

PERCEPTIONS OF TEACHERS AND LEARNERS ON THE USE OF ICTS IN RELIGIOUS EDUCATION IN ZAMBIA: A CASE OF SELECTED SECONDARY SCHOOLS IN KABWE DISTRICT

Owen Mulima and Melvin Simuchimba

Kwame Nkrumah University and University of Zambia

Abstract

Information Communication Technologies (ICTs) are widely being integrated in most sectors of the Zambian society including education. This study thus, investigated the perceptions of teachers and learners on the use of ICTs in the teaching and learning of Religious Education (RE) in three selected secondary schools in Kabwe District of Zambia. This was necessitated by the fact that so much had been said about the use of ICTs in science-based subjects but little, if any, is known about the use of ICTs in the teaching and learning of RE. The main objective of the study was, to establish the perceptions of teachers and learners on the use of ICTs in the teaching and learning of RE in the selected secondary schools.

A survey design involving the use of qualitative methods was employed in the study. Data were collected through face-to-face interviews, focus group discussions, and non-participant observations. Data were mainly in form of views and opinions. Analysis of the data was accomplished through thematic analysis, which revealed recurring themes from the data. The findings of the study were that ICTs were valuable pedagogical tools in enhancing the teaching and learning of RE. Teachers perceived that ICTs promoted participation, ambiance transformation in class, creativity, motivation, easier understanding, and higher retention levels among learners. In other words, this study showed that teachers and learners consider ICTs as beneficial to RE as they create a more enabling environment that best fits the present social scenario of increased ICTs in Zambia.

Arising from the findings of the study, it was recommended that: the Ministry of Education and school authorities should provide schools with more modern ICTs including computers. The ministry should consider the possibility of creating the position of Education Standards Officer-ICTs at district and provincial levels to oversee the correct and safe use of ICTs in RE (and other school subjects). The Ministry of Education and the Zambia Information Communications Technology Authority should formulate an effective e-safety policy to regulate the safe use of ICTs in schools.

Keywords: Attitudes, Perception, ICTs, Religious Education, Computer

Introduction and Background

In the 1960s, Pye (1963: 3) stated as follows:

It was the pressure of communications, which brought about the downfall of traditional societies. And in the future, it will be the creation of new channels of communication and the ready acceptance of new content of communications, which will be decisive in determining the prospects of nation-building.

Today, Information Communication Technology (ICT) is a scientific, technological and engineering discipline and management technique used in handling information. Its application and association with social, economic and cultural matters worldwide is almost universal (Bhati, M.S., Bhati, A.K., and Kulria, K.K., 2011). ICT can further be defined as technology that generally supports activities involving information. Such activities include gathering, processing, storing and presenting data. According to UNESCO (2022), ICTs are, ‘a diverse set of technological tools and resources used to transmit, store, create, share or exchange information.’ These technological tools and resources include computers, the internet (websites, blogs and emails), live broadcasting technologies (radio, television and webcasting), recorded broadcasting technologies (podcasting, audio and video players and storage devices) and telephony (fixed or mobile, satellite, visio/video-conferencing). As may be seen from the foregoing, even in education, ICTs can become a powerful tool for gathering, processing, presenting and storing information. According to Zhao (2022), ‘more than ever, information and communication technology (ICT) supports all three Cs (Content, Capacity and Connectivity) in creating a better education system for everyone, everywhere.’

In line with the above, ICTs have had great impact on the Zambian society and have changed the way people live, learn, work and play. Zambia has initiated the integration of ICTs in many sectors of nation-building. For instance, the Zambia Revenue Authority (ZRA) has introduced the online taxpayers system, which makes it easier to collect tax revenue, and more convenient for the taxpayers to remit their monthly returns and payments. Another example is where most banks in Zambia now have e-banking and internet banking facilities. Furthermore, Open and Distance eLearning (ODEL) through e-learning has relatively grown in many Zambian education institutions. This revolution demands for basic ICT knowledge for many careers in order for one to be competitively functional in the Zambian society today. The future of Zambia will be dependent on the size and quality of its human capital. Therefore, it is the duty of our education system to equip learners with relevant ICT skills at all levels. As Sichone (2011: 9), puts it, ‘gone are the days when Information Communication Technology (ICTs) was a luxury; the current times have called for an integration of education with ICTs, which are creating new learning and teaching possibilities.’ These new teaching and learning possibilities by ICTs also affect RE, hence, the need to find out the perceptions of teachers and learners of RE in selected secondary schools of Kabwe District in Zambia.

Statement of the Problem

In Zambia today, Information Communication Technologies (ICTs) are on the increase almost everywhere, including schools. However, while a lot has been said about how ICTs can be used to improve teaching and learning experiences in science-based subjects, very little, if any, is known about the perceptions of teachers and learners on the use of ICTs in the teaching and learning of RE. This study, therefore, tried to fill this knowledge gap by investigating and establishing the perceptions of teachers and learners on the use of ICTs in RE teaching and learning in three selected secondary schools of Kabwe District, Zambia. If this study is not conducted, the perceptions and views of teachers and learners of RE will remain unknown and the Ministry of Education and other school authorities may not consider them as they put in place policy measures and related interventions aimed at promoting the integration of ICTs in the curriculum, including RE. This would negatively affect the teaching and learning of the subject as the teachers, in particular, would feel ignored and some of the measures and intervention taken in the process of ICTs integration in RE may end up not being in line with what is needed for the subject.

Objective of the Study

As may be seen from the title, the specific objective of the study was to establish the perceptions of teachers and learners on the use of ICTs in the teaching and learning of RE in selected secondary schools of Kabwe District in Zambia.

Literature Review

Literature from several studies that are related to the use of ICTs in education were reviewed. This review was done under the following thematic headings: Global studies on ICTs in education, ICTs in education in Africa, and ICTs in the Zambian education system.

Studies on ICTs in Education Outside Africa

The past few decades have shown an increasing recognition globally of the role of ICTs in development efforts (Hewitt de Alcantara, 2001; Marker, McNamara and Wallace, 2002; ILO, 2001). Some have referred to this trend as the ‘information revolution’. Others have referred to what is called a ‘knowledge economy’, an economy in which knowledge and ideas promptly provided, lead to development of products, economic growth, and hence, progress (Castells, 2001). There are few studies that have been done on the use of ICTs in RE teaching. However, there are many studies that have been conducted in the area of ICTs and education in general. Our study will add to those studies that are in this area, but with special focus on ICTs and RE as a school teaching subject.

Saverinus (2008), suggests that the role of ICTs is rapidly ever changing, especially with the internet in education. Being aware of the role of ICTs in our lives, especially in educational activities, education authorities should be ready to implement strategies that promote integration of ICTs in schools. While Saverinus was concerned with integration of ICTs in schools or education generally, our study's concern was with the role that these ICTs can play and how they can be used in the teaching and learning of RE in Zambian schools, hence, the focus on the perceptions of teachers and learners in selected secondary schools in Kabwe on the topic under study.

Williams (2004), argues that research clearly demonstrates the potential of ICTs to increase motivation and autonomy in learning and improving retention. The use of multimedia to mediate directly to students, at their own pace, realities and experiences, which would, otherwise, be text-based stimulates their interest and motivation to learn. Williams further states that it has been observed that when students collaborate in pairs on computers or other ICTs, they experience greater autonomy and self-direction, and teachers become less directive. In doing so, learners tend to experience independent learning which, in turn, fosters confidence in the learning process among them.

The findings and conclusions of William's study above are largely in line with the views we expected to find, especially among the teachers of RE. However, rather than being general, our study was specifically on the role and use of ICTs in RE teaching and learning in Zambian secondary schools. Nevertheless, William's (2004) study will provide a good theoretical background upon which our study will build.

ICTs in Education in Africa

Compared to global trends, African education lags behind in many aspects such as education delivery, curriculum design, teaching methodologies, teaching and learning tools and resource libraries. Natural and human-made disasters and conflicts have placed extreme pressure on African educational systems, many of which are built on weak physical and institutional bases or foundations. In addition, many countries in Africa have been victims of austere social-economic structural adjustment programmes, which, among other consequences, have led to cuts in educational expenditure. This, together with increasing debt burdens, governance problems, an unsupportive global economic context, and the impact of HIV and AIDS, means that the basic human right of access to education has been denied to many young people (sub-Saharan African Education for All Framework for Action, 1999). This scenario is slowly but surely changing with the increasing use of ICTs in education in many African countries, including Zambia, hence, the need to find out the perceptions of teachers and learners on the use of ICTs in the teaching and learning of RE.

As early as the 1990s, studies established a positive attitude among educators in Nigeria towards computer education. For instance, in his study findings, Yoloye (1990) revealed that educationists at the University of Ibadan had a positive perception

and attitude towards computer and, in fact, wanted to be trained to use it. Similarly, most teachers in Nigerian secondary schools had positive attitudes towards computer education (Yusuf, 1998). With the growing spirit of embracing ICTs in education, the Nigerian Federal Ministry of Education launched the National Policy on Information Communication Technologies in Education in May 2019. The policy provides the needed guidance on expectations from various stakeholders in the entire process of ICT integration in education. An ICT-enhanced education is seen as top priority for the actualisation of Nigeria's national goals. While Yoloye and Yusuf's studies were general and seemed to focus on attitudes towards the computer, our study is specifically on teachers of RE's and learners' perceptions on the use of ICTs in the teaching and learning of the subject (RE).

In an effort to keep up with the new ICT developments, the Kenyan Government, through its key ministries of Education, Science and Technology, and Information and Communication, has developed several policy and strategy documents to guide the integration of ICT in education (National ICT Policy, 2006; Sessional Paper No. 1 of 2005 and Kenya Education Sector Support Programme, 2005-2010). The Kenyan Government launched its National Information, Communications and Technology (NICT) Policy in November 2019. This policy extends and amplifies the government's framework for science, technology and innovation by adopting a viewpoint called the knowledge triangle (KT), which holistically examines the interaction between research and technology, education and national innovation systems.

Ghana in West Africa equally progressed on a comparable path of integrating ICTs in education when it launched the Information and Communication Technology in Education Policy in 2006. The policy addresses various enabling objectives and strategies aligned with promoting teaching and learning using ICTs. In his foreword to the policy document, the Minister of Education, Science and Sports, made this pronouncement: 'It is the government's desire that through the deployment of ICT in education, the culture and practice of traditional memory-based learning will be transformed to education that stimulates thinking and creativity necessary to meet the challenges of the 21st Century' (*GHANA ICT in Education Policy*, 2006: 4).

In South Africa, the e-Education White Paper was adopted in 2004, the goal of the policy was that every learner in the primary and secondary school sectors should be ICT able by 2013. The e-Education Policy was introduced into schools with the intention of 'transforming learning and teaching' (DoE, 2004:1). The policy placed an obligation on education to use educational technology to deliver on expectations of quality education for economic growth and social development. In 2013, a new 'e-Education Strategy' for the period 2013-2025 was implemented. The goal for the new strategy is to integrate ICT into all levels of the education and training system in South Africa in order to improve the quality of teaching and learning. Moving on closer to Zambia, the Republic of Botswana launched the National Information

Communications Technology Policy in 2007. Clause 6.4.7 of the policy stated that a critical component of ICT-enhanced education would be the professional training and support of school heads, school IT managers and teachers so that they could have a greater understanding of ICT and how it could be used both as a classroom tool and as educational content (Maitlamo, 2007: 13).

The development and implementation of the highlighted policies on ICTs in the countries above is testimony to the increased use of information technology in Africa education, including Zambian education. That is partly why our study of teachers' and learners' perceptions on the use of ICTs in the teaching and learning of RE is justified.

ICTs in the Zambia Education System

Since the 1990s, Zambia, like other sub-Saharan African countries, has been integrating ICTs in various sectors of society, including education. Thus, *Educating Our Future*, the national education policy document (MoE, 1996: 80), recommended the use various media (including ICTs) in the delivery of distance education and open learning. Accordingly, in 2000 and 2001, the Education Broadcasting Service (EBS) produced and broadcast 30-minute lessons for Grade One on a daily basis. These lessons followed the Zambian curriculum for Mathematics and English and the learners were guided in the process by a facilitator. Lessons for Grades Two and Three were also being developed. A later evaluation of these programmes suggested that they had positive effects on learning (Bosch, Rhodes, and Kariuki, 2002).

Since then, Zambia has steadily grown a modest ICT infrastructure that is central to the increased usage of ICTs in schools. With the support of the International Institute for Communication and Development (IICD), the Commonwealth of Learning (COL), the United States Agency for International Development (USAID), the Zambian Ministry of Education developed a draft ICT policy for education in 2006 (MOE, 2006). The policy was launched in 2007 and served as a guiding framework on how to adopt and use ICTs in the Zambian education structure, with the aim of ICTs contributing towards reaching innovative and lifelong education and training in Zambia by 2030.

A study by Mtanga (2012) et al., found that '... integrating ICTs in the teaching-learning process improved the learning process ... learners demonstrated the desire to improve their learning outcomes by exploring various ICTs.' Masaiti, Njobvu and Kakupa (2018: 74) also observed that the future relevance of Zambian education depended heavily on the provision and use of ICTs. In line with the ICT policy, the Ministry of Education, Science, Vocational Training and Early Education (2013) introduced 'Computer Studies' as a curriculum subject in secondary schools in 2013, with ICT skills as one of the key competencies to be attained by the learners.

The studies and observations by Bosch, Rhodes and Kariuki, Mtanga et al., as well as Masaiti et al., only stress the importance of ICTs in the Zambian education system and do not go further to focus on any particular subject like RE. Therefore, by investigating teachers' and learners' perceptions on the use of ICTs in RE, our study fills an important information gap.

Methodology

An exploratory survey design which involved the use of qualitative methods of data collection was adopted for the study. This design was appropriate for this study because the researchers needed to have more than one school in the sample in order to come up with meaningful findings. The combination of a survey design and qualitative methods was necessary because the researchers needed to fully understand the teachers and learners' attitudes by probing their views, opinions, thoughts and behaviour on and towards the use of ICTs in the teaching and learning of RE. This, in turn, enabled them to adequately describe and explain the issues surrounding the use of ICTs in RE. The total population of the study was 30 secondary schools with their head teachers, teachers of RE and learners. For purposes of equal representation, out of the 30 secondary schools, one was randomly selected from each of the three zones in which the Kabwe schools are divided. In each of the selected schools, the head teacher, 3 teachers of RE and 12 learners were purposively selected to constitute the total sample of 48 respondents. Random sampling was used to select the 3 schools (and the head teachers) to ensure fairness and equal representation of the school zones. Similarly, purposive sampling was used to select the available teachers of RE and 4 learners of the subject from each grade level; 10, 11 and 12, at each school.

The methods used to collect data included semi-structured face-to-face interviews, focus group discussions and lesson observations. The data collection instruments used were: face-to-face interview guides, focus group discussion guide and simple lesson observation checklist. Face-to-face interviews proved to be very helpful in the clarification of data collected since the researchers conversed with the participants in person. Additionally, face-to-face interviews were ideal as they allowed the researchers to probe for deeper information and opinions. Wherever possible, open questions were used. A tape recorder enabled the researcher to record very fruitful focus group discussions with both the teachers and learners at all the three schools. Thus, data were mainly collected from primary sources in form of interviews and observations at the three schools. Some secondary data were also collected in form of document analysis. The researchers started with face-to-face interviews with the head teachers, went on to conduct focus group interviews with teachers, then conducted focus group interviews with learners. Lastly, lesson observations were carried out during agreed RE classes in the schools. Thematic analysis was employed using Microsoft Word (Find Tool) to reveal recurring themes from the data. A theme captures something important about

the data in relation to the research question and represents some level of patterned response or meaning within the data set (Braun and Clarke, 2006). The data were categorised into three (3) codes, namely; kinds of ICTs, levels of ICTs usage, and the role of ICTs. Afterwards, the coded data were analysed using a quick impressionist summary and a thematic technique corresponding to the emerging codes and research questions of the study.

Findings and Discussion

Teachers' Perceptions on the Role of ICTs in Religious Education

First, it was important to find out whether the teachers were using ICTs in the teaching and learning of the various curriculum subjects, including RE. Accordingly, it was established that teachers of RE at all the three sampled schools used some ICTs in the teaching of the subject. The administrators of all the three sampled schools indicated that their teachers were using ICTs in one way or another in the teaching of RE. The head teacher at Caritas School explained this in the following words: *'My teachers do use ICTs in RE, it is just like any other subject... With us, as I am telling you, we have taken everyone on board as far as the use of ICTs in teaching and learning is concerned.'* The head of Stephen Luwisha School added: *'Actually, from time to time there are ICTs training sessions or meetings organised by the provincial and district education offices or by the schools themselves in order to empower the teachers with ICT skills.'*

An RE lesson observation at Caritas Secondary School confirmed what the head teacher had reported as it showed that ICTs were indeed in use. The teacher introduced the topic, 'Justice in Society' to Grade 10B by playing a song from his mobile phone for the lesson introduction; the song by Black Eyed Peas was titled, 'Where is the love?' The song is about the disintegration of society's values, telling listeners what this world is turning into without love, true genuine love. It further mentions various awful things that are going on in the world today. The song encourages the making of peace, not war. The use of the phone by the teacher made the class lively. The learners seemed excited to listen to the song played on the mobile phone as some of them started dancing while sited at their desks. The relevance of the song to the topic of study was very clear. The learners were able to make reference to the song in response to the teacher's question. The pupils gave further examples such as robberies, killings, sexual molestations, and corruption to explain what their song meant about the present day situation in society. During discussions after the lesson, the teacher had this to say:

You know most pupils nowadays are quite knowledgeable about ICTs. Like what we did with the phone in class, it would be difficult for them to forget the concepts of justice and injustice because even when they listen to the song elsewhere, they will recall what they discussed during the lesson.

Another practical example of the use of ICTs in RE was by a teacher at Stephen Luwisha, who used a laptop and the school internet to access information on Hinduism to consolidate his lesson on ‘Loyalty to Society’ with his Grade 11 class. During the lesson, the teacher asked a learner to come in front of the class to read from the laptop the information accessed on the internet about the way Hindus express loyalty to society.

Similarly, a Grade 12 RE lesson observed at Stephen Luwisha Secondary School showed how internet assisted lessons in RE can be less abstract. The teacher conducted the lesson in the school computer laboratory where she introduced the topic, ‘Man’s Turning Away from God in Hinduism’ using the internet. The teacher asked the learners to state ways in which people turn away from God. Learners gave various answers such as stealing, killing, and adultery. The teacher explained that there were consequences to turning away from God. She then asked the learners to open Bible Pro on the computers and search for Isaiah 59:2. One learner was asked to read it aloud: ‘But your iniquities have separated between you and your sins have hid his face from you...’ The teacher then instructed the learners to open the internet search engines on the computers and search for ‘Man’s turning away from God in Hinduism’. The learners were able to find out from the internet that in Hinduism the aspect of turning away from God is through actions that create negative karma and by violating ethical codes of dharma. The teacher then explained further that the consequences of negative actions were a rebirth in a lower caste. During discussions after the lesson, the teacher said: *‘The use of internet in my RE lessons makes it easier to engage the pupils into looking for answers to questions I ask them, they are also able to see pictures and videos online that are related to the topic.’*

All the teachers of RE at the three schools, including those whose lessons were not observed, agreed that ICTs played a major role in improving the efficiency of RE lessons and broadened access to quality lesson preparation and delivery. One teacher at Jasmine Secondary School said:

Pupils are able to understand the lessons better when ICTs are used in RE... Pupils easily grasp and understand the concepts in detail...ICTs are in every aspect of learning these days, and when it comes to result analysis, we also use excel on computers to interpret pupils’ results. It makes work easier and more accurate”.

The teachers stressed that ICTs such as internet, Encarta, Britannica when used in RE, make the learning process less abstract and more relevant to everyday life situations. Another teacher from Caritas School explained further as follows:

The coming of ICTs is a blessing to us as teachers of RE. Apart from what my colleagues have said, the problem of lack of information on the different religions is no longer a big issue because all that one needs to do is to research on

the internet. So, the problem of lack of reference books, which RE teachers used to have in the past has been indirectly solved. Of course, there has to be internet and bundles for this to work.

The forgoing data from class or lesson observations and discussions with the teachers of RE show that the teachers had positive perceptions on ICTs; they understood and believed that ICTs were good for the subject and would generally, enhance the teaching and learning of RE in their schools.

Learners' Perceptions on the use of ICTs in Religious Education

The main finding with regard to learner perceptions from RE lesson observations at the three schools was that they seemed to be motivated to learn the use of ICTs. Learners were excited when teachers introduced ICTs during RE lessons and their attention and participation in the lessons were very good. From the focus group discussions with the learners at the three schools, it was established that generally, their perceptions on the use of ICTs in the learning of RE confirmed those of the teachers. Thus, 34 out of the 36 learners sampled confirmed the use of ICTs in RE lessons, with confirmatory responses like: *'Yes, ICTs are used by our teachers in RE; ICTs make it easy for us to understand and remember what we learn.'* In addition, a learner from Stephen Luwisha School said, *'I enjoy learning with ICTs, it is fun.'* Another learner from Jasmine School said, *'A lot of things which we learn in RE are explained on the phone; the only problem is that we are not allowed to come with phones to school.'* Yet another learner from Caritas School added: *'I always like it when our teacher uses a computer to teach us something and when we watch something like a video.'* As may be seen, these perceptions and understanding by the learners on the use of ICTs in RE were very similar to those held by the teachers of RE.

So in winding up, both the teachers' and learners' perceptions on the use of ICTs in the teaching and learning of RE may be summarised as shown in Figure 1 below:

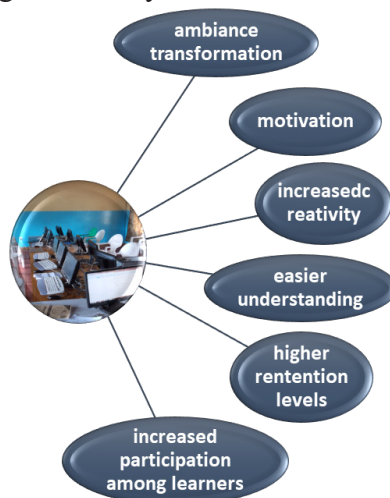


Figure 1: ICTs in RE



With regard to teachers of RE's perceptions on the use ICTs in the teaching and learning of RE, perhaps the main finding of the study was that the teachers had positive perceptions; they understood and believed that ICTs would generally, enhance the teaching and learning of RE in their schools. These findings are in line with the views of Mitropoulou (2005), who observed that the use of ICTs in RE supports learning processes and changes the negative attitudes of weak pupils into a positive direction. The study findings among both teachers and learners that ICTS promoted ambience transformation in class, raised motivation among learners, promoted higher retention levels and increased participation in lessons by learners are also supported by Mitropoulou (2005) who holds that ICTs promote effective learning across the curriculum.

To shed more light on the points above, what is meant by ambience transformation is that the typical atmosphere or mood of the class or lesson changes in a positive direction when ICTs are used. Both learners and teachers get motivated and the lesson moves smoothly. Furthermore, once motivation rises during the learning process, learning becomes interesting and the participation levels (among the learners) also automatically go up. This makes it easy for the learners to understand concepts being taught, which ultimately stimulates higher retention of what is learnt among the learners. These findings are in line with Muzumara (2011: 214, 215) who suggests that ICTs can help to create a favourable environment for different learning experiences, help learners to be curious and creative, encourage learners to collaborate with one another and take responsibility for their own learning and enhance the pace of learning.

Furthermore, the various media tasks that ICTs offered in terms of pictures, videos, sounds, and maps fascinate the learners and challenge them to become creative with their learning. According to most learner respondents, ICTs such as computers, television (TV) and the internet made many topics, sub-topics and concepts taught or learnt in RE lessons easier to follow and understand. This finding is in agreement with Masaiti, Njobvu and Kakupa (2018: 74), who observe that ICTs and technology generally, can enhance learning. Similarly, according to the teacher respondents, the use of ICTs in RE enabled them to quickly, reliably and accurately seek information and solve problems in RE, thereby increasing the effectiveness of teaching and learning in the subject. These findings are also supported by Muzumara (2011: 215), who identifies several possible ways in which a teacher with ICT-related competencies will be more effective in their work; for example, in terms of accessing a variety of material from different sources for their lessons, designing and delivering lessons effectively, coming up with new forms of learner activities, developing new methods of grading learner performance and managing contacts with distant learners for educational purposes.

The teachers and learners brought out many positive perceptions on the use of ICTs in the teaching and learning of RE (including other subjects). However, no

mention was made of learner e-safety. So, it was evident that learner e-safety was not taken seriously in the three schools. The ICTs training programmes in the investigated schools were mainly focused on building ICTs skills for teachers and learners, without adequate sensitisation on the dangers of ICTs, especially for very young learners. So, care needs to be taken to ensure that the ICTs, especially the phone and computer, are not wrongly used by the learners.

As may be seen from the foregoing, the view that ICTs do help teachers of RE to teach better and learners learn better, can be said to be held by all the respondents and was equally well supported in literature. However, while ICTs provide an additional resource and means for teachers' competent handling of lessons, there is no straightforward assurance that when ICTs are used, then RE lessons will automatically be expectedly successful. This is because the findings suggest, for example, that on average, Christianity had more application programmes available for teaching and learning in RE than the other main religions covered in the syllabus. Most computers in the three schools had programmes like Bible Pro, What the Bible Says, Bible Commentaries, and the actual Bible in softcopy.

This, therefore, means that it is the way the teachers and learners handle ICTs that will help to make the required positive difference in the effectiveness and success of the RE lessons. There is need for teachers to search more, go beyond what may be provided in the school platforms and ensure that they find the right mix of information (from different sources) according to the syllabus topics and outcomes. Learners too need to be carefully guided by the teachers so that they do not end up settling for any religious material but search for the required material in relation to the subject syllabus.

Conclusion and Recommendations

Conclusion

It is evident from the findings that school head teachers, teachers and learners of RE in the three investigated secondary schools have positive perceptions on the use of ICTs in RE teaching and learning. They believe that ICTs can play a major role in RE as a school curriculum subject. They also believe that ICTs do enhance learner engagement and improves the quality of lesson preparation and delivery by the teachers. They further believe that if well used, ICTs can contribute to increased levels of learner motivation, interest, creativity and performance. Thus, ICTs can contribute to the creation of a more enabling environment for the teaching and learning of RE in the Zambian society of today where there is ever increasing reliance on ICTs in people's daily lives.

Recommendations

It should be noted that although what we recommend may not have come out directly from the interviews and discussions with the head teacher, teacher and learner respondents, they are related and relevant to the topic of study and in line with what we observed as researchers in the sampled schools. We thus, recommend as follows:

1. The Ministry of Education and school authorities should provide schools with more modern ICTs, particularly, computers.
2. The Ministry of Education should consider the possibility of creating the position of Education Standards Officer- ICTs at district and provincial levels to oversee the correct and safe usage of ICTs in RE (and other school subjects) in schools.
3. The Ministry of Education and the Zambia Information Communications Technology Authority should formulate an effective e-safety policy to regulate the safe use of ICTs in schools.

References

- Bhati, M.S., Bhati, A.K., Kulria, K.K., (2011). 'Role of ICT in Teaching of Social Studies'. *Indian Streams Research Journal*, 1 (4), 1-7.
- Bosch, A., Rhodes, R., and Kariuki, S. (2002). 'Interactive Radio Instruction: An Update from the Field,' in Haddad, W.D., and Draxler, A. (eds). *Technologies for Education: Potentials, Parameters, and Prospects*. Paris: UNESCO, 134-143.
- Braun, V., and Clarke, V. (2006). 'Using Thematic Analysis in Psychology' *Qualitative Research in Psychology*. 3, 77-101.
- Bryman, A. (2004). *Social Research Methods*. New York: Oxford Press.
- Castells, M. (2001). 'Information Technology and Global Development', in Muller, Cloete, J., N., and Badat, S. (eds). *Challenges of Globalisation. South African Debates with Manuel Castells*. Cape Town: Maskew Miller Longman, 152-167.
- Federal Republic of Nigeria (1988). *Report on National Policy on Computer Education*. Lagos: National Committees on Computer Education.
- Hewitt de Alcantara, C. (2001). *The Development Divide in a Digital Age, An Issues Paper*. The Hague: United Nations Research Institute for Social Development.
- International Labour Organisation (2001). *World Employment Report. Life at Work in the Information Economy*. Geneva: ILO.
- Kombo, D.K., and Tromp, D.A. (2006). *Proposal and Thesis Writing: An Introduction*. Nairobi: Pauline's Publications Africa.
- Marker, P., McNamara, K., and Wallace, L. (2002). *The Significance of Information and Communication Technologies for Reducing Poverty*. London: DFID.

- Masaiti, G., Njobvu, T., and Kakupa, P. (2018). 'Education and Learning in the Post-Third Republic: Opportunities and Challenges,' in Masaiti, G. (Ed.). *Education in Zambia at Fifty Years of Independence and Beyond*. Lusaka: University of Zambia Press.
- Ministry of Education, Science, Vocational Training and Early Education (2013). *Zambia Education Curriculum 2015*. Lusaka: Curriculum Development Centre.
- Mitropoulou, V. (2005). Skediasmos Kai Anaptyksi Ekpaideutikou Logismikougai to Methima Tonthriskoutikon. Thessaloniki: Ekdotikos Oikos Adelfon Kyriakidi.
- Muzumara, P.M. (2011). *Teacher Competencies for Improved Teaching and Learning*. Lusaka: Bhuta Publishers.
- Pye, Lucian W. (1963). 'Introduction,' in Pye Lucian W. (ed). *Communications and Political Development*. New Jersey: Princeton University Press.
- Republic of Kenya (2005). 'Sessional Paper No. 1 of 2005, A Policy Framework for Education, Training and Research.' Nairobi.
- Republic of Kenya (2006). *Kenya Education Sector Support Programme, 2005-2010*. Nairobi: Ministry of Education, Science and Technology
- Republic of Kenya (2006). *The National ICT Strategy for Education and Training*. Nairobi.
- Sandelowski, M. (1995). 'Sample Size in Qualitative Research.' *Research in Nursing and Health*. 18, 197-183.
- Saverinus, K. (2008). 'The Role of ICT in Education Sector'. *Inside Magazine*, Vol. 02, July 2008. <http://verykaka.wordpress.com/2008/07/25/the-role-of-ict-in-education-sector>. [Accessed 25/11/2022].
- Sichone, C. (2011). 'ZICTA Responds to School ICT Curricula Challenges.' *Times of Zambia*.
- Sub-Saharan Africa, Education for All (1999). A Framework for Action in Sub-Saharan Africa: Education for African Renaissance in the Twenty-first Century. Adopted by the Regional Conference on Education for All, Johannesburg, South Africa, 6-10th December 1999.
- UNESCO (2022). *Guide To Measuring Information and Communication Technologies (ICT) in Education*. http://uis.unesco.org/sites/default/files/documents/guide-to-measuring-information-and-communication-technologies-ict-in-education-en_0.pdf [Accessed 30/11/2022].
- Williams, A.F. (2004). 'Voicing Diversity': *How Can I Integrate Web Quests and Moodle into Religious Education at Second Level?* Dublin: Dublin City University.

- Yoloye, V.O. (1990). 'Use and Perception of Computers by Educationists at the University of University of Ibadan.' *Ilorin Journal of Education*, 10, 90 - 100.
- Yusuf, M.O. (1998). 'A Study of the Dimensions of Teachers' Attitude Toward Computer Education in Nigerian Secondary Schools.' *Nigeria Journal of Computer Literacy*, 2 (1), 47 – 58.
- Zhao, H. (2022). The Power of ICT for Education. <https://www.itu.int/hub/2022/09/transforming-education-digital-learning-houlin-zhao/> [Accessed 30/11/2022].