History Research Journal

ISSN: 0976-5425
Vol-5-Issue-6-November-December- 2019

Principal's Support And Challenges Faced Towards Use Of Information And Communications Technology In Schools Of Malawi Southern Eastern Education Division: An Explortary Study

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ABSTRACT

Background. There are several efforts that school principals are endeavoured to offer in support of technology use within their respective institutions. These support efforts cannot go unnoticed by everyone who loves the need to use ICT schools and much-needed support from those in authority.

Aim: This paper is intended to explore the school principal's support and challenges faced towards the use of technology in schools from Malawi South Eastern Education Division.

Method: The investigator took a sample of 61 secondary school principals the sample composed of South-Eastern education Division four districts; Balaka, Machinga, Mangochi and Zomba To study the present support of the principal towards the use of technology in schools, percentages were calculated based on their responses to the questionnaire**.**

Results: The results show a good that school principals endeavour to support the use of ICT in schools. However, their support is dependent on available funds and their positive attitude towards ICT.

Keywords: ICT, Principal, support, challenges

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Introduction:

The assessment of ICT support cannot be effective minus its combination with quality curriculum-based content; quality of teachers making use of the ICT and policies surrounding the use of the ICT. All these have a great probability to ensure a progressive influence on education in emerging nations and Malawi being one of them. There have been significant impressions since the introduction of the ICT use by teachers in Malawi such as; improved school turnout, high enrolment rates plus enhanced student and teacher zeal. Acknowledgement of major challenges faced concerning implementation and sustainability has been briefly defined. The syntax of these challenges include; the dare need to rigorously train teacher in ICT and ICT use, classroom integration, appropriate deployment, maintenance, cost-effectiveness sustenance.

ICT: "Information and Communication Technology (ICT) is increasingly used in various fields including business, health care, tourism and education. The field of ICT now plays a major role in education with the introduction of hardware in most classrooms such as interactive whiteboards, wireless Internet, and computers. Globally, the level of ICT available to education differs from country to country. The important role of ICT in improving education is identified where nations have invested heavily in networking classrooms and increasing the number of computers in schools (Goodison, 2003; Hennessy et al., 2005; Kozma, 2003; Kozma & Anderson, 2002; Kangro & Kangro, 2004; Pelgrum 2001" (Isaacs, Shafika. 2007). Malawi is one nation striving to be ablest with information communications and technology too.

Information and communication technology can be looked at as strategies, interacting pieces of machinery, uses and structures that once joined permit individuals to interrelate in a computerized ecosphere. Wikipedia defines ICT as "an extensional term for information technology (IT) that stresses the role of unified communications and the integration of telecommunications (telephone lines and wireless signals), computers as well as necessary enterprise software, middleware, storage, and audio-visual systems which enable users to access, store, transmit, and manipulate information".

ICT is a wide topic of which its notions are changing each passing moment. It's comprised of devices which can amass, save, operate, transfer or accept data by

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electronic means in a digital form, for example, laptops, smartphones, emails, as well as robots. "The acronym ICT is used differently in education including the benchmarks of digital literacy, economic sector definitions and regulations, information technology disciplines, socio-economic development, and governance" Unesco. (2002). Extent of explanations with every form being used throughout globally differ extensively, though its key meaning of ICT focuses on devices besides infrastructure which enables digital data transferring.

According to Khvilon, E., & Patru, M.(2004) "ICT is a technology that supports activities involving information. Such activities include gathering, processing, storing and presenting data. Increasingly these activities also involve collaboration and communication hence IT has become ICT: information and communication technology. Technology does not exist in isolation. It contributes to various points along a line of activity". Khvilon, E., & Patru, M. (2004) noted that reviews about technological advancements from industrialized as well as emerging nations identified stages through which institutions follows as they integrate technology usage. These stages are as follows;

"Emerging-schools are purchasing or have had a donation of some computing equipment and software. Administrators and teachers are at exploring possibilities and consequences of using ICT for school management and adding ICT to the curriculum" Khvilon, E., & Patru, M. (2004).

'Applying-schools are developing an understanding of the contribution of ICT to teaching and learning. Teachers dominate the learning environment' Khvilon, E., & Patru, M. (2004)

'Infusion-it is a process of deliberately including technological concepts in all subject areas that are taught within an institution. Institutions buy and install necessary technologies in all appropriate school rooms and offices. All educators begin to find better ways of changing their personal and work lives using the skills and knowledge gained as they interact with technological appliances at their exposal. The school programs are made in such a way that concepts, courses and subjects are amalgamated to manifest real life experiences to be encountered by human race.

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Transforming-school intensifies the practice of technologies available with the aim of reconsidering or revisiting the institutional organisation innovatively. “ICT becomes an integral invisible part of daily personal productivity and professional practice and it is taught as a separate subject” Unesco. (2002).

About MALAWI and ICT

Malawi got independence in 1964 and its population then was 3 963 423. It is a poor nation. Just like many developing countries Malawi has an ICT policy that endeavours to promote the technological education in all schools as wrong as facilities are available. The National library and services help to provide innovative centres where students have access 24/7 in case their schools cannot afford to purchase technological appliances.

In 2014, the pupil-teacher ratio in secondary education for Malawi was 70.4 students per teacher. Though Malawi pupil-teacher ratio in secondary education has significantly changed lately, it went up from 2007 - 2014 times reaching 70.4 students per teacher. Therefore, there is need to harness more resources which should be used to train secondary school principals teachers. Not only that but also putting in place modern infrastructures in secondary schools which can be sustained without stretching the already thin budgetary allocations to schools.

"Information Communication and Technology (ICT) is an important feature in the world as it is widely used in different social-economic sectors. The world is becoming more technologically advanced in the quest for information and communication for socio-economic development. In education, ICT is a valuable source of information and teaching tool that can contribute to effective teaching and learning" (2018 Training Manual for Pre-Service on ICT).

Malawi has a youthful population with a lot of untapped potential skill ready to grab any opportunity that comes across and shape the country's economic development. This, therefore, calls for ICT integration and use in the teaching and learning process.

Literature Reviews

Page-Jones, A (2008), study outcomes showed a significant relationship between technological leadership styles and the varied use of technology in institutions. The

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results revealed there exist no significant relationship between technological leadership styles and the varied use of technology in institutions by staff of the department in support of the null hypothesis

Harvey-Buschel (2009) conducted a research study on computable analysis reason influencing infusion of ICT in town and open schools teaching mathematics intending to find out if availability and use of ICT correlated with its infusion in the mathematical activities that teachers planned to deliver in their lesson in those town institutions. The findings indicated that the teacher's familiarity with technology played no influence on the incorporation of technology in urban public secondary schools classrooms. There exited no variation among beginners, qualified and long-serving teachers and technology incorporation in mathematics teaching. Those who participated in training on how to incorporate ICT revealed having considerable usage of computer for the teaching of mathematics. Presence of computers played a role in computer use and inclusion teaching mathematics in city or town schools.

Shin, W. S. (2010) investigated 'teacher-related factors that influence teachers' use of ICT in Korean schools' and results showed following factors had a great impact on ICT incorporation; years spent teaching, pieces of training on how to incorporate ICT, technical know-how and support from topmost manager. Other factors include; school environment, personal experiences with ICT, and way people interact and share information within the school and outside.

Smith, G. (2011) examined what connection exists amid instructional technology headship skills acquired by the institutional leaders, active technology usage in lesson delivery. The results revealed that those school managers who actively supported use of technology were considerably stronger interpreters of operative use of ICT in classroom than those school managers who were just good at instructing others.

Mingaine (2013) investigated the challenges faced by school administrators in secondary schools in implementing the usage of technology. The results showed there was a significant positive attitude towards technology use in public secondary schools.

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Pye (2013) surveyed the attitude of principals that enable the usage of e-technology. The investigator found out that there was a significant relationship between institutional administrators' positive attitude towards technology and the way they were to assist, encourage and underline the anticipated objectives so that e-technology had to be operational in schools.

Waxman, et. al (2013) surveyed to examine the school manager's opinions on key purposes of technology in institutions they worked. A Questionnaire was used in a qualitative and quantitative study. They found out that institutional managers saw technology performing different tasks which include; networking, teaching, information distribution, tool, organizing duties, and controlling teaching

Alghamdi and Prestridge (2015) assessed the attitude of administrators concerning the usage of technology in teaching and learning methods in schools. Data was collected by using a quantitative and qualitative mode of questioning. The result revealed that there is significant impact of technology usage on the attitude of administrators They also found that technology usage in school improved teachers' and students' exploratory skills both during class and outside school time because it turns learning into activity-based.

Kafyulilo, A., Fisser, P., & Voogt, J. (2016) surveyed how teachers who attended school based trainings in between 2010 and 2012 sustained their use of ICT in their science and mathematics lessons. Findings revealed that institutional managers' praise and support were very significant to have a continued ICT use in any institution.

Objectives

1. To explore the principal's support towards use of information and communications technology in schools of Malawi Southern Eastern Education division
2. To know the challenges faced by teachers faced towards use of information and communications technology in schools of Malawi Southern Eastern Education division.

Analysis and results

Objective-1

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To explore the principal's support towards use of information and communications technology in schools of Malawi Southern Eastern Education division

Table 1 Frequencies and percentages of Principal's support towards technology use by teachers, support staff and students.

Question	Response	Frequency	Percentage
1	Providing encouragement	24	39.34%
	Procurement of equipment	10	19.39%
	minimal support	13	21.31%
	no response	6	9.84%
	Very good	2	3.28%
	lobbying for more resources	2	3.28%
	Poor support	2	3.28%
	increased financial allocation	2	3.28%
	Total	61	100%

From table 1 above it is revealed that 24 (39.43%) of principals support encouragement their teachers, students, and support staff. Principals who were found to support their teachers, students and support staff by procuring equipment were 10 (19.39%). Those principals offering minimal support are 13 (21.31%) while 2 (3.28%) principals said they offer very good support, lobby for resources, poor support and increased financial allocation respectively to teachers, students and support staff. The interpretation from the results above is that school principals are providing a lot more encouragement,

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increase financial allocation, and procuring equipment to support staff and students in use of ICT

Objective-2

To know the challenges faced by teachers faced towards use of information and communications technology in schools of Malawi Southern Eastern Education division.

Table 2 Frequency and percentage of challenges faced by principals when using technology in schools.

Question	Responses	Frequency	Percentage
2	Interrupted power supply/ failure	24	39.34%
	Lack of expertise-knowledge, skills	19	31.15%
	Lack of equipment	18	29.51%
	Total	**61**	**100%**

From table 2 it is evident that 24 (39.34%) principals agreed that interrupted power supply/failure is a challenge faced when using technology in schools. Additionally, 19 (31.15%) of principals agreed that lack of expertise-knowledge and skills is another challenge faced when using technology in schools. Lack of equipment is also a challenge that 18 (29.51%) of principals agreed upon. Therefore, this can be interpreted that many challenges are faced towards the use of ICT such as power interruption, lack of expert knowledge, lack of equipment among the many other factors.

CONCLUSION

In this study, data was also gathered through an in-depth analysis of some current scholarly articles from 2008-2018. A variety of educational related databases were searched to find relevant, peer-reviewed articles, journals and books.. A variety of methodology and tools were used in these studies such as quantitative and qualitative, mixed research designs, surveys, case studies, questionnaires, interviews etc. Samples

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included pre-service and in-service teachers, students, principals, headteachers and community members.

It has been revealed that principals support ICT use in schools in many ways. Some of the ways are

- Providing encouragement-principals take their time to identify strong and weak areas of their staff and students. They then encourage them in the form of words by mouth, incentives and professional support. Providing training for the teachers. The review has further revealed that for the school, students, teachers, and managers to integrate and use ICT, the encouragement, support from top management is very critical than the knowledge and skills of the top Managers. Students and teachers need more support from their managers if they are to adopt ICT.
- Procurement of equipment of new equipment when finances allow such as desktops, furniture and books
- lobbying for more resources-other principals have gone further to ask other organisations to help them
- increased financial allocation-in some schools the principal has increased financial allocation to support ICT use in the schools

CHALLENGES

Several challenges are faced in the process of accessing ICT in schools. Talk of access to continued electricity

- With the extensive power cuts in some African countries, including Malawi (and the expense of using generators). Qualified teachers and training of instructors who will make adequate use of the ICTs;
- There are also cultural shifts and practices; most teachers and students are not ready to change and begin to accept the need to have and use ICT in their everyday activities because they have no access to ICT gadgets and some because they lack the skills and knowledge on how to operate these gadgets. To some extent, ICT gadgets are too expensive for an average Malawian

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- Lack of sensitization mainly the community members. There are so many barriers associated with rolling out of ICT in both primary and secondary schools in Malawi. For instance, Isaac and Shafika in their survey reported a number of barriers; These "barriers to entry" and impediments to adopting ICTs in public schools ties in with the inequality debate because it prohibits some in society from being sufficiently equipped which will thereby widen the gap between those who have the opportunity to "jump on the bandwagon" of technological progress and those who are unable to do so.
- Affordability of ICT in public school. The survey also reports that it's challenging for public school administrators to think of buying ICT equipment as most schools have a lot of basic things to consider of buying despite most teachers and students realizing the importance of ICT in the teaching and learning process. Following is an exemplifying statement; "During one of the interviews conducted, Malawi's Ministry of Education Spokesperson said that with the financial resources provided, public school administrators "have to meet their basic needs before they can begin to think about ICTs" in the bigger context "because adopting ICTs is not cheap". According to some of the teachers interviewed, ICTs usage in teaching also provides "much-needed support" and students also referred to the improved learning experience and process when ICTs are incorporated.

SUGGESTED OPTIONS TO CHALLENGES

Based on the review of scholarly articles the following recommendations and suggestions have been made;

1. There is a need to develop a comprehensive ICT curriculum for both primary and secondary school plus all teacher training colleges so that teachers come out fully baked to train and teach ICT.
2. The National ICT policy needs to be revisited so that it provides a receptive environment for its growth at primary, secondary and college level.
3. There is a need to invest in electricity generation/allow more investor to compete in electricity generation to reduce power interruption. Alternatively

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exploring other means of generating power such as solar will be of so much help to ICT growth in Malawi.

4. There is a need to work with stakeholders to help in ICT training and infrastructure development in Teacher training colleges as breeding grounds for primary teachers who have a role to change many of Malawian younger generation.
5. The government needs to invest heavily in ICT infrastructure building if Malawi has to see grow in ICT. Lastly, school administrators have to coordinate well ICT initiatives and design the ICT school-based policies and desires to avoid coming up with unfriendly ICT curriculum. This should go together with school managers organizing continuous professional development training in ICT to keep teacher ablest.

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