

**Challenges of using ICT in the teaching and learning of English
Language: A Case of Harare Northern Central District of Harare
Metropolitan Province: Zimbabwe**

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ABSTRACT

This study sought to assess the challenges associated with the use of ICT in the teaching and learning of English language; focusing on Harare Northern Central District, Zimbabwe as a case study. This study used the descriptive research design which triangulated quantitative and qualitative research methods. It also employed interviews, observations and questionnaires to solicit for information from a random sample of 5 secondary schools. The study was made up of teachers and students. The sample size was composed of 105 teachers and 100 pupils. Data was analyzed using statistical methods such as frequency tables, bar graphs, tables and pie charts. The study discovered that most school administrations in the Harare Northern Central District have taken heed of the computerization program. The use of information and communication technology (ICT) cannot be underestimated in language teaching and learning process because emerging technologies make it pertinent and practical to approach learning in ways that have been advocated by scientists, theorists and educational psychologists. The study acknowledges that there was greater digital divide in use and integration of ICT in public secondary schools management in terms of ICT resources. There were causal factors for digital divide which included lack of funds, ICT management software and hardware, skilled manpower and general physical infrastructure. Teachers had basic skills in ICT which were not adequate for use and integration in management operations. The study thus, recommends that the government and the donor community should assist in the mobilization of financial resources for acquiring ICTs consumables, the teaching professional should continuously embrace training and development in the use of ICTs and also motivates the teachers to be at par with technological advancements.

KEY WORDS: ICTs, Teaching, English Language, Challenges, Multimedia

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INTRODUCTION

1.1 Background to the study

The major teaching and learning challenges facing the use of ICT in education revolve around student diversity, which includes, amongst others, diversity in students' academic preparedness, language and schooling background. Teaching and learning in higher education in general can largely be menaced by lack of academic preparedness, multilingualism in a first language environment, large classes or even lack of pedagogic and didactic training.

Students from disadvantaged educational backgrounds as well students from privileged backgrounds generally enter higher education with gaps in the knowledge and skills required for studying particularly in key areas such as mathematics (Paras, 2001, Howie & Pietersen, 2001) and science. Zimbabwe is a multilingual society with multiple official languages. English is therefore a second or foreign language for many Zimbabwean students. Secondary school students from disadvantaged educational backgrounds therefore have to learn in their second or third language. A considerable body of research (Cummins, 1996; Gee, 1990) has shown that language and academic success are closely related and that academic language proficiency is far more difficult to acquire in a second language. Students learning in their second or third language are therefore at a disadvantage which is compounded by poor schooling background.

The relationship between language and academic success is reflected in the throughput rates of English second language students when compared to the throughput rates of English first language students. At the University of Cape Town, for example, the difference in throughput rates between English first language and second language students in 2002 was more than 20% in several degrees/programmes (Spiegel et al., 2003). The growth of mass higher education has made large classes an endemic feature of several courses at higher education institutions. Large class sizes make it difficult for teachers to employ interactive teaching strategies (Nicol & Boyle, 2013) or to gain insight into the difficulties experienced by students. Large classes pose problems for all students but students who are under-prepared are particularly affected. It is these contexts that provide useful opportunities for educational technologies.

In a research, Gomes in Bingimlas (2009:239) concluded that, "Lack of training in digital literacy, lack of pedagogic and didactic training in how to use ICT in the classroom and lack of training concerning the use of technologies in science specific areas (like English Language) were obstacles to using new technologies in classroom practice." The rapid development of tools and resources presents both opportunities and challenges. In order to maximize the potential of ICT in language teaching, it is crucial that it is used in a pedagogically sound way that corresponds to the individual needs of learners. From the observations made by the researcher, it is also important that the use of ICT is introduced and supported in a sustainable way and in a range of pedagogical approaches that promote lifelong learning. Language teaching raises particular problems for the application of ICT, as many aspects of language rely on social understanding (Levinson, 1995) and the last 50 years have shown that there are great problems in trying to program computers, which continue to operate in the mechanistic way of the original Turing machines (Copeland, 2004), to take account of the subtleties of language (e.g. Atchison, 1989, Pinker, 1994). Clearly it is important to analyze the challenges of the use of ICT in the teaching and learning of English Language. Modes of testing supported best by computers tend to depend on the very convergent (only one right answer) and discrete-item styles of gap fill and multiple choice, whereas the weight of professional opinion after three decades of communicative language teaching would prefer assessment to be more concerned with judging the capacity to engage in interaction, to handle discourse (texts and contexts beyond sentence level) and to produce speech and writing in a variety of contexts.

ICT facilities provided in English Language at 'O' level allow pupils to learn at their own pace, according to their abilities (Olusegun 2015). Agbulu and Ademu (2010:1) proffer that "Introducing technology into teaching and learning has been shown to make learning more student centered, encourage co-operative learning and stimulate teacher/student interaction." The use of ICT in the teaching and learning of English Language has the other merit that learners can undertake the learning process actively and willingly and the desired feedback is immediate (Olusegun2015).

The use of ICT in the teaching of English Language at 'O' Level was not visible among the majority of Northern Central District of the Harare Metropolitan Province secondary schools. This lead one to wonder what the problem might be. According to Agbulu and Ademu (2010:1), "the success of integrating ICT in the education system depends largely on the skills and of the teachers." In this view, the teachers may not have the requisite knowledge and skills in the use of ICT in order to harness the potential benefits of such technology. Young people are now a global society and access is through a variety of means such as computers, TV and mobile phones. The increase in the use of ICT has had a great impact on the availability and accessibility of education .The right to education in SECTION 75 of the Zimbabwean Constitution states that every citizen and resident of Zimbabwe has a right to education. It is suggested that the use of ICT elevates the availability and accessibility of education.

The researchers have observed that geographical distribution of schools and resource disparities in urban or rural areas has great impact on the availability of ICTs and to this end this affects overall utilization. Appropriate use of ICT by language teachers facilitates communication and offers solution to some of the challenges of learning and teaching English Language. Multimedia can provide a sensory and real learning experience and provides greater opportunity for learning (Lindfor1997 cited in Parveen and Rajesh (2011). The research therefore attempts to unearth the contributing factors for this gap. Hence it is necessary that the impact of the use of ICT in the teaching and learning of English Language be assessed.

It against this background that the researcher carried out a study to establish teacher preparedness in using ICT in the teaching and learning of English Language at 'O' Level in Harare Northern Central District of Harare Metropolitan Province: Zimbabwe.

1.2 Statement of the problem

Overreliance on ICT has generally relegated the use of traditional teaching and learning methods. This potentially has effects to the access to education especially in developing nations such as Zimbabwe. It is therefore necessary to revisit the impact of the use of ICT in the teaching and learning of the English Language at secondary school level. As English is the intermediary language with which most subjects are taught, this research zeroed in on the use of ICT in the teaching and learning of the English Language

1.3 Research objectives

- To find the current situation in teaching and learning of English Language using ICT at secondary schools in Harare Northern Central District?
- To find out the extent of preparedness of secondary schools in terms of facilities and ICT infrastructure in Harare Northern Central District?
- To find an appreciation of the strategies that are being employed to prepare educators for teaching English Language using ICT?

2.0 Literature Review

ICT as a practical subject deals with the ability to make use of software for problem solving. It requires the acquisition of a number of ICT skills, such as analysing the problem, designing a model, understanding the functions and the overall principles of the software, implementing the right sequence of software instructions for problem solving, creating associations in the students' language, transferring previously acquired skills to the software, etc. However, according to Webb (2002), it is important for teachers not be overwhelmed by trying to master all the details of the software but to focus on the main functions and principles of the software that help to solve the problem.

The use of digital technology for education arena has since been growing drastically. The government have made the effort to help students use ICTs in education by donating computers in different schools. The Ministry of Information Communication Technology (MICT) has set up a goal that by 2018 it should ensure inclusion of ICT curricula at all levels of education. [Ministry of Information Communication Technology (MICT) Strategic Plan 2010 – 2018, page 18]. In their plan, the ministry would like to ensure optimal utilization of computers donated by His Excellency, the President by all recipient Schools. To fully utilize these computers there is need for more

software or application that can be used along with the computers. Teachers need to be taught how to use different ICTs in order to help in nation building.

The issue of digital technology in education has seen so many debates going on about whether it brings positive effect to the education arena or is rather pulling it down or has no influence at all. According to (Collins and Halverson 2009) digital technologies such as computers, mobile devices, digital media creation and distribution tools, video games and social networking sites are transforming how people think about schooling and learning.

The need to establish the value of technology to education is very important, especially where there is an emphasis on standards-based accountability and because of the substantial cost of implementing technology innovation in the classroom. The benefits which can be achieved in a well-crafted use of technology include increased learner effectiveness or performance gains, increased learner efficiency, greater learner engagement or satisfaction and even more positive student attitudes towards learning.

A counter argument is that the same could be said of well-managed non-technology supported lessons (Baker et al, 1997, cited by Underwood 2009). It is not feasible to control all the aspects in the imperfect research environment of schools, so the evidence rarely allows us to state unequivocally that technology has had an efficient and effective impact on student achievement

Digital technology could be represented using different media including text, graphics, animation, sound and video. “Unlike the traditional media in forms of books information stored digitally can be preserved without any forms of distortion and they can be accessed easily and quickly from any part of the world” (Wikramanayake 2006).

2.1 Theoretical perspectives

ICT education in schools has been influenced by the rapid development of ICT literacy of all individuals. ICT literacy describes the ability to develop the potential inherent in ICT and the innovative use of ICT in learning and work activities in society (Erstad 2006; Krumvik, 2006; National Research Council, 1999). ICT literacy entails a familiarity with ICT and is considered to be a key concept in lifelong learning. Implicit in the goal of ICT literacy as a continued initiative in education is the realization of the potential of ICT for better learning.

3.0 RESEARCH METHODOLOGY

Data was collected from both primary and secondary sources. Both Qualitative and Quantitative research methods were used and all aspects outlined were justified accordingly. The researchers purposefully chose to employ both qualitative and quantitative research techniques so as to try and mitigate limitations of one technique by implementing the other. The research combined both aspects of a descriptive and exploratory research. The researcher’s population has been defined as members of selected secondary schools in the Northern Central District of the Harare Metropolitan Province. In the context of this research questionnaires were used to collect primary data. The researchers gained informed consent from participants by informing potential participants of all the necessary facts pertaining to the research

Table 3.1: Data on Population and Sample Used

Category	Population	Sample	Sampling Procedure
DEI	1	1	Purposive
Headmasters	5	5	Purposive
HOD	5	5	Purposive
Teachers	53	25	Random
Pupils	620	100	Random

4.0 DATA PRESENTATION, ANALYSIS AND DISCUSSION

4.1 The challenges associated with the use of ICT in the teaching of English Language.

Identified below is a pre-compiled list of perceived challenges associated with the use of ICT in teaching and learning English Language;

Table 4.1: Challenges Responses

	Challenge	Students(100)		Staff(25)	
		Agree%	Disagree%	Agree%	Disagree%
1	Financial Constraints	87	13	88	12
2	Lack/ Inadequate ICT Infrastructure	91	9	80	20
3	Training in ICT Use and Integration.	59	41	96	4
4	Resistance to Change	45	55	46	54
5	Frequent electricity interruption	28	72	32	68
6	Non integration into the school curriculum	50	50	92	8
7	Lack of/poor perception of ICTs among teachers and administrators	75	25	48	52
8	Inadequate educational software	90	10	72	28
9	Poor management on the parts of school administrators and government	67	33	60	40
10	Lack of interest in ICT application/use on the part of students	2	98	76	24
	Average	63	37	70	30

N=125 Sources: Field Survey Report 2016

Table 4.1 above on the response to the challenges shows an overwhelming more than 75% of the pupils and staff members contend lack of financial and ICT infrastructure; low perception of the use ICTs among teachers. The researchers shares the same view with Loveless (2007, p.514) who argued that financial and skills challenges remain as a major setback in the use of ICT in schools. Both aspects are lacking in Zimbabwe's teacher education curriculum, as these are yet to be incorporated. The researchers totally agrees with the authors since no integration model or framework had been employed so far. Indeed, the belief was that once adequate hardware and software resources were made available, integration would be a success.

4.2 Possible solutions and rectifications

The following were set of possible solutions and rectifications that were suggested by the key informants in as far as the challenges being experienced by schools in teaching English Language using the ICT infrastructure;

4.2.1 To schools

1. Providing ICT resources including hardware and software
2. Training in new pedagogical approaches
3. Providing sufficient time, by reducing the number of teacher lessons or by increasing total daily lesson time
4. Providing training courses in dealing with new technologies, modern devices and new pedagogical approaches
5. Providing continuous technical support

4.2.2 To teachers and students

1. Taking advantage of resources offered at schools
2. Access to ICT resources at home
3. Keeping an open mind toward new ways of teaching and learning
4. Acquiring skills of self-organization and time management
5. Preparing themselves by self-training
6. Taking up opportunities of training offered at schools
7. Knowing how to access resources
8. Relying on themselves to be able to solve problems in their use of ICT
9. Accessing available support

4.2.2 ICT Infrastructure in teaching

On the sidelines of the ICT adequacy of infrastructure, it was noted that about 73% of the respondents had limited access to digital consumables such as projectors, printers and laptops. The researchers are in accord with Isaacs, S. (2007:4) who pointed out that according to the world economic forum's global information technology reports, "Zimbabwe ranks 105th of out 115 economies in 2005-2006, based on a networked readiness index." The remaining 27 % of the sample indicated that they have acquired L.C.D projectors and laptops. Even through, these facilities and gadgets are not meant for the English Language departments but should be shared across all departments in the schools. The situation then immediately becomes dire because one projector proves to be far too few for the sizes of the schools in the sample. All in all, it can be concluded that although there are some ICT facilities in the sample schools, their establishment and level of development still fall far short to make ICT in the classroom a success.

4.2.3 Teacher ICT readiness

The data gathered by the researchers noted that about 63% of the teaching staff was not ready to use the ICTs in the teaching as they were comfortable with the current "chalk and talk" method. The remaining 37 percent noted that they were ready to embrace ICTs given that they receive adequate training and development as well as provided with all the necessary ICT consumables. It can also be concluded that the teachers' low ICT readiness was negatively affecting their teaching in that they were lagging behind other teachers with ICT skills. Their teaching strategies were limited to "chalk and talk" or teacher centered methods. Also, their class levels of motivation remained low and their subject continued to receive a low perception from the pupils, fellow members of staff and the community at large. Lack of preparedness of teachers in the use of ICTs retards the government initiative for schools to embrace e-learning. The researchers are in agreement with Agbulu and Adame (2010) who argued that the success of teaching with information technology would be difficult due to lack of deep knowledge by the teacher.

4.2.4 Intervention Strategies

On the sidelines of the intervention methods that are being employed by a sample of schools represented by the study, it was noted that schools were rolling out the following strategies. These strategies encapsulate the training in new pedagogical approaches that involves use of digital technology; provision of sufficient time by reducing the number of teacher lessons or by increasing total daily lesson time; provision of training courses in dealing with new technologies, modern devices and new pedagogical approaches; provision of continuous technical support; keeping an open mind toward new ways of teaching and learning, acquiring skills of self-organization and time management; preparing themselves by self-training; according ICT training opportunities offered at schools.

4.3 Data interpretation

The findings have shown that the lack of finance, skills, teachers' unpreparedness, lack of ICTs consumables, resistance to change are the major stumbling blocks towards the successful use of ICTs in the teaching and learning of English Language. These aforementioned challenges call for the government and other related stakeholders to intervene in finding common policy interventions. It is also vital to note that the low uptake of ICTs in the education sector is intricately related to the harsh economic conditions that are prevailing in Zimbabwe. However, for schools to remain afloat in these trying times, they have to come up with holistic internal measures such as fundraising, public private partnerships with ICT companies for example First Pack, Fusetech and Gold Tech.

5.0 SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 The following were major findings of the study

- About 56 % of the staff sample had less than one year working experience in teaching English Language.
- It was noted that more than 80% of all key informants highlighted that financial constraints, lack of ICT consumables are the challenges being faced in the use of ICT in teaching English Language.
- On the possible remedial solution, the informants suggested that teachers and pupils should rely on themselves to be able to solve problems in their use of ICT and keep an open mind toward new ways of teaching and learning.
- It was also found out that 73% of the schools had depressed access to ICT infrastructure, though 27% of them were in the process of acquiring them
- It was also found out that that about 63% of the teaching staff was not ready to embrace use of ICTs in the teaching and the remaining 27% were ready given that they receive adequate ICT infrastructure coupled with relevant training.
- The sample of the schools studied noted that to fully embrace the use of ICTs, the school authorities were embarking on training in the new pedagogical approaches that use ICTs and provision of continuous technical support,

5.2 Conclusions

In spite of the limitations highlighted in the summary, interesting findings and observations were made and the following conclusions were made.

- There schools are manned by new members of staff
- Integration of ICT and its use is greatly affected by limited resources in the schools under study.
- Most schools under study had limited ICT infrastructure in the form of buildings, hardware and software even to include electricity
- Most teaching staff lack basic ICT skills

5.3 Recommendations

In view of the above conclusions, it is recommended that the following recommendations should be taken into account.

- Government should make sure that school human resources audits are done such as limiting unnecessary transfer of teachers as there would be disparities in distribution of teachers in the schools under study
- The government and the corporate organisations should try to mobilise financial resources that should be used to acquire information communication infrastructure as a way to get rid of inadequate ICT consumables.
- The teaching staff should embrace and develop the interest in the use of ICT application/use on the part of students for instance scheming and performance management for pupils to ensure that teachers develop interest in the use of ICT.
- There is need for continual development and training programs to teachers so that they will be at par with the technological advancements as lack of ICT skills is hindering its use.
- Schools should embrace the uninterrupted power supply for example use of the solar energy as the power outages are militating against the use of ICT.

6.0 REFERENCES

Abley, M. (2003). Spoken here. Travels among threatened languages. Toronto, ON: Random House of Canada.

Chiwanga, S. (2012), "30 000 teacher vacancies unfilled in Zimbabwe", The Sunday News: 29 April 2012

Collins, A. & Halverson, R. (2010), "The second educational revolution: rethinking education in the age of technology" Northwestern University, Evanston, IL, USA and University of Wisconsin, Madison, WI, USA. Communication Statistics Unit UNESCO Institute for Statistics (2006), "ICTs and Education Indicators".

Crystal, D. (2000). Language death. Cambridge, UK: Cambridge University Press.

Dalby, A. (2003). Language in danger. How language loss threatens our future. Harmondsworth, UK: Penguin.

Duffy, J. (2012) "The Best Language-Learning Software" [online], Available at <http://www.pcmag.com/article2/0,2817,2381904,00.asp> Accessed 13 June 2016

Grenoble, L..A. and Whaley, L. J. (2006), "Endangered Languages" Town Publisher?

Johnston, L.G. and Sabin, K. (2010), Sampling hard-to-reach populations with respondent driven sampling, University of California

Leanne, H. and Hale, K. (2001). The green book of language revitalization in practice. San Diego, CA: Academic Press.

<http://www.jefrench.com> Accessed 15 July 2016

<http://www.shonalanguage.info/index.htm> Accessed 13 August 2016

Lee, M. and Winzenried, A. (2009). The Use of Instructional Technology in Schools – Lessons to be learned. Melbourne: ACER Press

Ministry of Information Communication Technology (2010-2014), Strategic Plan

Ministry of Education, Sport Arts and Culture, Shona Primary Syllabus

Mumin, (2011), "Review of en unapalabra: Sevilla, España, Córdoba, Argentina, and Puebla, México", University at Albany, State University of New York (SUNY)

Nielson, K. B. (2011), "Self-study with language learning software in the workplace: what happens?" University of Maryland

Protheroe, N. (2005). Technology and Student Achievement. Principal- Effective Intervention - Research Report, 85, 46-48.

Reyhner, J. and Tennant, E. (2006) "Maintaining and Renewing Native Languages", Northern Arizona University and Educational Research Associates

Romaine, S. (2006) "Preserving Endangered Languages", University of Oxford

Sappey, J. Dr and Relf, S. (2010), "Digital Technology Education and its Impact on Traditional Academic Roles and Practice", Charles Sturt University.

Salleh, A.K. (2009), J Ross Publishing, Software Engineering, chapter 2, page 26.

Schmid, H. "Applications of ICT in Education", UNESCO Bangkok

Sinyolo, D. (2009), "Strategies for reviving Zimbabwe's education system", Newzimbabwe.com [online] Available at <http://newzimbabwe.com/pages/fees44.19257.html> Accessed 12 August 2016

The role of ICT in advancing growth in least developed countries: trends, challenges and opportunities (2011), International Telecommunication Union (ITU), Geneva

Underwood, J. (2009), "The impact of digital technology" Nottingham Trent University

Visual Link Languages (Available at www.learnalanguage.com, Accessed 13 July 2016).

Warschauer, M. and Matuchniak, T. (2010), "New Technology and Digital Worlds: Analyzing Evidence of Equity in Access, Use, and Outcomes", University of California, Irvine

Wikramanayake, G.N. (2006), "Impact of Digital Technology on Education", University of Colombo School of Computing.

Zikmund (1996) Qualitative Research, Allyn and Bacon, Boston