enhancement according to the site-based management. In order for MIS to be utilized effectively, it should be designed through an inductive process that includes stakeholders from all levels of the organization in order that faculty will take ownership of the system and actually use it.

The government especially ministry of education must take serious actions on this issue due to the everyday changes of computer technology worldwide. If primary education schools have no computer department, teachers have no computer in their offices, how about the student's situation on having computer knowledge? So the government should increase the primary education budget in order to make good environment in primary education schools like building computer labs for students to learn, making sure every teacher have computer in their offices to make their everyday task easy. After having the good computer environments at schools, the computer training for teachers will results to positive impact to the education sector and the country development.

REFERENCE

Babbie, E. (1990). *Survey Research Methods.* Belmont: Wadsworth Publishing Company

Bober, M. (2001). School information systems and their effect on school operations and culture. Journal of Research on Technology in Education, *33*(5), 1–11.

Carnoy, M. (2004). ICT in education: Possibilities and challenges. Inaugural lecture of the Universitat Oberta de Catalunya (UOC) 2004–2005 Academic Year, Barcelona.

Castells, M. (1996). *The Rise of the Network Society*. London: Blackwell.

Castells, M. (2001). *The Internet Galaxy: Reflections on the Internet, Business, and Society*. Oxford; New York: Oxford University Press.

Christopher, J. C. (2003). Extent of decision support information technology use by principals in Virginia public schools. Doctoral Thesis. Virginia: Virginia Commonwealth University.

Condie, R., Munro, B., Seagraves, L., & Kenesson, S. (2007). The impact of ICT in schools – a landscape review. Coventry: Becta. Retrieved from http://webarchive.nationalarchives.gov.uk/20101102103654/publications.becta.org.uk/downloadcfm?resID=28221.

Gurr, D. (2000). How information and communication technology is changing the work of principals. Paper presented at the International Congress of School Effectiveness and Improvement, Hong Kong, January 4-8. Retrieved from http://www.ied.edu.hk/cric/ic2000/s9list.htm.

Kothari, C. R. (1990). Research Methodology: Methods and Techniques Wishwa. Prakashan, New Delhi.

O'Brien, J. (1999). *Management Information Systems–Managing Information Technology in the Internetworked Enterprise*. Boston: Irwin McGraw-Hill.

Telem, M. (1999). A case of the impact of school administration computerization on the department head's role. *Journal of Research on Computing in Education, 31*(4), 385–401.

Visscher, A. J. (1996a). Information technology in educational management as an emerging discipline. *International Journal of Educational Research, 25*(4), 291–296.

Visscher, A. J. (1996b). A fundamental methodology for designing management information systems for schools. *Journal of Research on Computing in Education, 27*(2), 231–249.

Waston, H. J., Carroll, A. B., & Mann, R. I. (1987). *Information Systems for Management*. Plano, TX: Business Publications Inc.

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[i] **Happyness Hurdson Temu** is of the Center for Information and Communication Technology Department, Saint John's University of Tanzania. P.O.BOX 47 Dodoma–Tanzania. She can be reached via email at mamsaro28@gmail.com.