CARI

ROLE OF ETHICS IN PROMOTING ORGANIZATION PERFORMANCE

.

Peter Mwikonji

Department of International Relation, Nairobi University

Corresponding Author's E-mail: Mwikonji@gmail.com

ABSTRACT

Purpose: The potential benefits of ICT integration in learning in schools have been extensively discussed in the academic literature worldwide. In recent years globally, there has been rapid expansion in integration of ICT in primary school education. Countries has further put in place many initiatives to enhance the same. Integration of Information and Communication Technology (ICT) is a critical factor in ensuring improved quality education. Despite the many benefits that are known to be brought by integrating ICT in teaching and learning, studies have shown that integration remains low especially in primary schools. The general objective of the study was to establish the influence of information communication technology on child education

Methodology: The paper used a desk study review methodology where relevant empirical literature was reviewed to identify main themes and to extract knowledge gaps.

Findings: The study found out that the influence of ICTs in learning cannot be dealt with in isolation. For technology to be effective, it must be availed to learners at the right time and place. There is need to be effective, it must be availed to learner's proximity; that is in classrooms or supposed learning environment

Recommendations: The study recommends that school management should focus on increasing their ICTs infrastructure by provision of computers, building computer laboratories and encouraging public-private partnership so as to help in internet connectivity and provision of basic infrastructure. Capacity building is an important initiative that helps in ensuring that the benefits that accrue from use of technology in education are maximized. Additionally, students should be provided with technical assistance to use ICTs in teaching and learning

Keywords: *Influence, information communication technology, child education*

1.0 INTRODUCTION

1.1 Background of the Study

Ethics is a well-established arena that has received both attention and support from large and small organizations. According to Queensland Purchasing, Department of Public Works Crime and Misconduct Commission (2006) ethics are the moral principles that guide officials in all aspects of their work. Ethical behavior involves the concepts of honesty, integrity, probity, diligence, fairness, trust and respect. It also includes avoiding conflicts of interest, and abuse of an individual's position or office. Roberts (2003) observed that professional ethics are separate from personal ethics or common morality. Personal ethics is an individual's own morality that guides his or her own conduct. Common morality is a set of commitments that guide the conduct of cultures or societies. He further observed that professional ethics are designed to set moral standards beyond those set by law, the market, and common morality. Ethical responsibility involves more than leading a decent, honest and truthful life or making wise choices. Our moral obligations must include a willingness to engage others in the difficult work of defining what the crucial choices are that confront technological society and how to confront them intelligently (Winner, 1990)..

The process of developing a code is crucial to the sense of ownership and observance of the code by staff. Higher levels of staff ownership and contribution toward a code provide a more effective code. This issue is repeatedly acknowledged in a code studies (Kaptein and Wempe, 1998; Stevens, 2008; Trevino and Weaver, 2003; Seshadri et al., 16 2007). A good code reflects the moral dilemmas that employees experience, and provide assistance in their resolution (Kaptein and Wempe, 1998). There are strong supporting arguments behind the assertion that most effective way to stop wrongdoing in any organization is to create a more open, stress free method of exposing wrongdoing in the workplace. Any wrongdoing in an organization is usually known to several people, any one whom could bring the problems into the open (Whistleblowing Ethics Australia, 2008). The motivation for exposing wrongdoing has several interconnected sources. One is that it is engendered by the people's preference to work in an ethical organization. Maclagan (1998) for instance, in a treatise on the application of Piaget and Kohlberg to ethical reasoning stated his belief that most people in the organization are essentially well intentioned. Other support for employees' preferences to work ethically can be found in Valentine and Fleischman (2004) in a survey of over 300 business professionals, they reach the conclusion that people subject to formal ethical training have positive perceptions of their company's ethical position, as well as higher job satisfaction.

Delany and Sockell (1992) had earlier obtained similar results from over 1000 respondents. There is also strong support in the evolutionary biology literature to the effect that we are intrinsically cooperative, and to some extent, altruistic (Ridley, 1997; Winston, 2002; Levy, 2004; Joyce, 2006). Employees however, are subject to the prevailing culture and thought processes within the organization. Adams (2008) points out the problem of groupthink in an issue of journal of the Australian Institute of Company Directors – a phenomenon where people tend to think the same

on issues where diversity of thought needs to be encouraged. The term, first developed by social psychologist Irving Janis, included a tendency not to 17 question moral issues. Bringing unethical actions into public view is likely to bring retribution on the person who revealed the unethical or illegal action. Jubb (1999) gives many instances of whistleblowers victimized for revealing wrongdoing. Micali and Near (1992) two of the more respected researchers in this field, have also pointed out the difficulties whistleblowers face (Alford, 2001). 'Career suicide' was the term that the news media reported a senior officer in the Australian Wheat Board used when questioned why nobody in the organization spoke openly against the bribes paid to the Saddam Hussein regime (Sydney Morning herald, 2006). These statements in various forms also explain why so few have spoken out in the spate of scandals that erupted in the state of NSW in 2007 and 2008 – the Wollongong Council and real estate developer bribes, the cover ups in several hospitals, the minister accused of paedophilia; whose electoral secretary was the only person to speak out and who was immediately dismissed. To minimize retribution, governments in the industrialized world have established legislation designed to protect people who reveal wrongdoing (Whistleblowing Ethics Australia, 2008). If the organization (or industry association, professional body, etc) is to develop a code of ethics, and manage that code, or operate an internal whistle blowing system, and decide sanctions for ethical transgressions, then it needs to assign people for these activities within the organization (Trevino and Weaver, 2003). Advocating change in ethical practices will need communication skills and a persuasive ability of a high order. It involves creating an understanding of oneself, one's ethical values and moral courage. Advocating for ethical change requires courage, confidence and a high degree of personal skill (Weber, 2007).

1.2 Statement of the Problem

The main objective of companies' existence is to earn profits for their shareholders. But this should not be on the expense of its employee's health, consumers concerns, environmental destruction or damage to societal values. In the last two decades, ethics has attracted public scrutiny because of its importance to the economic health of corporations and society as a whole. The Triton scandal, Anglo Leasing, Goldenberg, CMC Motors, WorldCom, Anderson, Merill Lynch, Enron, Martha Stewart, Global Crossing, Qwest Communications, Tyco International, Adelphia Communications, computer Associates, Parmalat, Putman, Boeing, Rite Aid and Xerox are headlines in the past years that have portrayed a sad story of corporate ethics (or lack thereof) 7 (Harshbarger and Holden, 2004). Jacobs (2004) observed that in these corporations it seems as if the checks and balances that should protect shareholder interests were pushed to one side, driven by a perception of the need to move fast in the pursuit of the profit objective.

Rynes (2003) in their one-meta study examining the relationship between ethical and financial performance show a positive correlation. The authors suggest that "corporate virtue in form of social responsibility and, to a lesser extent, environmental responsibility is likely to pay off…." The van Burden and Gosling's study (2008) examines 34 research projects that attempted to relate CSR to Corporate Financial Performance and found that 23 of the studies found a positive relationship, nine found no significant correlation, and two found a negative correlation. Because of the concerns, the current study focuses on role of ethics in promoting organization performance

.

1.3 Objectives of the Study

The general objective of the study was to establish role of ethics in promoting organization performance

1.4 Justification and Significance of the Study

The study described the landscape of ethics within the public service. The risk of unethical behavior on the part of managers or other employees can be lessened by understanding how employees view your ethical standards and peoples' adherence to them. The study finds it important to also measure the pro-active steps that have been taken by government institutions to encourage ethical behaviou.

LITERATURE REVIEW

2.1 Theoretical review

Two theories were found to be relevant in establishing the influence of information technology on child education. The theories that were found to best inform the research constructs are the diffusion of innovation theory (Rogers 1962) and Social Learning Theory (Bandura 1977).

2.2.1 Rights Theory

According to the theory of moral rights, human beings have certain fundamental rights that should be respected in all decisions: the right to free consent, privacy, and freedom of conscience, free speech, and due process (Cavanagh et al., 1981). A right is a capacity, a possession, or condition of existence that entitles either an individual or a group to enjoy some object or state of being. For example, the right to free speech is a condition of existence that entitles one to express one's thoughts as one chooses (Duska, 2002). According to rights theory, as long as the distribution of wealth in society is achieved through fair acquisition and exchange, the distribution is a just one regardless of any degree of inequalities that may ensue (Budd, 2004). The morally correct action is the one that a person has the moral right to do, that does not infringe on the moral rights of others, and that furthers the moral rights of others (Rachels, 1999; Velasques, 1998; Cavanagh et al., 1981; Schumann, 2001). People who rely on rights theory to reason their actions emphasize the entitlement of individuals (Cavanagh et al., 1981). Restrictions on behavior should prevent harm to others, but unless your actions harm others, you should be free to do as you please. A manager making a decision based on this theory should avoid violating the rights of others who may be affected by the decision (Cavanagh et al., 1981).

2.2.2 Social Learning Theory

This theory was proposed by Albert Bandura (1977). According to Bandura (1977) learning would be exceedingly laborious, if not hazardous, if people had to rely solely on the effects of their own actions to inform them what to do. However, most human behaviour is learned observationally through modelling. From observing others, one forms an idea of how new behaviours are performed, and on later occasions this coded information serves as a guide for action. Bandura (1977) believed that direct reinforcement could not account for all types of learning and that people can learn new information and behaviours by watching other people, known as observational learning (or modelling). In his famous "Bobo doll experiment", Bandura " demonstrated that children and imitate behaviours they have observed in other people. The children in Bandura's

studies observed an adult acting violently toward a Bobo doll. When the children were later allowed to play in a room with the Bobo doll, they began to imitate the aggressive actions they had previously observed. Bandura identified three basic models of observational learning as a live model, which involves an actual individual demonstrating oracting out behaviour, a verbal instructional model, which involves descriptions and explanations of behaviour and lastly a symbolic model, which involves real or fictional characters displaying behaviours in books, films, television programs, or online media. From Banduras theory on social learning, ECD teachers learn and often teach the children like their tutors taught them. If teacher trainees observe their trainers using lCTs in their instruction, the teacher trainees too will aspire and at times unconsciously teach like their trainers, not like the teachers teach them to teach. The teacher trainers should be empowered and encouraged to make use of information and communication technologies in their instruction in order to act as role models to their students and the student teachers will copy them

2.2 Empirical Review

Mwangi (2019) did a to establish whether construction companies in Kenya have ethics management systems; to find out the benefits of ethics management systems; to identify the challenges facing implementation of ethics management systems; and finally to explore the correlation between lack of ethics management systems and unethical practices. The study used a descriptive survey approach where primary data was collected via structured questionnaires. The analysis of data was done using statistical analysis software. The study findings indicate that majority of construction companies surveyed (80.6%) have an inadequate ethics management system and lack documented ethical decision-making procedures. They lack adequate ethics guidelines such as code of ethics and value statements. There was also a lack of commitment by top leadership in fostering ethics management in their respective companies as exemplified by minimal ethics infrastructure with only 10% having ethics departments. Improved projects' performance, improved compliance with laws and regulations, reduction in misconducts and disputes were noted to be the major benefits of ethics management in the construction companies respectively. Lack of trained personnel, low organisational ethical culture, and harsh business environment were majorly impacting ethics management. The results showed that there is a positive correlation between lack of Ethics Management Systems and Unethical Practices. The study concluded that ethics management amongst contractors in Kenya is ineffective resulting to very high ethical sacrifices by employees in the companies and predisposing decision-making to malpractices; this is because very few companies have a reliable ethics management system, have poor ethical culture, lack proper ethics management philosophy and ethics infrastructure. xiii The study, therefore, recommends training of ethics personnel to build ethics management human capacity, documented ethics decision-making procedures, and strong effective and dedicated leadership leading by example as the most effective ethics management strategies amongst contracting firms.

Mwiringi (2018) did a study to explore nurses' and doctors' experiences regarding ethical challenges in end of life care in KNH CCU. The study was a qualitative study utilizing a descriptive phenomenological approach. Nurses and doctors working in KNH CCU during the study period and were willing to participate by giving informed consent, were interviewed. Purposeful sampling method was used to recruit eighteen participants who were interviewed until

data saturation. An audio recording was used to store data from interviews. Data collection took three weeks. Data analysis was guided by transcendental phenomenological data analysis process using N-VIVO software. Clustering of themes took place where the researcher clustered themes that were common from the study findings. There were five major themes identified: Definition of ethical challenges, Encounter of ethical challenges; Experience on decisions in end of life care and decisions arrived at when faced by an ethical challenge. The study concluded that ethical challenges are a reality at KNH CCU. The nurses and doctors providing care at KNH CCU find themselves in a dilemma when faced with ethical challenges. The study concluded that an ethical committee from KNH mandated to handle ethical challenges should be set up. Need for guidelines, protocols or policies documenting exactly what should be done should a health care provider encounter ethical challenges.

Mutinda (2012),did a study to explore ethical dilemmas experienced by nurses working in the critical care areas at Kenyatta National Hospital and factors influencing nurses' ethical decision making. An exploratory survey of 123 nurses working at KNH- critical care areas was conducted over a period of five weeks. Participation in the study was by written consent. Participants were employees of KNH working in the critical care areas during the time of data collection. Nurses were selected through simple random sampling. Data were collected using a questionnaire 'containing 40 items adapted from Fry and Duffy Ethical issues scale. Modification of the questionnaire was done to' omit questions on personally disturbing ethical dilemmas.Authority to conduct the study was obtained from the KNH management while clearance was sought from University of Nairobi and KNH ethical research committee. The study was done as part fulfillment of the award of a master of science of nursing degree ; the researcher had no conflicting interest with the training institution or the hospital. Data was cleaned and analyzed using SPSS. Chi square test was used to assess the relationship between variables. Propositions and conclusions were made based on apparent patterns or relationships within the data.The result revealed that dilemmas of major concern to nurses included: prolonging the dying process, withdrawing/ withholding treatment, resuscitation (DNR) orders, unsafe nurse- patient ratios and allocation of scarce medical resource, rights of pediatric patients, and nursing of critically ill patients who may pose a risk to the nurses. In dealing with the dilemmas majority of the respondents indicated that they would consult with physicians. Some socio- demographic factors were shown to influence the experience of ethical dilemmas by respondents. These included age, level of knowledge on ethical issues, professional -.. qualification and availability of work .place resources. It was noted that respondents aged below 35 years experienced more dilemmas compared- to others. Respondents with knowledge on ethical issues experienced less dilemmas compared to those who with no knowledgeable.

Okwiri (2012), conducted a study on the role of ethics in supply chain management of oil marketing companies in Kenya and how ethics can be used to improve the supply chain process. The study considered all the fifty one oil marketing companies who pass their products through Kenya Pipeline system. A sample size of 500 respondents were selected using stratified random sampling for the supply chain practitioners in these companies Primary data was collected from 434 respondents through a survey by use of research administered questionnaires and subjected to rigorous data processing and analysis using Statistical Packages for Social Sciences (SPSS). Business practices, relativism and idealism were identified as independent variables while ethical measures as dependent variable. The findings revealed that there is positive association between

business practices, relativism and ethical measures. However, the research revealed that there is an insignificant negative association between idealism and ethical measures. It was noted that relativism (Beta = 0.731) is more influential at explaining ethical behaviour than business practices The study recommended that ethical behaviour concepts like honesty, integrity, probity, diligence, fairness, confidentiality, trust and respect should be encouraged, monitored and evaluated. It recommends that supply chain organizations and managers should institute ethics principles, moral standards, ethics training, ethics culture, code of ethics for their supply chain practitioners to establish integrity in the supply chain process. The study suggested that organizations should focus training not only on informing employees about compliance with regulations, but also on encouraging employees to behave in a way that is conducive to a strong ethical culture. The findings were also instructive in pointing out how organizations can tailor their ethics training to different levels of employees. Further research is recommended that will consider other variables other than business practices, relativism and idealism. The research recommended that longitudinal study should be carried out to find out the role of ethics over long period of time

2.5 Research gaps

Geographical gap is a knowledge gap that considers, the untapped potential or missing/limited research literature, in the geographical area that has not yet been explored or is under-explored. For instance Gaitho (2016), did a study to investigate the factors influencing use of ICT in teaching and learning among primary school pupils in Kandara Sub-County in Kenya. The study found out that 94.9% of pupils respondents and 92.9% of teachers had no access to power.97.3% of pupil respondents and 92.8% of teacher respondents confirmed that they had no computers at schools.93.3% of pupil respondents and 92.9% of teacher respondents indicated that computers are placed in offices and this had negatively affected the use of ICT in teaching and learning in primary school .The study presented a geographical gap as it was done in Kandara sub county while our current study will focus to influence of information communication technology on child education

Methodological gap is the gap that is presented as a result in limitations in the methods and techniques used in the research (explains the situation as it is, avoids bias, positivism, etc.). Martin (2016), did a study to establish the factors influencing the implementation of Information and Communication Technology projects in public secondary Schools in Kwale County. Non-experimental descriptive survey design was used to establish the factors that influence the implementation of ICT projects in secondary schools Kwale County. The study found out that technological revolution in schools has been beset by theoretical inadequacies that have kept educational technology at the margins of the established educational system.The study presented a methodological gap as it involved correlation design while our study will adopt a desktop literature review method (desk study). Which involves an in-depth review of studies related to influence of information communication technology on child education

METHODOLOGY

The study adopted a desktop literature review method (desk study). This involved an in-depth review of studies related to influence of information technology on child education. Three sorting stages were implemented on the subject under study in order to determine the viability of the subject for research. This is the first stage that comprised the initial identification of all articles that were based on influence of information technology on child education from various data bases.

The search was done generally by searching the articles in the article title, abstract, keywords. A second search involved fully available publications on the subject on influence of information technology on child education. The third step involved the selection of fully accessible publications. Reduction of the literature to only fully accessible publications yielded specificity and allowed the researcher to focus on the articles that related to influence of information technology on child education which was split into top key words. After an in-depth search into the top key words (influence, information technology, child education), the researcher arrived at 5 articles that were suitable for analysis. The 4 articles were findings from Joshua (2013), who did a study on to investigate factors that influence integration of ICT in primary school science education in Molo district.The study found out that showed that there was a positive moderate relationship between the transformational leadership style and discipline .Kariuki (2013) who conducted a study to analyze the leadership styles of principals and their influence on leaners' performance of secondary schools in Kinangop district. the attitudes of the teachers, the level of ICT competency among teachers and the availability of ICT resources affected integration of ICT in primary schools science education

Titus (2015), who did a study to investigate factors influencing pedagogical integration of ICT in teaching and learning in public secondary schools in Keiyo Sub County, Elgeiyo Marakwet County.The study found out that concludes that the potential that ICTs hold in pedagogy can only be attained if key challenges identified as influencing the use of ICTs in supporting teaching and learning are handled. These factors include availability of ICT infrastructure, lack of skills on how to integrate ICTs in teaching and learning, poor connectivity, poor electricity supply and lack of technical assistance.

Israel (2016), who did a study on the positive and negative impact of ICT on education in Nigeria. The study found out that some countries have made considerable progress in bringing networked ICT into education and made it possible for teachers and learners to use them on a daily basis Martin (2016), who did a study to establish the factors influencing the implementation of Information and Communication Technology projects in public secondary Schools in Kwale County.The study concluded that technological revolution in schools has been beset by theoretical inadequacies that have kept educational technology at the margins of the established educational system and Gaitho (2016), who did a study to investigate the factors influencing use of ICT in teaching and learning among primary school pupils in Kandara Sub-County in Kenya.The findings revealed that 94.9% of pupils respondents and 92.9% of teachers had no access to power.97.3% of pupil respondents and 92.8% of teacher respondents confirmed that they had no computers at schools.93.3% of pupil respondents and 92.9% of teacher respondents indicated that computers are placed in offices and this had negatively affected the use of ICT in teaching and learning in primary school

4.0SUMMARY, CONCLUSION AND POLICY IMPLICATION FOR FURTHER STUDY

4.1 Summary

ICT projects and their relevance in education are spreading rapidly in schools not just in wealthy countries, but increasingly in developing ones as well. However, although schools have had computers for almost two decades and some with ICT projects underway, ways to use and

implement them effectively have evolved slowly and patchily. Technological revolution in schools has been beset by theoretical inadequacies that have kept educational technology at the margins of the established educational system. Research findings across the country have revealed that there are ICT facilities in schools such as computers, computer laboratories, internet connections, alongside the traditional methods of telecommunication. Further research has revealed that projects involving ICT use and integration in the schools have both internal and external challenging factors leading to weak implementation of these ICT projects.

4.2 Conclusion

The apparent immense educational potential of ICTs has captivated stakeholders in education around the world. There is widespread belief that ICT can and will empower teachers and learners and transform teaching and learning processes from being highly teacher-dominated to student-centered. This transformation will result in increased learning gains for students, creating and allowing for opportunities for learners to develop their creativity, problem solving abilities, informational reasoning skills, communication skills and higher-order thinking skills. The research findings in this study reveal that ICTs has the potential of improving the quality of teaching and learning in secondary schools if fully exploited.

The influence of ICTs in learning cannot be dealt with in isolation. For technology to be effective, it must be availed to learners at the right time and place. There is need to be effective, it must be availed to learners" proximity; that is in classrooms or supposed learning environment

4.2 Recommendations

School management should focus on increasing their ICTs infrastructure by provision of computers, building computer laboratories and encouraging public-private partnership so as to help in internet connectivity and provision of basic infrastructure. Capacity building is an important initiative that helps in ensuring that the benefits that accrue from use of technology in education are maximized. Additionally, students should be provided with technical assistance to use ICTs in teaching and learning. They should be guided on all ICTs applications with necessary expertise to enable them acquire ICT skills for use in pedagogy. This can be done by ensuring that students are made to realize the new innovations in educational technology and be prepared and equipped with skills for the technology era

REFERENCES

Abanikannda, M. (2018). Effect of Technology tools on students' interest in Biology. A survey of Osun State High schools in Nigeria

Al-Jenaid, S., Chiu, A. S. F., Dahl, A., Fleischmann, K., Garcia, K., Graham, M., ... & Fletcher, J. (2014). Global Environment Outlook Small Island Developing States Outlook.

Al-Wadi, H. (2020). Bahrain's Secondary EFL Teachers' Beliefs of English Language National Examination:'How It Made Teaching Different?'. *International Journal of Instruction*, *13*(1), 197-214.

Asoma, A. (2018). Using in-service training to improve teachers'skills towards the use of ict to teach at st peter's jhs, tamale (Doctoral dissertation).

Bandura, A., & Adams, N. E. (1977). Analysis of self-efficacy theory of behavioral change. *Cognitive therapy and research*, *1*(4), 287-310.

Bitok, E.B. (2014). Teachers' Preparedness in Integrating Information and Communication Technologyin Biology Classrooms in Uasin Gishu County, Kenya. Journal of research and Methods in Education: Vol. 4, 45-53

Bitok, E.B. (2014). Teachers' Preparedness in Integrating Information and Communication Technologyin Biology Classrooms in Uasin Gishu County, Kenya. Journal of research and Methods in Education: Vol. 4, 45-53.

Criado, J. I., Rojas-Martín, F., & Gil-García, J. R. (2017). Enacting social media success in local public administrations: An empirical analysis of organizational, institutional, and contextual factors. *International journal of public sector management*.

De Wet, W., Koekemoer, E., & Nel, J. A. (2016). Exploring the impact of information and communication technology on employees' work and personal lives. *SA Journal of Industrial Psychology*, *42*(1), 1-11.

Flores, V.C. (2014, October 7). Biology tools and simulations for teachers and parents. Retrieved from BioDigital Human: http://www.cloudetal.com

Gaitho, A. M. (2014). *Factors influencing use of ICT in teaching and learning among primary school pupils in Kandara sub-county, Muranga county, Kenya* (Doctoral dissertation, University of Nairobi).

Gakime, R. (2016). Factors influencing integration of digital resources in science teaching and learning in secondary schools of Murang'a County, Kenya.

Johansson, W., & Söderlund, A. (2018). Teachers' Views on Digital Tools in the English as a Second Language Classroom.

Kaga, J. K. (2013). *Factors influencing integration of information communication technology in primary school science education in Molo district, Nakuru county, Kenya* (Doctoral dissertation).

Kjällander, S., Åkerfeldt, A., Mannila, L., & Parnes, P. (2018). Makerspaces across settings: Didactic design for programming in formal and informal teacher education in the Nordic countries. *Journal of Digital Learning in Teacher Education*, *34*(1), 18-30.

Lindqvist, M. H., & Pettersson, F. (2019). Digitalization and school leadership: on the complexity of leading for digitalization in school. *The international journal of information and learning technology*.

Mertala, P. (2019). Two worlds collide? Mapping the third space of ICT integration in early childhood education.

Miller, R. L. (2015). Rogers' innovation diffusion theory (1962, 1995). In *Information seeking behavior and technology adoption: Theories and trends* (pp. 261-274). IGI Global.

Muleya, G., Kaumba, M., Mphahlele, R., & Simui, F. (2021). Disablers and enablers in the uptake of information communication technologies in rural primary schools of Mwinilunga District, Zambia.

Peas, J. S. (2019). *Positive and Negative Influences of Technology in Early Childhood Classrooms: A Qualitative Study* (Doctoral dissertation, Northcentral University).

Sakr, M. (2019). *Digital Play in Early Childhood: What' s the Problem?*. Sage.

Sargent, A. R. (2017). *Urban Preschool Teachers' Instructional Technology Integration Perceptions and Practices*. Hampton University.

Sheninger, E. C. (2017). *Learning transformed: 8 keys to designing tomorrow's schools, today*. ASCD.

Titus, B. K. (2015). *Factors influencing pedagogical integration of information communication and technology in Teaching and learning in public secondary schools: A case of Keiyo sub county, Elgeiyo Marakwet county, Kenya* (Doctoral dissertation, University of Nairobi).

World Bank. (2016). World development report 2016: Digital dividends.