BINDURA UNIVERSITY OF SCIENCE EDUCATION
FACULTY OF SOCIAL SCIENCES AND HUMANITIES
DEPARTMENT OF SOCIAL WORK

Digital Tool Integration programming on educational outcomes for OVC in Bindura rural: A Social Work perspective.

BY

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Supervisor: Mr Magocha

A dissertation submitted to Bindura University of Science Education, Faculty of Social Sciences and Humanities, Department of Social Work, in partial fulfilment of the requirements for the Bachelor of Science Honours Degree in Social Work.

June 2025

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I would like to acknowledge the divine providence that enabled me to pursue my academic endeavours. I also thank the Lord the guiding me throughout my project, giving me strength and resilience to overcome encountered challenges.

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DEPARTMENT OF SOCIAL WORK
27 AUG 2025
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Dedication

I dedicate this project to my parents and my grandmother who have been my rock and inspiration throughout with their unwavering support, belief in my ability and potential being a source of motivation driving me to work extra hard and persevere through the challenges l encountered. To my friends who were with me socially and emotionally, l extends my heartfelt gratitude for their collective efforts which enabled me to complete this project. Their love, kindness and generosity made a significant difference in my journey, I am honoured to have them all by my side.

This project is a true reflection of the power of love, support and determination, I hope it might inspire others in perusing their passions and dreams.

Plagiarism report

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Marking Guide: Undergraduate Research Project

Chapter 1: INTRODUCTION	**Possible Mark**	**Actual Mark**
Abstract	**10**	
Background to the study- what is it that has made you choose this particular topic? Include objectives or purpose of the study	**20**	
Statement of the problem	**10**	
Research questions	**15**	
Assumptions	**5**	
Significance of the study	**15**	
Limitations of the study	**5**	
Delimitations of the study	**5**	
Definition of terms	**10**	
Summary	**5**	
Total	**100**	
Weighted Mark	**15**	

Comments……

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Chapter 2 LITERATURE REVIEW

Introduction- what do you want to write about in this chapter?	**5**	
Conceptual or theoretical framework	**10**	
Identification, interpretations and evaluation of relevant literature and citations	**40**	
Contextualisation of the literature to the problem	**10**	
Establishing gaps in knowledge and how the research will try to bridge these gaps	**10**	
Structuring and logical sequencing of ideas	**10**	
Discursive skills	**10**	
Summary	**5**	
Total	**100**	
Weighted Mark	**20**	

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Chapter 3 RESEARCH METHODOLOGY

Introduction	**5**	
Research design	**10**	
What instruments are you using to collect data?	**30**	
Population, sample and sampling techniques to be used in the study	**25**	
Procedures for collecting data	**15**	
Data presentation and analysis procedures	**10**	
Summary	**5**	
Total	**100**	
Weighted Mark	**25**	

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Chapter 4 DATA PRESENTATION, ANALYSIS AND DISCUSSION

Introduction	**5**	
Data presentation	**50**	
Is there any attempt to link literature review with new findings	**10**	
How is the new knowledge trying to fill the gaps identified earlier	**10**	
Discursive and analytical skills	**20**	
Summary	**5**	
Total	**100**	
Weighted Mark	**30**	

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Chapter 5 SUMMARY, CONCLUSION AND RECOMMENDATIONS

Introduction- focus of the chapter	**5**	
Summary of the whole project including constraints	**25**	
Conclusions- have you come up with answers to the problem under study	**30**	
Recommendations (should be based on findings) Be precise	**30**	
References	**5**	
Appendices i.e. copy of instruments used and any other relevant material	**5**	
Total	**100**	
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SUMMARY:

	Actual	**Total**
Chapter 1		
Chapter 2		
Chapter 3		
Chapter 4		
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Abstract

This research project investigates the digital tool integration programming on educational outcomes for Orphans and Vulnerable Children in Bindura rural district, Zimbabwe. The study aims to examine the integration of digital tools in education among Orphans and Vulnerable Children (OVC) in Bindura rural using a social work perspective. The research objectives of this study include assessing the current state of the use of digital tools evaluating their impact on educational outcomes for OVC from Bindura rural, to identify challenges faced by educators and OVC in accessing digital learning and to develop strategies to improve digital tool integration in education for OVC in marginalized areas. Qualitative research methodology was employed by the study utilizing in-depth interviews amongst 10 participants inclusive of the OVC, educators and key informants.

The Technology Acceptance Model served as the theoretical framework guiding the entire study. Primarily, findings indicated that digital tool integration improve academic performance, increase motivation among students and enhance teaching methods. However, challenges like lack of infrastructure, limited digital literacy and some other socio-economic barriers exist in the rural areas of Bindura, areas of study. The study come up with a bunch of recommendations and interventions to ensure sustainable digital tool integration in education among OVC in Bindura rural. This study contributed to the growing body of knowledge on the role of technology in education particularly in underserved communities like Bindura rural, the study setting providing recommendations to stakeholders to optimise the outcomes for OVC in Bindura rural district.

List of Abbreviations

CDEM	Community Digital Empowerment Model
DTI	Digital Tool Integration
MoPSE	Ministry of Primary and Secondary Education
OECD	Organisation for Economic Co-operation and Development
OVC	Orphans and vulnerable children
PEOU	Perceived Ease of Use
PU	Perceived Usefulness
SDG	Child Sustainable Development Goals
TAM	Technology Acceptance Model
UNCRC	United Nations Convention on the Rights of the

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Chapter One: Introduction and Background

1.0 Introduction

Digital tool integration revolutionised the learning and teaching criteria globally though it remains stark in some developing countries. This chapter encompasses of the background of the study, statement of the problem, aim and objectives of the study. Moreso, justification of the study, definition of key terms and outline of the study are the other components to be discussed within this chapter. More is to be explored as the chapter proceeds.

1.1 Background to the Study

Orphans and Vulnerable Children (OVC) according to UNICEF (2020) are children who lost one or both of their parents or those who are at risk due to social, economic and environmental factors including poverty, disability and family disruption. Digital Tool Integration refers to the incorporation of technology like computers, tablets and online learning in education to facilitate learning and improve accessibility of education. Marginalised communities are communities that experience social, economic and political disadvantage which leads to limited access to essential services inclusive of education.

Digital tool integration in education aims to address disparities suffered by OVC though it remains unclear regardless of the potential benefits. In rural areas many schools lack adequate necessary infrastructure for digital integration support around the globe. World Bank (2018) conducted a study which showed that 40% of developing countries schools lack reliable electricity impacting the implementation of digital learning. Organisation for Economic Co-operation and Development (OECD) (2019) research highlights that over 50% teachers have insufficient training in digital literacy affecting their ability to facilitate technology-enhanced learning. Usually, OVC are from economically affected backgrounds influencing their ability to engage with digital learning. The Global Partnership for Education (2021) reported that mostly these vulnerable children are three times more likely to be school dropouts than their peers. These children face psychological trauma affecting their educational outcomes which need to be addressed to produce meaningful outcomes (Masten et.al. 2020). Hence the need for social workers to offer counselling and therapy sessions

and advocate for the rights of the most disadvantaged groups during the digital learning process especially the OVC.

Education is a fundamental key driver to socio-economic development though marginalised and vulnerable communities face multiple challenges to access quality education (UNESCO, 2014). Integration of digital tools in education enhances educational outcomes for OVC from marginalised areas. The global rise and shift towards digital education began in 2015 driven by technological advancements and the need to modernise educational practices. UNESCO Global Education Monitoring Report (2016) put an emphasis on the importance of technology in achieving inclusive education. Due to Covid 19 pandemic, schools were closed globally but digital tools ensure continuity of education even though (World Bank, 2021). Digital integration has transformed the learning landscape by offering unparalleled opportunities for vulnerable communities to enhance teaching and learning (Koehler & Mishra, 2015). Social workers should ensure equal distribution of opportunities to access and use of digital tools for OVC with their peers.

Researches conducted show that use of digital tools can improve student engagement, access to educational resources and bridge gap between urban and rural education. Chigona et al (2019) reveals that digital tools in South Africa had a potential to improve educational outcomes for vulnerable children but affected by inadequate infrastructure, high costs of connectivity and low digital literacy levels. The National Plan of Action (NPA) for orphans and other vulnerable children in Zimbabwe coordinate efforts made to support OVC inclusive of use of digital tools in improving educational tools, emphasizing more on multi-sectoral approach. This study will dwell more on digital tool integration among OVC in Bindura rural and its impact on enhancing educational outcomes for OVC in marginalised and vulnerable communities.

However, in Zimbabwe, previous studies highlights that they are having challenges to access quality education due to limited resources, infrastructure (Rasmussen, et al 2020), as well as limited digital literacy (Ertmer et al 2014) especially in rural areas. In terms of school attainment UNICEF (2020) notes that children from marginalised communities of Zimbabwe are most likely to drop out of school affecting their outcomes in education. Ministry of Primary and Secondary Education (MoPSE) in Zimbabwe launched the e-learning initiatives during times of crisis and

pandemic leaving behind OVC due to access issues according to Zimbabwe Education Sector Analysis (2021).

Social workers are responsible to support vulnerable population like the OVC to access digital learning though influenced by limited resources, inadequate training and high caseloads. The National Association of Social Workers (2020) indicated that social workers have limited access to digital technology and inadequate training in digital literacy impacting their service delivery. According to Chikulo (2017), social workers lack or limited collaboration and coordination with other stakeholders responsible for the success of digital tool integration like government officials, NGOs, local organisations, well-wishers, faith-based organisations and donors as well.

1.2 Statement of the Problem

Integration of digital tools must empower the marginalized and vulnerable communities (Selwyn, 2016). Digital tools like e-learning platforms, educational apps and online resources have a potential to improve educational outcomes for OVC particularly those from marginalised communities. Everyone has the right to education as enshrined by the United Nations Convention on the Rights of the Child (UNCRC), UDHR and Sustainable Development Goal (SDG) 4 through ensuring inclusive and equitable quality education for all by 2030, promoting technology as a solution to educational gaps. In response to COVID 19 pandemic, UNESCO's Global Education Coalition promotes collaboration among the state, governments, NGOs and private sectors to ensure continuity of education through digital means marginalised communities especially the OVC providing them with resources and support.

The African Charter on the Rights and Welfare of the Child notes that the state must ensure that all children have access to education and promoting the adoption of innovative approaches like digital education to support the vulnerable populations. The Continental Education Strategy for Africa (CESA) aims to enhance education by digital tools as it addresses the digital divide affecting OVC and encourages member states to implement strategies that leverage technology for educational improvement. This shows that regions are trying their best to improve the use of digital tools in education by OVC.

In Zimbabwe these rights are supported by Education 5:0 which emphasizes the need for innovation among children ensuring access to digital tools which improves the level of learning.

This also enhances the aspect of continuous learning even during pandemics like Covid 19 as students continue learning. However, in Zimbabwe OVC lack access to these digital tools due to financial constraints. For a few who have the tools they lack access to internet, face electricity challenges and some have little knowledge about how to use these tools which further imped the importance of digital literacy. Regardless of the literature emphasising the importance of digital tools in education there is notable limited research on the specific challenges faced by OVC from vulnerable communities in this region (Hodges et al., 2020 & Zawacki-Richter et al., 2019). Therefore, this study seeks to explore the exact of prevalence of these issues and propose strategies that can deal with the problem. By addressing the existing gap, this study aims to contribute valuable insights into how digital tools can be used to promote educational equality and improve learning experience.

1.3 Aim of the Study

This study aims to examine the integration of digital tools in education among Orphans and Vulnerable Children (OVC) in Bindura rural using a social work perspective.

1.4 Objectives

1. To assess the current state of the use of digital tools evaluating their impact on educational outcomes for OVC from Bindura rural.
2. To identify challenges faced by educators and OVC in accessing digital learning.
3. To develop strategies to improve digital tool integration in education for OVC in marginalized areas.

1.5 Research questions

1. Which digital tools are currently available to Orphans and Vulnerable Children in Bindura rural schools and what their impact on their educational outcomes?
2. What factors are hindering OVC and educators in accessing digital learning?
3. What strategies do they suggest to improve the digital learning especially for vulnerable children from remote rural areas?

1.6 Justification of the Study

This study holds a significant impact for different stakeholders (policy makers, educational institutions, study participants and community organisations) by exploring literature gaps, examining policy framework and offering actionable recommendations contributing to meaningful change in educational practices and outcomes for vulnerable populations. The goal is of inclusivity, equity and accessibility which aligns with the global efforts to ensure that no child is left behind in digital age. More on the importance of the study to these stakeholders is explained below.

1.6.1 Contribution to Body of Knowledge

By addressing these gaps, this research will contribute to the development of better strategies that promote successful integration of digital tools in educating OVC. The existing literature Wenglinsky (2015) primarily focus on mainstream education without adequately addressing the unique challenges faced by OVC from marginalised communities (Zhao, 2013). This study aims to fulfil the knowledge gap in context-specific research by providing imperial data on the limitations encountered by OVC to access technologies as well as unique educational needs for them. It contributes also to broader inclusive education through highlighting best practices and lessons learnt from the successful digital integration tailored to vulnerable populations. A study by Warschauer (2020) notes that cultural beliefs and values influence the acceptance of educational technologies, hence addressing this gap is essential to create culturally relevant digital learning encompassing OVC. Lastly the findings will provide the foundation for future research and development in this area (Lai &Bowe, 2019).

1.6.2 Social Policy and Programmes

Current social policies inadequately address the integration of digital tools in education of marginalised groups. The Zimbabwe National Education Policy outlines the mandates for equitable access to education and technology but there remains significant gap between policy goals and practical implementation (Chireshe, 2010). Therefore, this study will examine existing policies and their effectiveness in supporting digital learning for OVC. It is going to inform policy makers and stakeholders to develop inclusive educational policies, programmes and practices prioritising the vulnerable populations through identifying barriers and proposing actionable

recommendations (Gulamhussein, 2017). Research findings will also guide funding allocations and resource mobilisation strategies in order to improve digital accessibility to the marginalised and vulnerable communities by social workers. Through identifying effective strategies for digital learning, the study will contribute in developing evidence-based policies and programmes addressing educational needs for vulnerable populations (World Bank, 2020). Actionable recommendations for various stakeholders including policy makers, educators' community organisations will address the gaps and challenges inhibiting the succession of integration of digital tools in education of OVC for improves outcomes and better life opportunities.

1.6.3 Community and Study Participants (Education 5.0)

Moving on, this research is going to benefit the both the target group (primary participants) and the community by promoting Education 5.0 emphasising on the development of skills and knowledge for digital learning (Bates, 2019). Experiences and voices of OVC are crucial in understanding realities of digital tool integration in education, hence engaging them provide the insights of their specific challenges and needs other than just empowering them. Through local engagement, educators, learners and community members there is provision of opportunities for capacity building, technology transfer and empowerment (Kozma, 2017). In addition, this research is going to raise awareness on the importance of digital learning and the and the challenges associated with it as well as the coping strategies.

1.6.4 University curriculum, teaching pedagogy

Finally, this research will inform the development of new courses, modules and programs related to digital literacy, technology and inclusive education (Gulamhussein, 2017). The study will challenge existing pedagogical approaches as well as encouraging incorporation of innovative digital learning methods to serve the marginalised learners to improve their educational outcomes and ensuring social equity.

1.7 Definition of Key Terms

1.7.1 Information and Communication Technology (ICT)

ICT was referred to as a transformative force in society enabling new forms of interaction and collaboration particularly in the context of globalisation and social networks. UNESCO (2002)

also defines ICT as means to bridge the digital divide, providing opportunities for education and economic development particularly in developing countries.

1.7.2 Digital Tool Integration

Digital tool integration refers to the process of incorporating digital technologies, such as learning management systems, educational software and mobile apps into educational settings to enhance teaching and learning (Koehler & Mishra, 2018). Effective digital tool integration requires careful consideration of the educational context, the needs of learners and the potential of benefits and limitations of different digital tools (Ottestad, 2018).

1.7.3 Educational Outcomes

Refers to the knowledge, skills and attitudes that learners acquire as a result of their educational experiences (Biesta, 2015). Kuh et al., (2017) notes that it can be measured in various ways including through standardised tests, project-based assessments and self-reporting instruments.

1.7.4 Marginalised Communities

Refers to groups of people who are at risk of being vulnerable, excluded or disadvantaged due to various factors like poverty, lack of access to education and social inequality (UNESCO, 2019). In the context of this study orphans and vulnerable children living in marginalised communities in Bindura district face challenges in accessing quality education due to limited resources, infrastructure and technological infrastructure.

1.7.5 Digital Literacy

This is the ability to effectively use digital technologies to access, evaluate and create information as noted by (Hobbs,2017). It's an essential skill for learners during this 21st century as it enables them to fully participate in the digital economy and society.

1.8 Dissertation Outline

1.8.1 Chapter one: Introduction and background

The chapter introduces the research topic, outlining the problem statement, significance of the study, aim and objectives guiding the entire study. Definition of key terms of the study would be discussed by this chapter.

1.8.2 Chapter two: Literature review

This chapter reviews the existing literature and researches on digital tool integration in education among OVC. There will be analysis of previous studies and literature identifying existing gaps as well as establishing current research which highlight further investigations. Theoretical framework to be utilised by the study is explored here.

1.8.3 Chapter three: Research methodology

This section consists of the methodologies utilised by the researcher during her study. It describes the research philosophy, approach and design used during the study. In addition, this section outlines the study setting, target population, sampling techniques and sample size. Moreso, data collection techniques and tools, research procedure, reliability/trustworthy of the study, data analysis as well as ethical considerations are the other components of this chapter.

1.8.4 Chapter four: Presentation, interpretation, analysis and discussion of findings

Finding of the study are presented, analysed and discussion with is this section in relation to the study objectives. The chapter addresses encountered challenges and suggest areas for further exploration.

1.8.5 Chapter five: Summary, conclusions and recommendations

Thus, the final chapter of the project summarising the findings, providing conclusions and recommendations to various groups of people. This section also encompasses of the suggested model by the student to address the challenges involved and the areas for future study.

1.8.5 References

Here there will be a comprehensive list of all cited literature within the study following the APA referencing style. This referencing involves only current scholars from 2015 up to now.

1.9 Chapter Summary

The chapter provides an overview of the research topic, background of the study, problem statement and definition of key terms. It highlights the importance of integrating digital tools as a means to improve and engagement among orphans and vulnerable children living in marginalised areas. The research objectives and aim that will guide research concluded the chapter.

Chapter Two: Literature Review

2.0. Introduction

This chapter is going to examine the current state of research on digital tool integration, its impact on educational outcomes, the challenges faced by vulnerable populations and educators as well as the critical role played by stakeholders and community support, within Bindura rural. The study is going to utilise Technology acceptance model (TAM), to provide a comprehensive framework for understanding the complex interplay of factors that influence digital tool integration in Zimbabwean schools. This theory posits how users form attitudes and intentions to use digital tools.

2.1 Theoretical Framework

The Technology Acceptance Model (TAM), formulated by Davis (1989) is widely used to explain how users accept and adopt new technologies. It posits that Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) are the key determinants to technology adoption, influencing user's Attitude towards Using (ATU) and their Behavioural Intention (BI) to use digital tools. PU is the degree to which a person believes that use of digital tools will improve their performance for example better grades and easier learning. PEOU is the degree of a person believing that use of digital tools will be free from effort for example simple navigation and minimal training. Focussing on the digital tool integration for OVC in marginalised communities of Bindura, TAM provides structured lens to assess socio-economic barriers, educator and learner perceptions and strategies for improving adoption.

Using this model during the research study helps the researcher to figure out if OVC and educators find digital learning is beneficial for learning and if they are aware of how digital learning can improve their educational outcomes. Hence if the PU is low, the adoption of digital tools is low as well. Moving on the model helps to find if the digital tools are available, user friendly to both learners and educators. If tools are too complex thus low PEOU leading to reluctance by OVC and the educators. External factors in TAM like lack of devices, unstable internet and electricity, cultural barriers and attitude towards use which arise due to financial constrains impact the actual usage of digital learning even if PU and PEOU are high, hence social workers must address such

challenges to facilitate digital learning. TAM enables interventions like training programs to improve digital literacy, demonstrating how digital tools improve learning and free devices and internet access which enhances PU and PEOU. The Technology Acceptance Model (TAM) improves PU and PEOU lead to higher adoption rates of digital learning by OVC and assess if digital learning correlates with better academic performance.

Application of TAM would identify why digital tools are underused among OVC in Bindura and how to improve adoption (training, infrastructure, policy support). The model will ensure a structured approach to diagnose current challenges, design targeted interventions and measure real-world impact of digital learning on education. This framework aligns directly with Biestek social work principles by advocating for equitable access and empowerment of marginalised children through technology.

However, the model oversimplifies technology acceptance factors as it focuses only on PU and PEOU not considering cultural, social and emotional factors. The model scope is also limited because it only emphasized more on user acceptance other than linking the use of technology and educational outcomes. Tam also overlooks issues related to digital divide particularly relevant in rural areas.

2.3 Literature Review

2.3.1 Legal Frameworks Supporting Educational Integration in education

Digital learning has become a global priority to enhance outcomes and prepare students for a future digital future. The UNESCO Digital Education Framework encourages inclusive and equitable access to digital learning resources and advocating for policies that support digital literacy and the integration of technology in educational settings (UNESCO,2021). This aligns with SDG 4 which aim to ensure inclusive and equitable quality education for all. The United Nations Convention on the Rights of the Child (UNCRC) emphasises on the right to education and access to information for every child. This advocates for the inclusion of marginalised groups highlighting the responsibility of government to provide equal access to educational resources like digital tools. Despite these global frameworks on digital tool integration in education, they pay a blind eye on the contextual relevance to specific populations like the OVC from marginalised areas. This is because these populations face unique challenges in accessing digital tools so there is need of

paying more attention to them in order to understand more about them. There is limited research on the specific experiences of OVC regarding digital tool access demanding further exploration examining availability and current usage of digital tools by OVC.

According to U.S Department of Education (2015) in North America region, the United States has implemented Every Student Succeeds Act (ESSA) which provides legal frameworks for integrating technology in education and emphasis the need for digital literacy and access to technology in schools. Moving on, Canada embraced technology through the Pan-Canadian Education Strategy which have initiatives for digital learning and integration of technology in classrooms, supported by provincial frameworks that promote digital literacy, Government of Canada, (2019). In Europe, Finland is seen as leader in digital education with robust frameworks supporting the integration of technology in schools. Finish National Agency for Education (2016) notes that Finland's National Core Curriculum includes digital competence as a key component of education. All these indicated that digital tool integration is crucial in education but paid a blind eye to the vulnerable groups. Ministry of Education of the People's Republic of China (2010) notes that China promotes development of smart classrooms and digital learning environments through its National Medium- and Long- Term Education Reform and Development Plan of 2010-2020 emphasising on integration of information technology in education. Regardless of these legal frameworks guiding digital tools regionally, developing countries in Africa face numerous challenges in accessing digital tools hence need for strictly enforcing those frameworks to ensure no one is left behind.

Education 5.0 in Zimbabwe promotes the integration of technology in education to enhance teaching and learning and emphasises on the need for innovation and digital literacy within the education system. The Zimbabwe National ICT Policy supports the use of technology in education to improve access to digital resources and infrastructure (Government of Zimbabwe,2020). Despite the existence of these effective frameworks, they are poorly implemented in rural areas and marginalised areas associated with OVC hence leaving them behind during the digital evolution. Moreso the Zimbabwean Curriculum Framework for Primary and Secondary Education (2015-2022) involve integrating ICT into curriculum to promote literacy among students to prepare them for modern workforce. This encourages schools to adopt digital tools to enhance learning experiences and improve educational outcomes (Ministry of Primary and Secondary Education,

2015). This curriculum endangers rural areas since they rarely access the so-called digital tools due to financial constraints. The Education Act mandates that every child have the right to equal education including access to digital learning resources though it remained consistent especially for the OVC in marginalised areas due to poor enforcement. Additionally, the Zimbabwe ICT Policy promotes the integration of technology in education aiming to enhance digital literacy among all student including the OVC. Reality shows that only those from A schools have access to these tools exploiting those from poor schools hence this study would come up with the recommendations to address the existing disparities in the digital era.

Additionally, the Zimbabwe National Orphan Care Policy (1999) outlines the government's commitment to protect the rights of OVC. However, implementation of these legal frameworks is weak argued Dr Chikasha that while policies exist, lack of enforcement and resource allocation undermines their effectiveness. Advocacy for stronger implementation of these frameworks is crucial to ensure that OVC receive the support they need to overcome socio-economic barriers. Addressing these challenges requires a comprehensive approach that includes targeted research, community engagement and advocacy for stronger legal protections and resource allocation facilitated by social workers.

Despite these extensive frameworks and policies, they lack enforcement and implementation and limited resources especially in developing countries. For instance, in Zimbabwe the legal framework plays a crucial role in shaping the educational landscape for OVC, however lacks practical implementation and reinforcement. A report by MoPSE (2022) highlighted a number of schools lack basic digital infrastructure and a gab in resources available to OVC and their peers, hence this disparity remain a barrier for OVC to access digital learning. This study would inform social workers to effectively advocate for the equal access to digital tools by the disadvantaged populations especially the OVC as well as collaborating with other stakeholders to be funded so they ensure that OVC are not left behind.

2.3.2 Conceptualisation of Digital Tool Integration in Education

Online learning platforms, Artificial Intelligence (AI) and Virtual reality (VR) enhances teaching and learning processes worldwide. COVID 19 pandemic necessitated a rapid shift to online learning acting as a catalyst for digital technology adoption especially in higher education where online management platforms largely replaced traditional campus settings (UNESCO,2023).

Countries like United States and Canda have high rates of digital tool adoption but many developing nations struggle with basic infrastructure and access to technology (Zhao et., 2022). Collaborative efforts among various organizations, ministries, family and community at large supports the digital learning environment improves access to educational resources according to Jones et al., (2021). Interactive technologies improve student engagement and achievement in countries like Singapore for its innovative educational practices notes (Hwang & Wu, 2019) and Kivunja, 2020). By so saying, digital tools improve the educational outcomes of students though those from disadvantaged communities are left behind due to digital divide. Hence this study will provide recommendations to address the existing gap were social workers advocate for equal treatment of everyone by digital tools regardless of class. A case by Hennessy et al. (2019) reveals that while some schools have adopted digital tools, access remains consistent especially in rural and marginalised areas. Preliminary assessments in Bindura indicates that even if some schools have access digital tools, previous assessments in Zimbabwe indicated that digital learning remains stark in rural schools and communities. A report by MoPSE (2022) highlighted a number of schools lack basic digital infrastructure and a gab in resources available to OVC and their peers, hence this disparity remain a barrier for OVC to access digital learning. This study is going to ensure equal access to digital tools advocated by social workers.

In the Asian region, China and South Korea rapidly adopt smart classroom technologies and Al-driven educational tools. These nations invest heavily in digital infrastructure to support innovative teaching methods (Xie et al, 2022). This highly improve their educational performance and their economic development was boosted because learners leave school fully equipped with the modern skills to work. This means that all countries should invest more in infrastructure development for the succession of digital tools. Germany and Netherlands focus on digital literacy and equitable access to technology through the European Union's Digital Education Action Plan aiming to enhance digital skills among educators and students, promoting inclusive education (European Commission, 2021). Everyone was able to access digital tools regardless of class, sex, ethnic group or social status due to the above-mentioned union. Learning Management Systems to facilitate both in-person and online instruction have been adopted by Canada, emphasising on flexible learning environments that cater to diverse student needs (Johnson et al, 2020). This improved the adoption of digital learning regionally and accessibility of digital tools by the disadvantaged populations.

However low-income countries lack reliable internet and access to devices influencing effectiveness of digital learning initiatives (Makaudze, 2021). Kumar & Kaur (2021) argued that acceptance of technology varies widely thereby some cultures deeply entrench traditional teaching leading to resistance to adopt new technologies. Despite this extensive research on digital tool integration, several gaps remain. Much of the existing literature focuses on developed nations hence they lack contexts in developing countries so there is need for contextual studies locally. Most studies provide short-term evaluations leaving behind the sustained effects of technology on learning. While many studies emphasize on teacher training, there is insufficient research on the specific types of professional development most effective in different educational contexts (Blomeyer, 2020). Though digital tool integration transform education, its success is highly context dependent as only countries which invested in infrastructure and training have better outcomes in terms of student engagement and achievement. Contrary regions with limited access to technology like Africa face challenges that impact the effective use of digital tools. Since digital learning continually evolve, there is need for a collaborative approach among stakeholders (educators, policy makers, technology developers and social workers) to ensure that digital tools are used effectively and equitably.

2.3.3 Opportunities Associated with Digital Learning for OVC

Digital tool integration has transformed numerous sectors particularly education, healthcare and business. Research by Cheung and Slavin (2013) shows that technology enhanced learning environments lead to higher levels of student motivation and participation. A case study by Mhlanga (2020) indicates that OVC who have access to digital tools tend to demonstrate increased interest in their studies and are more likely to participate actively in class discussions. Digital learning ensures personalised learning experiences allowing students to learn at their own pace and style based on their ability which led to improved educational outcomes. Moreso digital tools fosters innovation and economic growth. For instance, countries like Singapore have leveraged digital technologies to create smart classrooms that enhance student engagement and learning outcomes, (Tan et al, 2020). Digital Education Action Plan by the European Union aims to support member states in developing their digital education policies, thereby enhancing the skills of the workforce and promoting lifelong learning (European Commission, 2021). Also, the UNESCO (2020) mentioned that Digital Education Framework improve learning experiences, promote

inclusivity and provide access to quality education for marginalised groups especially OVC. However digital tools usually benefit those who invest more in digital infrastructure development at the same time leaving behind those from poor communities like the OVC hence need for this study to address the disparities.

Smith (2020), identified that teachers equipped with digital skills are more effective in integrating technology into their classrooms hence training programs must target them a lot to improve the engagement and learning outcomes of students'. Research by International Labour Organisation (ILO) 2021, indicates that digital literacy is increasingly becoming a requirement for many jobs in the modern economy. Hence, fostering digital skills among OVC significantly enhance their career prospects in their future life. However significant gaps remain, hence need for further research to quantify the effects of digital integration and developing targeted strategies that can improve educational outcomes for OVC. Moyo (2019), who argues that community organizations play a critical role in enhancing educational access by providing resources and support. Additionally strengthening legal frameworks and ensuring their effective enforcement is very crucial in facilitating access to digital education for all children particularly OVC from marginalised communities.

The ESSA provides a framework for integrating technology in education, emphasising the importance of digital literacy and access to technology (U.S. Department, 2015) in North America therefore increasing investment in educational technology resulting in enhanced learning environments. The African Union's Digital Transformation Strategy aims to harness digital technologies to drive economic growth and improve educational outcomes. Hence countries like Kenya made significant strides in utilizing digital tools for education through initiatives like M-PESA which transformed financial transactions and increased access to educational resources (Mas & Morawzynski, 2019). Correspondingly, Rwanda invested in digital infrastructure to support e-learning initiatives demonstrating the potential for digital tools to enhance educational access and quality (Rwanda Ministry of Education, 2020). This showed that digital tools are impactful not only to the educational outcomes but also for the economic growth.

In Zimbabwe, digital integration enhances education and economic development. Education Policy 5.0 promotes use of technology in education fostering innovation and improve teaching and learning outcomes (Government of Zimbabwe, 2020). Through the ICT policy there is improves

access to digital resources and infrastructure. This helps to build a better country through innovation and improves the future of the OVC since they have access to digital tools promoting skill development. Also, the Zimbabwean Curriculum Framework for primary and Secondary Education (2015-2022) promotes digital literacy among students to prepare them for the modern workforce. These initiatives highlight the potential for digital tools to enhance educational quality and accessibility in Zimbabwe. Hence this study is going to close the disparities in accessibility of digital tools. This study will also ensure that social workers are at the forefront in protecting the rights of OVC by ensuring they benefited as per their colleagues in digital tools.

However, there are limited researches to address unique needs of OVC and the barriers faced by OVC to access digital learning. In addition, support systems are overlooked in the literature such as the roles of social workers to facilitate accessibility of digital tools as well as resource provision to OVC is being ignored. For OVC to enjoy the use of digital tools in education as per their peers, there is need for a comprehensive approach with tailored interventions and support systems participation like social workers.

2.3.4 Challenges Faced by OVC to Access Digital Learning

Digital Tool Integration is affected by digital divide, a gap between the ones who are able to access technologies and those who cannot. World Bank (2021) notes that poverty, lack of parental support, unstable living conditions contribute to poor educational performance, combined by digital divide which affects marginalised groups. Approximately 3.7 billion people worldwide lack access to internet severely limiting their educational opportunities (International Telecommunication Union (ITU), 2020). This is worsened by geographic location, educational disparities and income inequality to mention but a few. Hohlfeld et al (2008), argues that research in United States indicates that students from low-income families have limited access to digital tools like computers and high-speed internet impacting their educational performance. Disparities in India rural areas in the use of digital tools in education is influenced by lack of infrastructure and resources, (Sangwan & Sharma, 2020). Therefore, this study will come up with recommendations to address such challenges and empower social workers to be more active in the lives of OVC.

The African Union's Digital Transformation Strategy aims to address the challenges affecting digital learning by promoting digital literacy and access to technology. Selwyn (2016), argues that

adequate infrastructure would lead to succession of digital learning in low resourced settings contrasting with Warschauer (2020), who uttered that infrastructure alone is not enough but also addressing social inequalities limiting capacity of the vulnerable population like OVC to benefit from digital tools. While mobile technology improved educational resources, many students still lack necessary devices and internet connectivity in Kenya (Mugo et al, 2019). Similarly, the European Commission (2021), reports that students form disadvantaged backgrounds are less likely to access digital resources impacting their academic success hence countries like Italy and Spain implemented initiatives to bridge the existing gap. This triggered this researcher so she identified the gap between the ideal and reality and would suggest strategies to address the mentioned challenges impacting succession of digital learning.

Locally in Zimbabwe many schools from rural areas lack required infrastructure and resources for digital learning worsened by absence of electricity and reliable internet connectivity hence limited use of digital tools in classrooms. MoPSE (2015), reports that financial constraints and inadequate teacher training impact the integration of digital tools in education since teachers lack the confidence and skills to effectively use the tools. In the annual budget of the country there should be a set apart amount to cater for the digital improvements to limit the mentioned challenges especially for the disadvantaged populations like the OVC.

For these challenges to be addressed, policy makers should prioritize investing in digital infrastructure and resources especially in remote rural areas. Partnerships amongst various stakeholders would also improve the implementation and adoption of digital tools in education because it creates a fully supportive environment for students and educators leading to improved outcomes.

2.3.5 Capacity Building for Both Educators and OVC

Effective capacity building is essential for improving educational outcomes for OVC who encounter various challenges to access digital learning (Maphosa & Maphosa, 2020). Despite this, existing programs implemented lack sustainability leading to short term impacts (Thompson & Williams, 2022). In Uganda rural they offer capacity building workshops providing immediate skills failing to establish ongoing support mechanisms for educators during the integration of digital tools. Lack of sustainability is caused by limited funding and resources among educators and OVC to effectively apply the new skills. These challenges are addressed by a collaborativee

approach among variouss stakeholders equipped with unique and evolving needs of OVC when it comes to digital tool integration. Social workers facilitate communication between educators, OVC and local organizations enhancing the support network for OVC. However, these capacity building efforts do not adequately incorporate social work principles disjoining the support for OVC. In Sout Africa social workers are frontliners in addressing the encountered challenges, their insights to the community and resource availability are invaluable. The existing gap call for a holistic training program that involve both academic and psychosocial dimensions.

2.3.6. Stakeholder Collaboration and Community Involvement

According to Kearney & Maher (2020) multifaceted approach is required for a successful digital tool integration among OVC in the education sector including educators, parents or guardians, community leaders and local organizations. However, this failed leading to poor ownership and sustainability of the initiatives. Families may not recognize the value of these tools in their everyday life, which leads to opposition and restricted utilization of digital efforts when the local community is not actively involved (Smith et al., 2021). Examples of productive partnerships include Finland's "Digital Schools" programs, which successfully include local companies, organizations, and parents and guardians in the educational process (Häkkinen, 2021). Nevertheless, there aren't many frameworks that describe how to involve stakeholders in the digital process in a methodical way. Here, social workers are viewed as the conduit that enhances communication and understanding between educational institutions and the populations they serve (Jones & Roberts, 2022). For example, in Sub Saharian Africa social workers in successfully mobilized community resources to support educational initiatives enhancing collaboration. However, this is not universally applicable as they overlook challenges faced by marginalised communities. Therefore, this study aims to address the existing gaps during the integration of digital tools in the education sector to foster community and stakeholder involvement. This not only enhance digital tool integration but also fosters a sense of community ownership and support for education among OVC.

2.3.6 Monitoring and Evaluation Strategies

Traditional monitoring and evaluation frameworks, according to Rughani et al. (2020), frequently ignore the contextual subtleties of social work, creating a gap between data gathering and practical implementations. In environments with limited resources, this is apparent. According to

researchers like Chen et al. (2022), digital tools improve data collecting and processing. However, there are regional differences in how technology is implemented. Developing strong monitoring and assessment techniques that are generally applicable in a variety of social work contexts can help address these

2.3.8 The Role of Social Workers in Digital Learning Especially for OVC

International Federation of Social Workers (IFSW) (2020), indicates that social workers promote social justice and ensure equal access to digital resources enhancing learning experiences of students particularly from the disadvantaged populations. Social workers are involved in programs that promote digital literacy among vulnerable populations particularly OVC in Europe. For instance, in UK they implement programs to teach digital skills to disadvantaged populations ensuring that children have necessary tools to withstand a digital learning environment in collaboration with the institutions (BASW, 2020). They are also involved in policy advocacy in Australia to support digital learning particularly for OVC, collaboration with educators creating inclusive digital learning environments catering for diverse needs (Australian Association of Social Workers, 2019). This study would therefore inform social workers on their duties during the implementation of digital tool integration in schools among OVC since they are the ones responsible for their welfare and protection.

In Zimbabwe social workers are advocates who ensures that students from disadvantaged backgrounds particularly the OVC have access to digital resources essential for their educational success. They are involved in community outreach programs promoting digital literacy among parents and students, providing training and resources to empower families to support their children's digital learning (MoPSE, 2015). Moreso, they collaborate with schools to identify those in need of support in navigating digital tools ensuring no child is left behind in the digital age. However, a number of studies ignore collaborative efforts and the interventions by social workers to assist and support OVC cope with digital learning as well as improving their educational outcomes.

3.4 Chapter Summary

This chapter synthesizes relevant literature on digital tool integration in education through the lens of the Technology Acceptancy Model (TAM). Furthermore, it highlights some literature and

successful case studies that illustrate the potential of digital tools to transform educational practices in similar contexts.

Chapter Three: Research Methodology

3.0 Introduction

The chapter outlines the study methodology utilized throughout the research, emphasising on qualitative methodology. This study focused on the following areas of methodology namely research philosophy, approach, design, study setting, target population, sampling techniques and sample size. Moreso, there is also data collection techniques and tools, research procedure, reliability/trustworthy of the study, data analysis as well as ethical considerations. More on the above-mentioned focus areas will be discussed as the chapter proceeds.

3.1 Research Philosophy

The interpretivist philosophy was adopted during this study, emphasising on the understanding of social phenomena from the perspectives of the participants according to Schwandt (2014). This philosophy posits that reality is socially constructed and researchers must understand the meaning of individuals' attitude to their experiences (Cresswell & Poth, 2017). This philosophy acknowledged the importance of context, meaning and individual interpretation in understanding educational experiences for orphans and vulnerable children. Through employment of this perspective, rich data was generated from the OVC, educators and social workers in vulnerable communities.

3.2 Research Approach

This study utilized the inductive research approach a qualitative methodology focussing on deriving theories and patterns from specific observations, insights and data. Inductive approach is particularly valuable in exploring complex phenomena through gathering of rich insights. Inductive approach is flexible and open ended since research questions can evolve as new insights might emerge allowing the researcher to adapt focus based on the findings of the study. Through fostering a deep understanding of participant's perspectives, the approach not only informed practice and policy but also paved the way for further research. In the context of this study the approach allowed for a nuanced exploration of how digital tools impact educational outcomes for OVC, ultimately contributing to meaningful interventions and improvements.

3.3 Research Design

Phenomenological research design was utilized by this study, focusing on study consciousness and the subjective experiences of individuals. It seeks to understand how people perceive and interpret their lived experiences, emphasising on the importance of context and meaning. Phenomenological research design ensured probing deep into participants' perspectives to capture rich and complexity of their lived experiences, Smith et al (2015).

3.4 Study Setting

This study was conducted in Mashonaland Central Province, Bindura rural district, area characterised by high levels of poverty, unemployment and limited access to services like education and healthcare as mentioned by Zimbabwe National Statistics Agency (2015). Many families struggle to meet basic needs in marginalised areas of Bindura, impacting educational opportunities for children especially OVC. Bindura rural district was chosen for this study project as a study setting because it far much behind in terms of integration of digital tools among OVC in the education sector.

3.5 Target Population

The target population for this study research comprised of the Orphans and Vulnerable Children (OVC), educators (teachers) and social workers from Bindura rural. Experiences and perspectives of these groups unpacked the integration of digital tools in education especially for OVC using a social work perspective. The primary target group of this study were the OVC making the educators the secondary target group since they directly work with the children in schools playing a critical role in facilitating integration of digital tools into classroom and creating a conducive learning environment. Furthermore, educators are the ones who can provide valuable information on the support they require to enhance their teaching practices and better serve OVC. Contacting social workers was of great importance since they are the ones who work directly with the OVC protecting their welfare, advocating for justice and equality.

3.6. Sampling Techniques and Sample Size

The primary sampling technique to this research study was purposive sampling, a qualitative research technique with a goal to gain comprehensive understanding of a specific phenomenon

(Palinkas et al., 2015). Purposive sampling allowed the researcher to focus on individuals who can provide rich, detailed information about the research topic, thereby enhancing the depth of qualitative data collected (Cresswell & Poth, 2018). Participants with specific knowledge and experience relevant to the research topic were selected to provide deeper insights useful to address research questions effectively. Few schools were selected from Bindura rural district to provide participants who are going to provide the needed information aligning with the research objectives. Moving on, convenience sampling for initial data collection was used particularly for educators and social workers who were readily available at school or at the department to avoid normal operation of the department or school.

For this study, a sample size of 10 participants was anticipated consisting 5 OVC from selected schools ensuring diversity to get unique insights from their experiences related to digital learning. Participants also involved 3 teachers from selected schools to represent the educators providing wide range of perspectives on digital learning and lastly 2 social workers sharing their role in the implementation of digital learning, identifying challenges faced by OVC and how they ensured that they met the needs of OVC. This sample size ensured that the study captures a comprehensive information on digital learning especially for OVC allowing in-depth exploration of participants' experiences.

3.7 Data Collection Techniques and Tools

3.7.1 In-depth interviews

In qualitative research, choice of data collection techniques and tools is vital to gather rich, detailed information to the research study. The study utilised in-depth interviews to capture different dimensions of the participants' experiences and perspectives, providing comprehensive understanding of digital learning. Interview guides were used to ask questions among OVC, educators and social workers. Cresswell & Poth (2018) notes that in-depth interviews are particularly effective in qualitative research as they enable participants to share their personal narratives and insights in their own words. Open-ended questions encouraged participants to elaborate on their thoughts and feelings thus flexibility of the tool. For example, the questions may include: "What challenges do you face in accessing digital education resources?" or "how do you think digital tools could improve your learning experience?". Some of the interviews were audio-recorded with participant's consent.

3.8 Research Procedure

1. Bindura University of Science Education approved the investigations of the study and the researcher sought permission from the Ministry of Public Service, Labour and Social Welfare under the Department of Social Development, Bindura district MoPSE to conduct research within their identified institutions with the institution approval letter, research tools and proposal.
2. Following the permission granted, the researcher recruited her participants using purposive and convenience sampling as per educators and key informants, explained the study purpose and convincing participants that their contribution is crucial encouraged them to participate build trust with them. Interested individuals were provided with consent forms outlining their rights and the study's objectives, ensuring that they fully understand their involvement (Cresswell 2014).
3. The next step after participant recruitment was data collection using in-depth interviews. Throughout the data collection process the researcher always reflected to the study topic and objectives so as to gather rich necessary information.
4. Thematic analysis was employed to analyse the study findings. It involves identifying and interpreting patterns within qualitative data, Braun & Clarke (2013). Here there was familiarising with data and data coding to come up with themes related to the research questions but derived from the objectives.
5. The research findings were disseminated to the relevant stakeholders including the University, MoPSE, DSD and policy makers in form of a report as feedback. This will help to address the identified gaps or areas of improvement in digital learning for OVC hence improving it.

3.9 Validity and Reliability/Trustworthiness

Establishing validity and reliability often referred to as trustworthiness is crucial to ensure if findings accurately reflect the participant's experiences and the phenomena being studied. This study employed several strategies to ensure validity and reliability of data including credibility, transferability, dependability and confirmability. The confidence in the truth of your findings (credibility) was enhanced by using more than one data collection method. According to Cresswell & Poth (2018), triangulating information from different sources improve the understanding of the research topic and helps to validate findings through cross-verification. Member checking strategy

was used to enhance credibility where participants were called after data analysis to review the findings and confirm if their perspectives have been well represented. This process not only validates the data but empowers participants by involving them in research process (Birt et al., 2016).

Moving on, transferability the extent to which the study findings can be applied to other populations was applied during the study. Lincoln & Guba (1985), highlighted that in qualitative research it is essential to provide rich, thick descriptions of the research context, participants and findings to enable readers to determine the applicability of the results to their own settings. This study provided a detailed descriptions of socio-economic conditions in Bindura rural, characteristics of OVC and educational landscape hence enhancing transferability to other settings. Inclusion of a diverse sample participants from different vulnerable communities in Bindura rural, helps to enhance external validity.

3.10 Data Analysis

Data analysis is a critical phase in research that involves data interpretation and making sense of the collected information from participants. This study utilized thematic analysis which is widely recognised for its flexibility and effectiveness in identifying patterns and themes within qualitative data (Braun & Clarke, 2013). Thematic analysis begins with data transcription, thus converting spoken language and non-verbal expressions to written text for analysis. Upon transcription of data, the researcher familiarized with the data thus reading and re-reading the transcripts to understand the content and context of the participants' responses. During this phase, the researcher took notes on initial impressions, recurring ideas the potential themes emerging from the data. The researcher then coded the data allowing themes to emerge from data rather than pre-existing categories (Cresswell, 2014). Once the themes are identified, thematic analysis to interpret the findings followed involving examination each theme in detail, exploring its significance to the research questions considering how it reflects to digital learning. Implication of the findings is be considered for social work practice particularly in identifying strategies to enhance digital learning for improved outcomes for OVC.

3.11 Limitations

This section will discuss on the potential limitations which might influence the outcomes, related to the methodology utilized during the research study since every research study have its limitations. These limitations may arise from factors like research design, participant selection, data collection methods and the study setting. Choice of research design significantly impacted the study's outcomes and interpretations since certain designs may not fully capture the complexity of the phenomenon being studied. For instance, qualitative studies while rich in detail, may lack generalizability (Creswell & Poth, 2018). This limitation restricted the applicability of findings to broader contexts. The potential for bias in study design also affected results. As noted by Johnson et al. (2020), poorly designed studies may lead to skewed results, impacting the reliability of conclusions drawn.

Sample size plays a crucial role in the research findings hence qualitative study make use of a limited sample size restricting generalizability of findings. This may also limit diverse of perspectives and experiences among OVC represented, affecting the study's comprehensiveness. Cresswell (2014) notes that qualitative research often focusses on in-depth exploration of specific cases rather than aiming for broad statistical representation. For this study, sample size is limited to only 10 participants which may not represent the entire population around Bindura rural (Creswell, 2018). Additionally, the research is going to focus on selected schools in Bindura district which may not generalize to other regions and district. Consequently, since the study aims to provide valuable insights, the findings may not be universally applicable to all OVC or educational settings in the region (Mason, 2015).

Moving on researcher bias can influence data collection, analysis and implementation. The researcher plays a critical role in shaping the research process and their perspectives. Relying on self-reported data from students, teachers, community leaders and social workers can lead to biases such as social desirability bias, where participants provide responses, they believe are more acceptable (Roberts, 2018). For instance, if the researcher strongly believes in the effectiveness of digital learning, this may lead to emphasising on positive during data analysis overshadowing critical challenges faced by participants.to mitigate this challenge, researcher must seek diverse perspectives during data analysis

Time constrains also pose limitation to the depth of data collection and analysis. According to Cresswell (2014), qualitative research requires extensive time for building rapport with participants, conducting interviews and analysing data thoroughly. Since the study is assigned to a short period of time, this might limit number of selected schools, participants, interviews to be conducted and duration of participant engagement. It will also affect follow-up processes for member checking essential in validation of data and ensuring that participants' concerns are fully represented.

To address the above encountered challenges, the researcher suggested that future studies use mixed methodology use conduct a pilot study before the research. To reduce bias the researcher suggested use of triangulation, blinded data collection and reflexivity in future studies. For time constraints, there is need to prioritise research questions and use efficient data collection methods. By implementing these solutions, researchers increase the validity and reliability of their findings.

3.12 Delimitations

This study is geographically confined to Bindura rural, limiting the generalizability of findings to other rural areas around Zimbabwe and beyond. Educational challenges faced by OVC in Bindura differ significantly from those in urban areas, where access to technology and educational resources is more readily available. Rural settings often experience unique infrastructural and socio-economic challenges that are not present in other regions. As such, the study's conclusions may not apply universally to all OVC around Zimbabwe or other countries with different developmental contexts (Chireshe et al., 2021). Future studies could consider expanding to include a broader range of rural settings to enhance the representatives of the findings.

Specifically, the research focused on OVC excluding other marginalized children who are also affected by educational disparities. As defined by the government and social work institutions, OVC face specific vulnerabilities including trauma from the loss of parents, lack of basic needs and heightened exposure to abuse and neglect (Munemo et al., 2020). However, there other vulnerable groups such as children with disabilities or those from economically disadvantaged families who experience barriers to education but are not part of the scope of this study. This narrows the potential of the study as it only captures a specific subset of vulnerable children not all who benefit from digital tool integration in educational settings.

This study delimits itself by focusing on digital tool integration as the primary intervention for improving educational outcomes for OVC. Digital tools encompass a wide range of technologies; however, the study did not cover all of them like highbred learning models or face to face interventions which are also effective in rural education (Chikumba, 2021). Furthermore, the research does not examine the long-term sustainability of digital tool interventions across different educational levels. Thus, the study's findings are specifically constrained to the role of digital tools and did not reflect the broader spectrum of interventions that enhance OVC educational outcomes.

This study is also delimited by time frame in which digital tools are implemented and assessed. It assumes that short term interventions can lead to measurable improvements in educational outcomes for OVC, but the long-term effects of such interventions are not within its scope. Previous studies highlighted the need for longitudinal research to better understand how digital tools affect educational outcomes over time (Chibaya et al., 2019). By focusing on a specific period of digital tool integration, the research does not capture potential changes in educational outcomes that unfold after years of sustained intervention. Therefore, the findings may only reflect short-term impacts and not provide a complete picture of the lasting effectiveness of digital tools for OVC in rural areas.

3.13 Ethical Considerations

When conducting research ethical considerations are very crucial, hence this study adhered to the following; informed consent, confidentiality, voluntary participation and parental or guardian consent.

3.13.1 Informed Consent

The researcher adhered to informed consent where participants received clear and comprehensive information about study's purpose, procedures and potential risks. This was obtained through signing of the consent form by participants prior to participation, ensuring that they understand what their involvement entails (Holloway & Galvin, 2016).

3.13.2 Confidentiality and Anonymity

Maintaining the confidentiality of participants was paramount. Personal information and identifiers were removed from transcripts and reports ensuring that participants' responses remain

anonymous. This means data was stored securely to prevent unauthorized access (Liampttong, 2016). Moreso, sensitive information will be ensured not to be disclosed.

3.13.3 Voluntary Participation

Participation in the study was entirely voluntary giving participants right to withdraw anytime they feel like without consequence. This principle is important especially for vulnerable groups as it ensures that participants do not feel forced to participate in the research (Cresswell & Poth, 2017). By adhering to this, the study aims to protects rights of participants.

3.13.4 Parental or Guardian Consent

For minors, the researcher obtained consent from their parents or guardians to protect the best interest of the child. In addition to guardian consent, researcher sought for child's agreement ensuring he/she understand his/her involvement in the research appropriate to their age and maturity.

3.14 Chapter Summary

The chapter provided a comprehensive overview of the study research methodology which was utilised. It explains the research philosophy, research approach, research design study setting, target population, sampling techniques and sample size, data collection techniques and tools, data analysis, reliability and validity of data as well as the feasibility of the study. Ethical considerations in research were highlighted to emphasize the importance of conducting research responsibly, particularly in vulnerable communities.

Chapter Four: Data Presentation, Analysis and Discussion of Findings

4.0 Introduction

In this chapter the researcher is going to present, analyse and discuss the findings of a research study titled 'Digital Tool Integration (DTI) programming on educational outcomes for Orphans and Vulnerable Children (OVC) Iin Bindura rural: Asocial work perspective. The chapter is going to be presented according the objectives of the study and the sub themes derived from objectives. In-depth interviews with the OVC students, educators and social workers were conducted to collect the data during this research study and the findings will be presented in thematic groups derived from the study's objectives. The study explored more on the following questions;

4.1 Demographic Characteristics of Participants

This section provides the biographical information of the research participants like gender, age and occupation. This is crucial in data presentation because it provides valuable insights to the population being studied informing development of interventions and contextualizing study findings. The study consisted of 10 participants in total comprising of 2 key informants, 3 educators and 5 OVC. Both stakeholders were from the Department of Social Development with experiences ranging from 4 years to 10 years making their insights crucial for this study, showing that these people know more about the organization and are experienced to give me in-depth information.

The 3 educators interviewed have a teaching experience ranging from 5 years to 12 years which helps the researcher to get authentic information from them. Throughout this research study, the researcher managed to speak to 5 OVC students from 3 different schools and classes giving the researcher diverse perspectives to understand developmental differences.

4.2 Current State and Use of Digital Tools and Their Impact on Educational Outcomes for OVC from Bindura Rural

On this objective, the researcher found out that most vulnerable children and educators from Bindura rural are not utilizing digital tools such as mobile phones, e-learning platforms, computers, offline digital content in their learning process though they are aware of a number of these tools. Quite a number indicated that they are not even aware on how to operate the tools despite their benefits in promoting inclusive and equitable education in rural and resource constrained areas. From the findings, social workers are informed to advocate for digital inclusion strategies for vulnerable children. From this objective, emanated their sub themes which are going to be discussed below.

4.2.1 Types of Digital Tools Utilized in Bindura Rural by OVC and Educators

The study finds out that vulnerable children from rural area hardly use digital tools in their learning process though some of them are aware of computers, tablets and smartphones due to limited accessibility. Additionally, educators also indicated that they are aware of online learning platforms like Google classroom and zoom and social media like WhatsApp and Facebook even though they hardly use them. Participants also reported that rural schools have poor infrastructure for digital learning but they are eager to move away with their traditional learning methods which are tiresome and boring putting more labour on educators. In support of the above insights, participants highlighted that;

OVC 4

> *"Handina kubvira ndamboshandisa tabhureti kana kombiyuta kunyange kumba kwedu kwacho hakutorina magetsi zvekutoti kunyangwe nguva yelockdown yakakonzerwa neCovid 19 apo vanhu vaikurudzirwa kudzidza pamhepo nemafoni handina kukwanisa kutodzidzawo zvakava izvo zvakakandideredza muzvidzidzo zvangu."*
>
> (I have never used neither a tablet nor a computer before. During covid 19 lockdown, l couldn't attend any online lesson as advised by the government because we don't have a phone or electricity at home affecting my total performance in education).

Educator 1

> "We usually teach using textbooks which are old enough on our daily bases because our school have no computers and access to internet. Of course, we are aware of online resources but we cannot afford them due to a number of reasons."

Key informant 2

> "Many families in Bindura rural struggle to afford basic food at home what more a smart phone, computer or data for a child. Digital education is a dream for most OVC in remote rural areas as they are already left behind before they even get a chance."

This reviewed that use of digital tools among educators and vulnerable children in Bindura rural is limited due to limited accessibility and poor infrastructure impacting the effectiveness of digital integration. This is in line with existing literature by Makaudze (2021) who states that low-income countries lack reliable internet and access to devices influencing effectiveness of digital learning initiatives as Bindura rural district struggles when it comes to digital learning. In addition, the study findings contrast with Article 28 of the UNCRC which grants the governments to ensure access to quality education for all children because vulnerable children from rural areas are left behind. This further impacted the Technology Acceptance Model (TAM) utilised by the study since Perceived Usefulness (PU) and Perceived Ease of Use (PEOU) remains low for OVC of Bindura rural district due to limited access to devices and poor connectivity to internet. Literature emphasizes on digital divide in rural areas Smith (2020), which is evident in limited access to digital tools like computers and poor infrastructure. Therefore, the researcher suggests that the government should invest more in infrastructure development and community engagement to have a supportive digital environment. Social workers should also ensure equal distribution of digital tools among rural schools remove the digital divide that exist.

4.2.2 Skill Development Related to Digital Literacy

The research found out there is a gap in digital literacy skills among OVC and educators in Bindura rural. A number of participants mentioned that they have little or no knowledge or experience of using digital tools since they lack exposure to digital tools and never received a formal training. This gap highly affects integration of digital tools in education to improve educational outcomes for OVC. Information provided shows that some schools with few devices lack competent educators to use them hence they are just piled in their offices. Educators admitted they were not

trained but they are encouraged to adopt to digital teaching which they cannot deliver to learners. This worsens the digital divide gap existing between rural and urban schools. Responding to the interview guide questions participants mentioned that;

OVC 1

> *"Ndakava nemukana wekushandisa tekinoreji pandakashanyira vatete vangu pazororo rekuvharwa kwezvikoro pakudzidza kwangu negugu zvikandibatsira zvokuti ndakabva ndashuva kuramba ndichishandisa kombiyuta nefoni nguva dzose."*
>
> (I was exposed to technology for the first time one other holiday I visited my aunt thus when l learned how to use google for educative information but l wish I had more practice with computers both at home and school).

Educator 2

> "Since a number of students are eager to learn new skills quickly, many struggle with limited exposure to technology"
>
> "The interest is there, especially among OVCs, but the infrastructure is simply not sufficient. We have no stable internet connection and frequent power cuts."

Key informant 2

> "Lack of digital infrastructure in Bindura rural affects consistent skill development"
>
> "The gap is huge. In urban areas, kids are learning programming. In rural Bindura, many OVCs have never used a mouse."

Despite the participants' desire for exposure to technology to gain more skills digital literacy skill and accessibility to devices remains a barrier. This is supported by Moyo (2019) who states that inadequate access to technology in rural areas affects skill development. This directly impacts the PEOU as the core components of TAM since both the educators and students from rural areas of Bindura lack digital literate skills. Therefore, the researcher suggests for enhanced access to technology in rural schools alongside training programs like workshops for educators and OVC to enhance their competence and confidence in using digital tools for the total improvement in educational outcomes. Social workers should facilitate in community engagement collaboration with local organizations and NGOs to provide necessary resources and training creating a

supportive environment. In addition, the study findings were in line with Jones et al., (2021) who argues that digital literacy is crucial for academic success and future employment thereby disadvantaging the vulnerable children from Bindura rural. To address the above-mentioned barriers there is need to enhance access to technology and digital literacy improving educational outcomes among vulnerable children ultimately increasing acceptance and effective use of digital tools as mentioned by the TAM framework.

4.2.3 Impact of Digital Tools on Academic Performance of OVC from Bindura Rural

The study indicated that digital tools improve the academic performance of OVC though they have limited access to them due to the remoteness of their area and financial constraints. Almost all participants showed interest to digital learning in order to improve their academic performance. Both educators and OVC students reported that if they have equal access to digital learning as their peers from urban areas they would have improved their learning engagement since they would have access to educational materials online which are current and authentic. Despite limited exposure to digital tools participants showed interest to use them for the improvement of their academic performance. Supporting the above ideas participants uttered that;

OVC 5

> *"Pandakashanyira sekuru vangu vanogara kuHarare pazororo rekuvharwa kwezvikoro ndakafara kushandisa kombiyuta, foni nezvimwewo zvakasiyana siyana kuita tsvakurudzo yedzidzo dzangu zvinova zvakaita kuti fundo yangu kuti ireruke uye inakidze. Ndaiva nemukana wekuterera zvimwe zvidzidzo zvainge zvakarekodhwa panguva yandinenge ndalkazorora uye ndisina zvakawanda zvandinenge ndiciita zvinova zvakawedzera pefonanzi yangu patemu yaitevera yacho. Izvi zvakandipawo shungu dzekuti ndifarire kushanyira sekuru vangu ivava pazororo rega rega."*
>
> (Every holiday I visited my uncle in Harare, I get a chance to access various digital tools like a computer, smart phone and many others to do my researches and studies making education easy and interesting for me. There l could repeat a lesson and listening to the provided audios anytime will be free and I feel like which boost my academic performance for the following school term to the extent that l wish to spend all my holidays in Harare.)

Educator 3

> "Some learners grasp concepts faster when using digital platforms where learning is visual and interactive especially those with learning difficulties but our school cannot sustain this due to limited access to digital tools and unstable connectivity"

Key informant 2

> "Children in town have access to online learning during their holidays whilst those in rural areas are busy loitering around waiting for the opening day. That existing digital gap is becoming an academic gap as well."

The research reviewed that digital learning significantly improves OVC students' performance academically. This is in line with UNESCO (2020) & Warschauer (2020) who argues that digital tools significantly enhance OVC students' academic performance by promoting learner engagement, individualized instruction, enhances understanding and access to diverse learning material. TAM supported by explaining that students exposed to digital tools showed interest and active participation to their studies though vulnerable children in Bindura rural have low PU to digital tools. However, to maximise this improvement there is need for improving internet access, provision of computers at schools and community centres by the government, NGOs or well-wishers support.in addition the findings of this study were supported by Mhlanga (2020) who states that OVC who have access to digital tools tend to demonstrate increased interest in their studies and are more likely to participate actively in class discussions. This is because digital learning ensures personalized learning experiences allowing students to learn at their own pace and style based on their ability which led to improved educational outcomes. Moreso digital tools fosters innovation and economic growth.

Moreso, educators should also be equipped with skills thus training them to effectively integrate the digital tools into their teaching to maximize benefits for students enhancing the PEOU, a component of TAM among them. The researcher went on to suggest that social workers should facilitate community support initiatives resource mobilisation, training, influencing policy change by cultivating a digital learning environment that bridges the digital divide gap between urban and rural schools. Ultimately technology acceptance is improved in rural areas at the same time increasing educational outcomes for OVC.

4.3 Challenges Faced by Educators and OVC in Accessing Digital Tools

Based on this objective, the researcher noticed that the practical implementation of digital learning remains a challenge among vulnerable children and educators from Bindura rural. Most of the participants mentioned that poor infrastructure, financial constraints, limited access to digital tools to mention but a few influence their access to digital learning. This theme would critically examine the challenges experienced by both OVC learners and educators from Bindura rural which further impact their digital learning. Insights from this study would inform policy makers and social workers not only about the digital divide but for them to advocate for social justice, equality and other violated human rights for vulnerable populations. From this main objective, emanated sub themes which are going to elaborate more on the barriers encountered in rural area to access digital learning.

4.3.1 Infrastructure Barriers

The study found out that Bindura rural is far much behind in the practical implementation of digital tool integration in learning due to various reasons. The most mentioned barrier to digital learning by participants was absence or poor infrastructure to support digital learning. By poor or inadequate infrastructure participants encompass of unstable internet connectivity, lack of digital devices, lack power supply all hindering equal access to digital learning by vulnerable children and educators in Bindura rural. These issues related to poor or inadequate infrastructure are the great foundation of digital divide in Bindura rural directly affecting the OVC and educators. Some participants mentioned that;

OVC 3

> *"Chero zvavo chikoro chine makombiyuta mashoma, hatisi kumashandisa anogara akavharirwa mumaofisi nekuda kwekuti hatina magetsi uye masayi sayi pachikoro. Zvakadaro zvikoro zvinofanira kutanga zvaisa magetsi nemasayi sayi kuti zvigokwanisa kushandisa tekinologi muchidzidza kwevana."*
>
> (Even though we have access to digital tools like computers, they are always locked up in the store room because we cannot use them due to power issues and poor connectivity surrounding our school. So, there is need to improve power and connectivity issues first for us to utilize the digital tools).

Key informant 1

> "Some schools in Bindura rural don't even have enough desks or textbooks, so digital tools are seen as luxurious items because they are struggling to meet the basic needs."

Despite the policies that promote ICT integration in education, the reality in Bindura rural remains stark. The research findings were in line with the arguments made by Selwyn (2010) that digital initiatives in low resourced settings often collapse due to inadequate infrastructure. Absence of infrastructure in Bindura rural entails a failure of the country to uphold its legal commitments according to the Zimbabwean Constitution of 2013 and the ICT Policy 2016 which supports equal digital learning. TAM supports these findings as it indicates that poor and lack of infrastructure negatively impact PU and PEOU of digital tools which affect their effectiveness to enhance OVC educational outcomes which is aligning with the study findings in Bindura rural.

Therefore, the researcher notes that technological interventions in rural areas like Bindura should be accompanied by infrastructure development for them to be a success. Implementation of solar energy systems in rural schools would provide sustainable solution to power shortages contributing to sustainability of overall educational facilities. Zimbabwe is supposed to borrow a leaf from China Ministry of Education (2010) which promote development of smart classrooms and digital learning environments through its National Medium- and Long- Term Education Reform and Development Plan of 2010-2020 with an emphasis on integration of information technology in education to enhance its digital learning. Social workers are also encouraged to be the voice of the voiceless (OVC), liaise with local organizations, faith-based organizations and NGOs seeking financial assistance for development in schools, donations of digital tools and as well advocating for the equal resource distribution by the government. Based on study findings, Selwyn (2016) argues that adequate infrastructure would lead to succession of digital learning in low resourced settings but Warschauer (2020) uttered that infrastructure alone is not enough but also addressing social inequalities limiting capacity of the vulnerable population like OVC to benefit from digital tools.

4.3.2 Attitudes towards digital learning by educators, OVC students, care givers and the community

The research finds out that despite poor or inadequate infrastructure barriers and socio-economic challenges faced by OVC and educators, rural people remain eager to be exposed to digital tools no matter what since they have heard of the benefits of digital tools. OVC students showed their curiosity and ambition to be exposed to digital learning since they believe that digital tools would make learning interesting and more engaging than traditional teaching. Educators in Bindura rural areas are supportive but cautious towards digital learning because they understand that it enhances teaching and learner engagement. Care givers, often guardians have mixed attitudes towards digital learning for OVC since some of them have no idea on the importance of digital literacy in future life of their children and some concerned about the negative influences associated with digital exposure. One of the OVC told the researcher that, her grandparents believe that smartphones disrupt students' education focusing on games or watching movies spoiling their academic performances. In Bindura rural communities there are some people who still see computers as being unnecessary relating to their old days that they studied without any use of digital tools. As per the above insights, participants mentioned that;

OVC 3

> *"Ndinonzwa kufara chose kunyanya paya patinombodzidziswa nemavhidhiyo zvinoita izvo kuti fundo ive nyore kunzwisisa uye ndine chishuwo chekuti dai tichitogara tichidzidza nenzira iyoyo zvinotibatsira kunzwisisa, kunakidzwa uye kuita kuti muzvidzidzo zvedu zvive nyore. Nokudaro ndinoshuva kuva ndichishandisa nzira iyoyi yekudzidza nguva dzose."*
>
> (I like it when we watch educative videos in class, making learning easier to understand and l wish l could be more exposed to digital learning to improve my academic performance as well as making it easy to look for a job and vis versa so I wish to know more about digital tools.)

Educator 1

> "Of course, digital tools are good, students understand faster when they see things visually but frustrating if there is no digital devices or power.

Key informant 2

> "Some households in Bindura rural still believe that technology is only for the rich people especially those living in towns."

The findings highlighted that digital literacy for OVC is regarded as a pathway for their academic success and future employment. Participants expressed that they are curious and eager to be exposed to digital tools following their potential benefits. This is supported by the Perceived Usefulness of the Technology Acceptance Model (TAM) which explains that use of digital tools will improve learning outcomes and performance as members are willing to adopt them. Educators value digital tools especially visual and interactive teaching though they lack training, infrastructure and support which limits their reliance on them. Since care givers have trust issues to expose of their children to digital tools the researcher suggests that social workers should first sensitize the community on digital literacy for trust-building. By so saying the researcher further notes that social work practitioners advocate for inclusive digital literacy programs, engage communities to clear the misconceptions fostering a supportive community around digital tools especially in rural areas of Bindura thereby enhancing technology acceptance.

4.3.3 Socio-economic Barriers

The findings brought out that OVC not only suffer from poor infrastructure and lack of training to access digital tools but also clash of basic survival needs and demands of modern digital education. Financial constraints, poverty and food insecurity makes it hard for care givers to provide digital devices, internet data and paying school fees therefore constraining OVC to digital learning. From the participants, socio-economic barriers either directly or indirectly affect digital learning for vulnerable children in Bindura rural. Educators showed that they are concerned about socio-economic deprivation of OVC from Bindura rural since their poorer families struggle neither to buy them an exercise book nor pay fees, what else digital tools. Though educators indicated that some learners are from supportive families who can afford buying computers, smartphones for their children even electrifying their home, they find it widening digital learning between students, reinforcing social and educational disparities hence they chose to continue by their traditional learning methods. Regarding the above findings, participants mentioned that;

OVC 1

"Nguva zhinji tinotomborara tisina kutodya chaiko saka zvinozorema kukumbira mubereki kuti anditengere foni, kombiyuta amditengere dhata rekushandisa pazvidzidzo zvedu ivo verikutonetsekana nekutiwanisa mabhesiki nidzi edu nekutobhadhara mari yechikoro yacho."

(Sometimes we sleep without eating, how can l ask for money to buy a smart phone, computer, buy data or even pay school fees.)

Key informant

"Those who are economically stable especially the ones living in town can afford online lessons other than in rural areas since getting a school uniform is even hard for them hence digital learning in rural areas is always seen as a dream."

This study illustrate that digital exclusion in rural areas is necessitated by poverty where people struggle to have their basic priorities hence digital learning becomes luxury to them. A number of OVC from Bindura rural are being raised by widowed parents, elderly and unemployed caregivers that further influence their educational needs and support to an extend that some of them come to school bare footed, even without exercise books, a pen or a satchel. This is in line with existing literature such as that by Smith (2020) stating that parental involvement and access to educational resources at home are crucial for student success but lack of support due to economic challenges keep the OVC struggling to succeed in a digital learning environment. Contrary to the study findings, UNESCO and Tonde & Chigora (2019) noted that economic inequalities are the root cause of digital divide in Sub-Saharan Africa. The study findings go against TAM as the challenges further influence participants' attitudes and participation. In addition, TAM framework also mentioned that economic constraints affect PU of digital tools as rural people considers digital learning luxury other than a necessity for their children's studies. Therefore, in response to these socio-economic challenges the researcher suggests that social workers facilitate the multi-sectoral interventions like food relief programs, child protection services, social grants and empowerment of rural people to improve family well-being and fostering positive attitudes towards digital learning. This would cultivate a supportive community when it comes to digital learning at the same time increasing technology acceptance and educational outcomes for OVC in rural settings of Bindura.

4.4 Strategies to Improve Digital Tool Integration in Education for OVC in Marginalized Areas

This study aims to come up with the strategies to be implemented to improve digital tool integration among OVC in rural areas in order to improve their educational outcomes. Participants have a chance to mention some of the strategies they hope they would benefit them with the assistance of the researcher. This theme is going to explore more on the suggested strategies by the participants.

4.4.1 Community Involvement and Support Mechanisms

In light with the challenges of poor family and community support among OVC for digital learning in Bindura rural, there is need for community involvement and any support mechanisms. Quite a number of participants indicated that it's wiser to introduce volunteer programs, parent and family engagement, local NGOs and community organizations for the succession of digital tool integration in Bindura rural. In line with this view, participants highlighted the following;

OVC 1

> *"Vana vanotambura kuno kumaruzevha vanofanirawo kuwana rubatsiro kubva kumacomiyuniti senders anenge achivadzidzisa kushandisa makombiyuta nezvimwewo pasina izvozvo kuno kumamisha ticharamba tichiita tekiniroji yeekurota kuhope."*
>
> (Vulnerable children here in rural areas would benefit a lot if there is a community centre that help us on how to use digital tools, besides that digital tools would always be our dream.)

Educator 3

> "Community involvement is very beneficial in the integration of digital tools in education as parents would then been eager to support their children's education yielding better outcomes."

Key informant 2

> "Community programs would bridge gaps in education especially in rural areas were resources are limited by enlightening the benefits of digital tools to the community members."

Regarding the above arguments, community involvement would enhance digital learning opportunities for OVC in Bindura rural. Local organizations and active family participation create supportive digital environment reducing some barriers in accessing technology. Various community organizations and NGOs would provide training, workshops and access to digital tools by community members thereby increasing the digital literacy level within a community supporting the study findings. Through parent and family engagement, OVC families would actively participate in their education support and needs as well as community initiatives. The study findings are supported by TAM as they improve PU AND PEOU through fostering local engagement and active family participation to reduce barriers to access technology in rural areas of Bindura. Findings contradict with Moyo (2019) who states that community organizations play a critical role in enhancing educational access by providing resources and support, since there are no local NGOs offering tutoring and access to technology among OVC's. Similarly, Smith (2020) mentioned that parents foster a positive learning environment which impact the educational outcomes for students as educators emphasizes on the parental engagement to support students' outcomes aligning with the study findings.

Despite cultural resistance to technology adoption by Kumar and Kaur (2021), Bindura rural communities totally embraced a different point as they are eager and ready for transformation and adopt new culture of using digital tools in learning as per the study findings. This is in line with the TAM principles saying that increased support and resources improves the acceptance and utilization is technology thereby improving educational outcomes for the disadvantaged children. Therefore, the researcher suggest that social workers enhance digital skills and confidence among

OVC and educators in collaboration with other government officials, local organizations, NGOs and well-wishers in underserved areas.

4.4.2 Improved Infrastructure, Training and Capacity Building

The study found out that for the succession of the integration of digital tools among OVC in Bindura rural, are a number of actions to be put in place. Participants suggested that there is need to improve infrastructure by improving digital access and internet connectivity in Bindura rural areas. Some suggested that training and capacity building amongst OVC and educators matters on digital literacy though they rarely have such programs in their remote communities. As per the above findings participants highlighted the following;

OVC 3

> *"Kana tikava nemukana wekushandisa makombiyuta kana mafoni nekuva nemasayi sayi akanaka pefomanzi yedu inowedzera nekuda kwekuti tinenge tavanemukana wekuita tsvakurudzo pamapuratifomu akawanda."*
>
> (If we are exposed to digital devices like computers or smart phones and better internet connectivity, our academic performance would greatly improve due to wide range of learning platforms and research platforms.)

Educator 2

> "Training of educators on how to use digital tools would ensure effective delivery of digital integration in education to students, improving their outcomes."

Regarding the above findings, Bindura rural has poor infrastructure for the successful implementation of digital tool integration. Through initiatives like workshops, peer mentoring and community centres enabling interventions like training programs to improve digital literacy. Digital tools improve learning and free devices and internet access PU and PEOU at the same time boosting the educational outcomes for vulnerable children from Bindura rural as indicated by the Technology Acceptance Model. This differs with literature from Smith (2020) who notes that teachers equipped with digital skills are more effective in integrating technology into their classrooms since these programs are a dream in Bindura rural. Hence, training programs must target teachers a lot to improve the engagement and learning outcomes of students. Since ESSP

2021-2025 believes that educator professional development is a priority in improving educational outcomes, lack of training programs in Bindura rural undermines this statement leaving OVC disadvantaged. Therefore, the researcher suggests that social workers advocate training programs, foster community awareness campaigns creating a conducive environment for digital learning in Bindura rural through partnerships, training and capacity building among OVC, educators and community members.

4.4.3 Multifaceted Approach and Community Awareness

This highlighted that for the succession of digital tool integration, there is need for collaborative approach among various organizations like government officials, local organisations, NGOs, local businesses, well-wishers, faith-based organisation, donors and most importantly social workers the key drivers and facilitators. Participants mentioned that they never had a chance to host a community awareness campaign that could have helped them understand more about digital tool integration as well as boosting their support. The researcher later concluded that the members in Bindura rural are eager and curious to digital learning regardless of a number of challenges they are encountering. In support of the above ideas, participants uttered the following;

Educator 4

> "My greatest wish is that the government in collaboration with other organisation raise awareness to the community through awareness campaigns that would help the parents understand the importance of digital tools to their children's learning."

Key informant 1

> "Community engagement and support is very important to the success of digital integration since there will be collaboration to the provision of resources to the OVC."

From the above insights it shows that there is a significant gap in governmental support to rural schools to accommodate then in the digital learning landscape since none of the participants mentioned that. Regardless of it all the people are still curious and have a great ambition to be exposed to digital tools and it's never too late for them. Collaborative efforts among various organizations, ministries, family and community at large supports the digital learning environment since it improves access to educational resources (Jones et al., 2021). This differs from the insights

found in Bindura as all the burden is left only to the schools, therefore the researcher suggests that social workers should be positioned as brokers among various organizations and ministries to facilitate collaboration and efforts to solve the problem at hand. Therefore, the researcher notes that social workers should advocate for policy changes to ensure collaboration and equal resource mobilization regarding digital learning for the OVC especially those from rural areas to avoid them being left behind. The researcher went on suggesting that the government, NGOs, well-wishers and faith-based organizations should help rural schools with donations for their infrastructure development (improved internet connectivity, access to devices, establishment of community computer laboratories with Wi-Fi). This would foster the culture of digitalization in the community aligning with Technology Acceptancy Model principles of improving user acceptance through adequate support and resources.

4.4.4 Role of Social Workers in Supporting Digital Learning and Policy Change

The research indicated that social workers in Bindura are relaxed when it comes to supporting digital tool integration for OVC since they are the ones who cater for their needs, protection and wellbeing as a vulnerable group in the community. Their roles are very limited when it comes to advocacy, capacity building, community integration and awareness campaigns around issues of digital learning in remote settings of Bindura rural. From their perspective of they consider their contribution to digital learning as a minor issue without any impact though it is contributing to a digital gap among rural and urban schools. Social workers are the ones who should advocate for policy changes regarding the integration of digital tools in education of OVC. In support of these insights, participants uttered that;

Educator 2

> "Social workers should be active when it comes to issues of OVC since they are their protectors so they can effectively enforce existing policies or even advocate for policy changes to have policies that are friendly to everyone regardless of their circumstances."

Key informant 2

> "Community programs can bridge gaps in education especially in rural areas where resources are limited."

From the above views, the study reviewed that social workers should be on the forefront of this whole digital tool integration among OVC from Bindura rural. They should assess and address the unique needs and challenges of vulnerable children in accessing digital tools. Educators also tasked social workers to engage with stakeholders advocating for policy changes, seeking for funding assistance and donations to the vulnerable children in Bindura rural so as to improve their educational outcomes. The training programs should be organized and facilitated by social workers uttered participants knowingly that they are the ones who understand the vulnerable groups in the community. Social workers should also mobilize the communities for awareness campaigns educating the members on the importance of digital literacy and education fostering a community that values digital learning for their children. These efforts of community mobilisation, awareness and training programs aligns with the TAM on the emphasis of user engagement which builds a supportive environment encouraging adoption of digital tools in the education of their vulnerable children in the rural settings of Bindura. These collaborative networks with local businesses, NGOs, government officials and community leaders would assist social workers to gather the support for OVC through provision of mentorship, tutoring and resources for digital learning. Social workers to borrow a leaf from countries like Italy and Spain which implemented initiatives to bridge the existing gap in digital learning ever since the European Commission (2021) reports that students form disadvantaged backgrounds are less likely to access digital resources impacting their academic success, suggests the researcher.

Furthermore, the researcher suggests that social workers should be actively engaging with policy makers advocating for increment of funding and resources and equal accessibility to digital tools together with other social service organizations to amplify their voices. Adding on, she notes that social workers increase the awareness and engagement with community members through workshops to educate people on the importance of digital skills fostering improved educational outcomes.

4.5 Chapter Summary

This chapter presented, interpreted, discussed and analyse the findings of the research study titled “digital tool integration programming and educational outcomes for OVC in Bindura rural; A social work perspective.” Thematic data analysis where by sub themes were derived from the main objectives was used to discuss and analyse the findings.

Chapter Five: Summary, Conclusions and Recommendations

5.1 Introduction

This chapter provides a comprehensive summary, drawing conclusions and recommendations based on the findings of the study. The chapter would also include the implications of the study in social work profession, policy, community and stakeholder partners. A model developed by the researcher based on the findings of the study is discussed here as well as the areas for future study.

5.2 Summary

5.2.1 Current State and Use of Digital Tools and Their Impact on Educational Outcomes for OVC from Bindura Rural

This study focused on the current state and use of digital tools and their impact on educational outcomes among OVC in Bindura rural district. Bindura is characterized by limited access to digital technology due to infrastructure challenges associated by inadequate internet connectivity and lack of devices. This resulted in limited access to digital learning among OVC in Bindura rural as they lack necessary resources to utilize. The study also highlights that there are rarely educational programs incorporating digital technology since there is limited funding and support in rural areas of Bindura. There is also poor community engagement to promote digital literacy in the education sector thereby impacting the educational outcomes for OVC residing in Bindura rural.

Though the research figured out that there is a link between educational performance (academic results) and digital tool integration, majority of Bindura rural schools are deprived from accessing digital resources. This further affect the potential skill development regarding these digital tools like critical thinking, problem solving among OVC studying in Bindura rural. With the absence of training, OVC never benefited from technological advancements though they have access to the digital tools since they lack familiarity with them.

To address the above-mentioned challenges, there should be improvement to invest more in infrastructure development (access to digital tools, better internet connectivity) and endorsing programs which fosters digital literacy among OVC, educators as well as community members. Collaborations between government, local organisations, NGOs and educational institutions

would be beneficial by crafting a supportive framework for integration of digital tools in education among OVC from Bindura rural at the same time enhancing their learning experiences and future opportunities.

5.2.2 Challenges Faced by Educators and OVC in Accessing Digital Tools

Challenges encountered by both OVC and educators in accessing digital tools was also a key area of this study as the study revealed that lack of infrastructure, lack of training among either OVC or educators and other socio-economic factors impacted the integration of digital tools in the education sector in the rural areas of Bindura.

Many schools from Bindura rural are poorly equipped with necessary resources like digital devices, reliable internet connectivity making it difficult for educators and learners to incorporate digital tools in their learning or teaching process. Usually, OVC are from economically disadvantaged backgrounds which further impact their digital learning in the sense of personalized digital devices for learning. Inequalities in educational attainment is an impact necessitated by digital divide which also limits exposure of OVC to modern educational resources. Both students and educators are restricted from contemporary learning practices using digital tools by the absence of technology.

Adding on, lack of training and support for both OVC and educators on how to use digital tools effectively is a challenge for digital education. Educators struggle to navigate use of digital tools to improve vulnerable children's learning process since they have poor digital literacy skills. Therefore, this discourages educators from exploring some teaching methods for the benefit of the OVC in Bindura rural. To address this there should be professional development programs to train educators so they are equipped with necessary skills for digital learning. There is also need for collaborating with the government officials, local organisations, NGOs, well-wishers and donors either regionally or internationally for sustainable solutions in fighting digital divide. Overcoming these challenges improves educational outcomes for OVC and empower them and educators to tirelessly thrive for the digital world breaking circles of misconceptions in rural areas of Bindura.

5.2.3 Strategies to Improve Digital Tool Integration in Education for OVC in Marginalized Areas

This study goes on to identify the strategies which are expected to improve the integration of digital tools among OVC in Bindura rural. These strategies not only address the problem at hand but fosters a sustainable environment for digital learning in rural areas. Infrastructure improvement would ensure reliable internet connectivity and better access to digital tools. This is achieved through partnerships with government officials, local organisations, NGOs investing in technological infrastructure. Establishment of community centres equipped with shared resources like computers and internet access where OVC can engage with digital learning is important in overcoming limitations caused by poverty in Bindura rural ultimately improving equal access to digital learning to vulnerable children.

The study highlighted that training through programs and professional development through workshops for educators and OVC is a significant solution to improve digital tool integration in rural areas of Bindura. This is for educators to develop necessary skills and confidence to use digital tools in their teaching practices. Incorporation of community engagement initiatives would further improve digital tool integration by fostering a culture of digital learning in rural communities of Bindura. This would involve collaboration between families, local leaders, local business men and community members improving digital learning. Through workshops and awareness campaigns access to digital learning would be improved through community conscientization which support community support on educational initiatives. Lastly the study suggests that there is also need to develop a culturally relevant and context specific digital content tailoring educational materials that reflect local languages, cultures and experiences to enhance engagement and motivation among students making learning more impactful.

Addressing the above-mentioned challenges of digital tool integration, OVC would be empowered and enabled to thrive more for the digital world breaking circles of digital divide and misconceptions surrounding Bindura rural.

5.3 Conclusions

This study yielded significant insights on the current state and use of digital tool integration in Bindura rural areas. It concluded that educational outcomes for OVC is influenced by lack of

access to digital tools in rural settings of Bindura, limited infrastructure and socio-economic barriers enlarging the digital divide between rural and urban schools. This divide further perpetuates existing inequalities faced by OVC residing in Bindura rural. Educators are not equipped with necessary skills and resources to effectively employ technological digital tools in classrooms. Together with, inadequate infrastructure contributed to limited capacity for educators to engage OVC meaningfully in digital learning. The study mentioned that professional development programs to empower educators with skills to navigate and integrate digital tools is very crucial.

Pertaining the mentioned challenges, strategies were suggested to improve digital tool integration in the education of OVC residing in the rural areas of Bindura. Infrastructure development would ensure reliable internet connectivity, access to digital tools and establishment of community centres where OVC can use digital tools free of charge. Moreover, educational digital material should resonate with local context cultures to engage all students. The research encourages collaborative efforts between stakeholders (government agencies, local organisations, NGOs, donors, well-wishers and the community) to yield better results in the integration of digital tools among vulnerable children in rural areas of Bindura. A holistic approach the study yielded, encompass of infrastructure development, training and community engagement being essential in bridging digital divide and improving educational outcomes for OVC from Bindura rural.

5.4 Implications for Social Work Practice

Findings of this study had significant implications on the social work practice. Social workers advocate for the improved access to digital tools among OVC from Bindura rural communities thereby enhancing their educational outcomes. They are also policy influencers to allow equal access to digital tools among OVC and securing funding for infrastructure development in rural communities of Bindura. The study enables social workers to facilitate collaboration and partnerships between government agencies, local organisations, NGOs, well-wishers, donors and the community creating community programs that provides OVC accessibility to digital tools at the same time addressing disparities in digital learning.

The study also encourages social workers to facilitate digital literacy programs among OVC and educators from Bindura rural to improve educational outcomes. The training would empower both the educators and OVC to effectively incorporate digital tools in their learning process which

improves engagement outcomes. The study ensures that social workers play a pivotal role to bridge the gap between traditional educational methods and modern technological advancements benefiting not only OVC but also position themselves as agents of change within the educational landscape.

This study ensures that social workers adopt a holistic approach in solving and facilitating the problem at hand considering socio-economic and cultural contexts of the served communities making sure the implemented educational programs reflect local values and experiences. Social workers foster community engagement and ensure that the initiatives tailored address the specific needs of OVC as well as enhancing the program effectiveness. This is aligning with Biestek's social work principles, respect for diversity and empowerment of vulnerable populations. The study highlighted that social workers ethically are advocates of equality so they ensure that in education and access to resources among OVC and their peers. In support of that, they advocate for policy changes to address existing disparities within the digitalization of education promoting equality. By so doing, the study highlights that social workers fulfil their ethical obligation to promote social justice and empowerment of vulnerable populations by challenging the challenges encountered by both OVC and educators in Bindura rural.

The study encourages future social workers to be equipped with necessary knowledge and skills to navigate integration of digital tools to better prepare themselves in supporting OVC from rural areas to access advanced educational opportunities. It also helped them to stay prepared to address evolving challenges within the community emanating from digitalization.

5.5 Recommendations

5.5.1 Policy/Programmatic Recommendations

The study would greatly influence existing policies leading to the development of new policies to address the challenges not currently addressed by the present policies. Policy makers will identify gaps in current policies and take appropriate steps to address them. This would also ensure policy enforcement by the government to ensure the succession of digital tool integration in the education among OVC within the rural areas of Bindura. The study will influence development of initiatives to raise awareness on digital tool integration and related issues hence, impacting greatly on policy and practice.

5.5.1.1 Develop and Implement a Digital literacy Curriculum

Curriculum should be specifically meant for OVC residing in rural areas and should be implemented across local schools and community centres focusing on essential skills like computer usage, internet navigation, online safety and digital communication. This would be a collaborative strategy between local NGOs, social work professionals, educational institutions and the government itself. This curriculum would aim to ensure that there is an increased number of OVC demonstrating improved digital skills within Bindura rural areas.

5.5.1.2 Foster Partnerships with Local Business for Resource Support

Partnerships with local business would support educational initiatives through resource provision, funding and mentorship opportunities among OVC from Bindura rural. There should be a forum, meeting or awareness campaign highlighting the benefits of investing in digital learning for vulnerable populations. Establishment of mentorship programs among OVC in Bindura rural will further improve skill development and awareness of career opportunities. Partners should also deliver mobile learning initiatives involving educational apps, e-books and interactive modules among OVC residing in Bindura rural. Social workers are encouraged to collaborate with the government, NGO, local organisations, well-wishers and donors to seek funding assistance or donations of digital tools for all local schools in Bindura rural to boost accessibility. By so doing there is going to be an increased number of OVC engaged in digital mobile learning leading to improved academic performance.

5.5.1.3 Establish a Monitoring and Evaluation Framework

Monitoring and evaluation would ensure the effectiveness of the programs implemented and assess digital tool integration impact on the educational outcomes for OVC. Collaboration between local NGOs, social work professionals and educational institutions is very crucial. Improved digital literacy, academic performance and student engagement are the key performance indicators for monitoring and evaluation for successful digital tool integration project. This should be done twice a year for easy tracking of progress.

5.5.1.4 Promote Community Awareness and Engagement

Community awareness should be organized and implemented by the local NGOs and the community leaders facilitated by social workers pertaining the benefits of digital learning among vulnerable children. They are crucial for the succession of digital tool integration in the education

sector among OVC staying in rural communities of Bindura. These campaigns would boost the curiosity and willingness to the rural residents to expose themselves to digital tools and also boost the community support over digital learning at their local schools. There is need to create a digital resource centre equipped with computers, internet access and educational software in Bindura rural to provide vulnerable children with access to educational materials, technology and training opportunities securing funding and resources from various stakeholders. Community members should satisfy if they are benefiting in terms of digital tool integration by the training and resources provided by the digital resource centre.

5.5.2 Stakeholders/ Partners-Based Recommendations

Following are the recommendations suggested by the researcher to various stakeholders as per the study topic. The stakeholders of this study include the government, NGOs, educational institutions, local leaders, social workers as well as the community at large.

5.5.2.1 Collaboration Between Local NGOs and Educational Institutions

There should be a strategic partnership between local NGOs and educational institutions designing and implementing programs to integrate digital tools in order to enhance educational outcomes for OVC from Bindura rural. The partnership should share a curriculum incorporating digital literacy and practical training skills ensuring accessibility, training to cater for the unique needs of vulnerable populations in rural areas of Bindura. For evaluations there should be educational workshops twice a year with a certain target of OVC attending.

5.5.2.2 Engagement of Local Government and Community Leaders

These parties play a crucial role in the integration of digital tools among OVC as per educational settings. They are there to discuss the benefits of incorporating technology in the education of their vulnerable children during community meetings. Leaders should advocate for fair resource mobilization and resource allocations to support digital infrastructure in schools and community centres. This would be an obvious success since there is a strong alliance between the government and community leaders further sustaining the educational support.

5.5.2.3 Partnership with Technology Companies

This would ensure provision of necessary resources and expertise in supporting OVC of Bindura rural in their education. It will necessitate negotiating of local NGOs with tech firms on donations

of devices, software and training for both educators and OVC. The partnership should ensure availability of devices and training sessions among the OVC and educators. Not only learning experience for OVC is enhanced but also foster a sense of corporate social responsibility among local businesses. Technology training programs for OVC and educators would increase their confidence in using digital tools in their teaching and learning classrooms. Also, collaboration with local organisations would encourage participation in activities supporting OVC through resource mobilization. This would provide financial support, sponsor educational programs and donate material and equipment for vulnerable children residing in Bindura rural areas. The partnership not only enhance educational landscape among OVC but also strengthen community ties and local economic development.

5.5.3 Community/Research Participants-Based Recommendations

5.5.3.1 Establish Community Learning Centres

These learning centres will consist of the OVC, local educators, social workers and community leaders meeting monthly to discuss and share educational content based on their experiences with digital tools. This would ensure collaborative actions within the community from various groups of people thereby improving integration of digital tools and boosting their confidents when it comes to digital skills and engagement among rural residents of Bindura.

5.5.3.2 Facilitate Community Awareness Campaigns

Community awareness campaigns would be ensuring that the community understand digital tool integration as well as its benefits so they might be curious and eager to be exposed to digital tools and support its accessibility to vulnerable children for their education in local schools of Bindura rural. They will be meetings and workshops where people share their insights based on digital tool integration in education, success stories of OVC if benefited from digital education, expected challenges and solutions and many more. The campaigns are beneficial since they give the community members a chance to bring out their ideas and ask questions where they need clarity which then boosts the supportive environment on the digital education for vulnerable children in rural areas of Bindura.

5.5.3.3 Conduct Community-Based Research on Educational Needs

This initiative should be launched to assess educational needs and challenges encountered by OVC in Bindura rural in accessing digital learning involving social workers, parents or guardians, educators and OVC. Qualitative and quantitative data will be gathered using surveys, interview guides and focus group discussions by either the social workers or research team. Findings would inform the areas which needs improvement as well as resource mobilization among rural and urban schools to avoid the digital divide existing.

5.5.3.4 Implement Feedback Mechanisms for Continuous Improvement

Implementation of feedback mechanisms for continuous improvement would unsure that educational programs and digital tool integration are effective in the education of vulnerable children from Bindura rural. Interactions between OVC, parents, educators and the community at large by the research team or social workers using surveys, questionnaires, interview guides and focus group discussions to gather insights pertaining their benefits and challenges encountered in trying to access digital tools is very crucial for feedback. The feedback will then be used for actionable improvements on the initiatives to improve digital tool integration in the education of vulnerable children of Bindura rural.

5.5.4 Social Work-Based Recommendations

According to the International Federation of Social Work (2014), social work is a practice-based profession and an academic discipline that promotes social change and development, social cohesion and the empowerment and liberation of people. Principles of social justice, human rights, collective responsibility and respect for diversities are central to social work. This study greatly impacts social work practice. Various social work methods like research, casework, community work and administration are critical to this study as they help in identifying the benefits and challenges encountered by educators and OVC in accessing digital learning, raising awareness to the community, advocating for rights of OVC and policy change. Social workers are vital in this study as they influence policy or strategy development improving accessibility to digital tools, advocating for funding, support and resources or investing more in infrastructure development in rural areas and collaborative work with other professionals to ensure success to digital tool integration in rural areas of Bindura. The study also tasked social workers to champion social

justice of the OVC in rural areas by developing strategies to address the limitations faced as an ethical consideration of social work.

5.5.4.1 Advocate for Policy Change to Support OVC

Social workers are policy advocates who can influence local policies impacting digital learning and welfare of OVC. They advocate for the inclusion of digital literacy programs in local schools' curriculum and securing funding for educational resources, through organizing advocacy meetings with local stakeholders briefing a policy. This would further result in the adoption of new policies which fight the existence of digital divide between rural and urban schools when it comes to digital learning. They should advocate for the policies stressing on the equal access of resources and digital tools among rural schools through collaboration among various stakeholders further ensuring equal distribution of resources and infrastructure development within rural schools in Bindura.

5.5.4.2 Provide Training for OVC on Digital Tools and Resources

Training sessions based on digital tool integration in the education sector should be organized and facilitated by social workers teaching OVC residing in rural areas how can they effectively use the digital tools in their education. This would involve the essential skills like online research, digital collaboration and use of educational platforms like google classroom. Further improvement in confidence when it comes to the utilization of digital tools for studying purposes for OVC from Bindura rural. Training would provide guidance on the usage of digital tools to enhance educational outcomes among OVC and provision of strategies to address their unique needs.

5.5.4.3 Establish Peer Support Networks

Social interaction, emotional support and collaborative learning would be promoted by social workers through these networks where regular meetings would be conducted on monthly basis. This would provide opportunities for both OVC and educators to build strong relationships with their fellow students from other schools which have access to digital learning thereby get a chance to interact with then and learn a few things. By so doing their digital literacy skills would improve and as time goes on, they became more reliant on the digital tools making the success of digital tool integration in the education of OVC withing the rural areas of Bindura.

Furthermore, social workers should implement programs offering resources, counselling and workshops in order to enhance digital tools engagement in education by OVC from Bindura rural. This would result in families playing a crucial role in improving and supporting children's educational activities.

5.5.4.4 Facilitate Community Resource Mapping / Needs Assessment

Social workers identify existing support services and resources available to OVC and their families through conducting community resource mapping involving collaboration with local NGOs, schools and community leaders. This would help the families and community members aware and utilize available resources and services. Needs assessment by OVC to understand challenges and experiences faced in accessing digital learning fostering equitable access to digital learning with their fellow peers from urban schools.

5.5.4.5 Monitoring and Evaluation

Social workers are responsible for monitoring and evaluation of the effectiveness of digital tool integration initiatives implemented in trying to enhance educational outcomes for OVC. This will involve tracking progress, success stories, identifying areas for improvement and drawing recommendations for program development and policy change. Monitoring of the implemented initiatives regarding digital learning will be conducted twice a year.

5.5.5 Model

Based on the study findings, the researcher developed a model named **Community Digital Empowerment Model (CDEM)**. The model aims to improve digital tool integration by OVC from rural areas, ensure equitable access to digital learning among OVC from rural and urban schools making sure there is no one left behind. The model developed by the researcher is explained below.

Components of the CDEM model

1. Digital Literacy Training

There should be regular workshops and meetings after every 6 months in rural areas so as to train the OVC and educators on how to integrate digital tools for their learning and teaching process further enhancing their educational outcomes. The workshops and meetings should be facilitated by social workers, skilled educators, skilled volunteers, local organisations and leaders.

2. Resource Accessibility

Social workers together with local leaders should conduct the needs assessment in the rural communities for them to ensure which resources are available and which ones are limited so that they see where to start assisting them when it comes to digital learning. This would ensure that activities are done chronologically making sure that for example they cannot first donate the digital tools to the rural areas with internet connectivity rather infrastructure development should come first for their effective use or donate digital tools to rural schools were no one is digitally literate hence training should come first.

3. Community Engagement

This would improve the community involvement in the digital learning of vulnerable children following their eagerness and curious to explore themselves using digital tools. Here OVC, parents/guardians and community members collaborate for the succession of educational projects supporting digital learning amongst vulnerable children residing in the rural areas of Bindura. Local organisations, community leaders together with social workers should organize the awareness campaigns championing for the importance of digital literacy and education among OVC so that the community is convinced enough to support the digital learning project being implemented by their local schools without complaining.

4. Monitoring and Evaluation

This monitoring is meant to ensure the continuous effectiveness of the **Community Digital Empowerment Model (CDEM)** within the rural communities when it comes to digital learning making necessary adjustments. There is need for the feedback mechanism where OVC, educators and community leaders and members would paste their concerns regarding digital tool integration. Through this, shows that there is active participation of the community members, leaders, educators and OVC in ensuring succession of digital learning through their voices. Annual reviews for the model by social workers, research team and stakeholders are crucial as it helps them identify the positive and negative impact of the model in trying to improve digital tool integration within the rural communities.

The above model is seen as an approach to address challenges faced by OVC from Bindura rural in accessing digital learning. Through focusing on digital literacy training, resource accessibility,

community engagement and monitoring and evaluation the model would ensure creation of a supportive and empowered community to ensure the succession of digital tool integration in the education of the OVC in rural areas.

5.6.6 Areas for Future Study

The areas for future study suggested by the researcher based on the issues that were not addressed by the current study.

5.5.6.1 Study Focus

The current study focused on the digital tool integration, programming on educational outcomes for OVC of Bindura rural. However, it leaves room for future study to extend their focus on analysing the existing policies and regulatory frameworks governing digital tool integration in education within the Zimbabwean context, briefing the ways in which they support or hinder the integration. Future studies could also focus on the role of community engagement in supporting digital initiatives examining the ways in which community members contribute to the success of digital integration.

5.5.6.2 Methodological Issues

Considering that the current study utilized the qualitative methodology, mixed methodology would be adopted for future studies to get rich data in understanding digital tool integration among OVC in the education sector. Participatory research is also a suggestion for future research methodologies as the information provided will be first-hand information as one will be conducting research within his/her field where he is aware of the current situations and areas that need attention.

5.5.6.3 Findings

Since the current study is mainly based on detailed descriptions, future studies would focus on both detailed descriptions and statistical data. It will be showing percentages of OVC having challenges in accessing digital learning as well as average cost for infrastructure development and devices provision. This would further broaden one's understanding of the phenomenon under study.

5.6 Chapter Summary

Following the comprehensive research findings, this chapter concludes the research study with some recommendations to various stakeholders. The recommendations include the potential implication on policy, application within the field of social work practice and the areas for future study.

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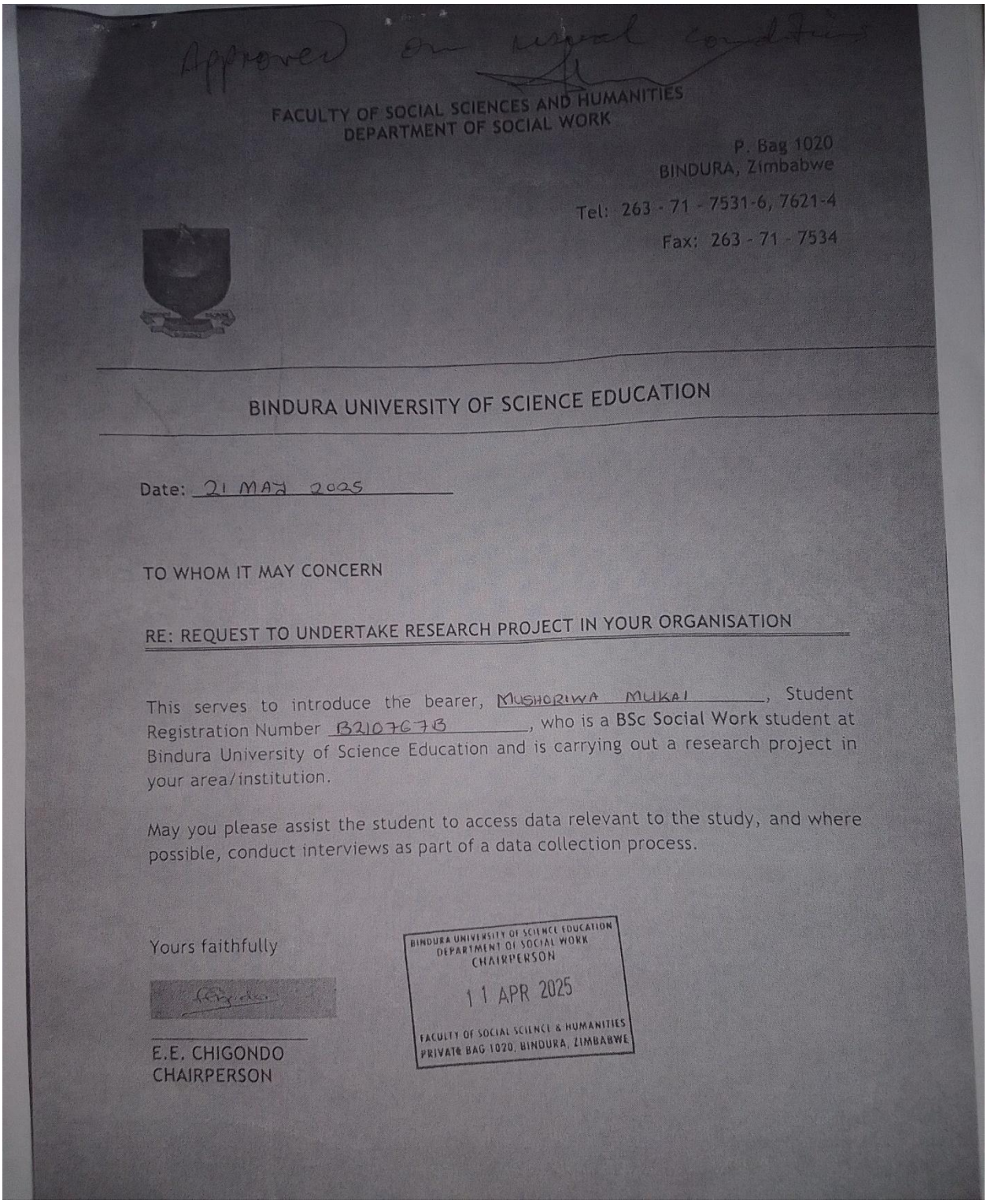
Appendices

Appendix 1: Request to conduct research



Approved on ethical conditions

FACULTY OF SOCIAL SCIENCES AND HUMANITIES
DEPARTMENT OF SOCIAL WORK

P. Bag 1020
BINDURA, Zimbabwe

Tel: 263 - 71 - 7531-6, 7621-4

Fax: 263 - 71 - 7534

BINDURA UNIVERSITY OF SCIENCE EDUCATION

Date: 21 MAY 2025

TO WHOM IT MAY CONCERN

RE: REQUEST TO UNDERTAKE RESEARCH PROJECT IN YOUR ORGANISATION

This serves to introduce the bearer, MUSHORIWA MUKAI, Student Registration Number B2107673, who is a BSc Social Work student at Bindura University of Science Education and is carrying out a research project in your area/institution.

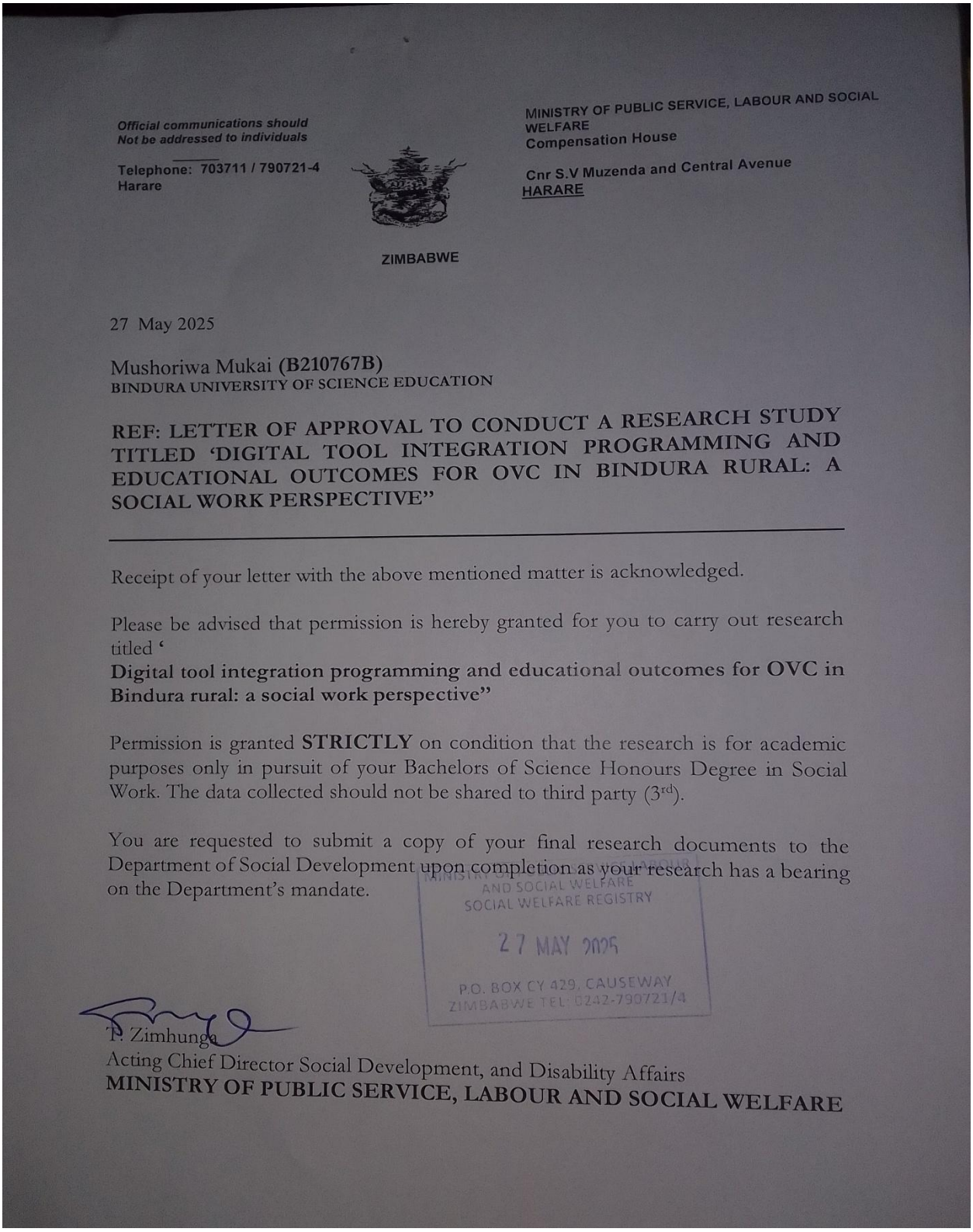
May you please assist the student to access data relevant to the study, and where possible, conduct interviews as part of a data collection process.

Yours faithfully

E.E. CHIGONDO
CHAIRPERSON

BINDURA UNIVERSITY OF SCIENCE EDUCATION
DEPARTMENT OF SOCIAL WORK
CHAIRPERSON
11 APR 2025
FACULTY OF SOCIAL SCIENCE & HUMANITIES
PRIVATE BAG 1020, BINDURA, ZIMBABWE

Appendix 2: Permission to conduct research



Official communications should Not be addressed to individuals

Telephone: 703711 / 790721-4
Harare

ZIMBABWE

MINISTRY OF PUBLIC SERVICE, LABOUR AND SOCIAL WELFARE
Compensation House

Cnr S.V Muzenda and Central Avenue
HARARE

27 May 2025

Mushoriwa Mukai **(B210767B)**
BINDURA UNIVERSITY OF SCIENCE EDUCATION

REF: LETTER OF APPROVAL TO CONDUCT A RESEARCH STUDY TITLED 'DIGITAL TOOL INTEGRATION PROGRAMMING AND EDUCATIONAL OUTCOMES FOR OVC IN BINDURA RURAL: A SOCIAL WORK PERSPECTIVE"

Receipt of your letter with the above mentioned matter is acknowledged.

Please be advised that permission is hereby granted for you to carry out research titled '
Digital tool integration programming and educational outcomes for OVC in Bindura rural: a social work perspective"

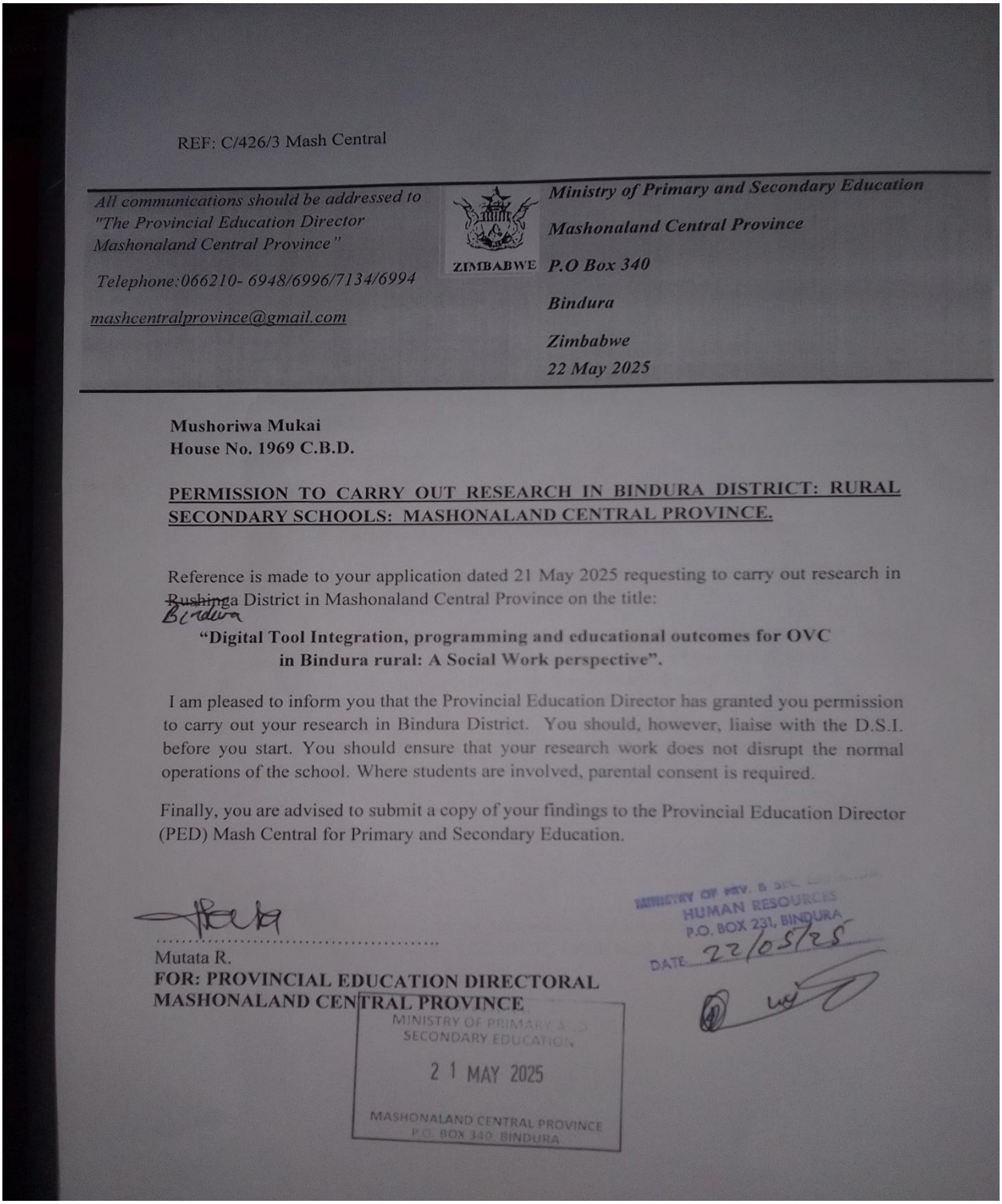
Permission is granted **STRICTLY** on condition that the research is for academic purposes only in pursuit of your Bachelors of Science Honours Degree in Social Work. The data collected should not be shared to third party (3rd).

You are requested to submit a copy of your final research documents to the Department of Social Development upon completion as your research has a bearing on the Department's mandate.

AND SOCIAL WELFARE
SOCIAL WELFARE REGISTRY
27 MAY 2025
P.O. BOX CY 429, CAUSEWAY
ZIMBABWE TEL: 0242-790721/4

T. Zimhunga
Acting Chief Director Social Development, and Disability Affairs
MINISTRY OF PUBLIC SERVICE, LABOUR AND SOCIAL WELFARE

Appendix 3: Permission to conduct research



REF: C/426/3 Mash Central

All communications should be addressed to "The Provincial Education Director Mashonaland Central Province"

Telephone:066210- 6948/6996/7134/6994

mashcentralprovince@gmail.com

ZIMBABWE

Ministry of Primary and Secondary Education

Mashonaland Central Province

P.O Box 340

Bindura

Zimbabwe

22 May 2025

Mushoriwa Mukai
House No. 1969 C.B.D.

PERMISSION TO CARRY OUT RESEARCH IN BINDURA DISTRICT: RURAL SECONDARY SCHOOLS: MASHONALAND CENTRAL PROVINCE.

Reference is made to your application dated 21 May 2025 requesting to carry out research in ~~Rushinga~~ Bindura District in Mashonaland Central Province on the title:

"Digital Tool Integration, programming and educational outcomes for OVC in Bindura rural: A Social Work perspective".

I am pleased to inform you that the Provincial Education Director has granted you permission to carry out your research in Bindura District. You should, however, liaise with the D.S.I. before you start. You should ensure that your research work does not disrupt the normal operations of the school. Where students are involved, parental consent is required.

Finally, you are advised to submit a copy of your findings to the Provincial Education Director (PED) Mash Central for Primary and Secondary Education.

.....

Mutata R.
FOR: PROVINCIAL EDUCATION DIRECTORAL
MASHONALAND CENTRAL PROVINCE

MINISTRY OF PRIMARY AND SECONDARY EDUCATION
21 MAY 2025
MASHONALAND CENTRAL PROVINCE
P.O. BOX 340, BINDURA

MINISTRY OF PRIM. & SEC. EDUCATION
HUMAN RESOURCES
P.O. BOX 231, BINDURA
DATE 22/05/25

Appendix 4: Interview guide for OVC

Greeting and introduction

Hello and thank you for taking your time to meet with me today. My name is ***Mukai Mushoriwa*** *student at BUSE, here to discuss with you about your experiences with digital learning. This interview aims to understand how children like you use digital tools for learning and hear any challenges faced which will help in identifying ways to improve educational resources and support for students in your community. Everything we discuss here will be kept confidential, your participation is voluntary and you may choose not to answer some questions you are not comfortable with. I encourage you to speak openly, share your thoughts and experiences freely. There are no right or wrong answers; just your personal experiences and opinions.*

General information

Participant's sex …… Participant's age …… Class ……

Interview questions

Section 1: Experience with digital tools and on learning

1. What types of digital tools (computers, tablets, smartphones etc.) are you aware of? Which ones of the above have you used for school?
2. How often do you used these tools?
3. Can you describe how you use these tools in your learning? Which subjects or activities you use them for?
4. Have you received any training on how to use these tools? If so, who provided the training?
5. How do you think digital tools affects your learning and school performance? Have you noticed any changes in your grades or understanding of subjects?
6. Do you think digital tools help you learn better compared to traditional methods (like reading books and classroom lectures)? Provide a reason for your answer.
7. What improvements would you suggest for using digital tools in your education?

Section 2: Access and support

9. Do you have easy access to digital tools either at home or school? Provide a reason for your answer.
10. What challenges do you face in accessing these tools?
11. Who helps you when you have trouble using digital tools and do you feel you get enough support?
12. How does your family feel about your use of digital tools for education?

Section 3: Challenges and barriers

13. What difficulties do you experience when trying to use digital tools for your studies, provide specific examples?
14. Are there any socio-economic factors (like money, internet access, availability of devices etc.) that make it hard for you to use digital tools?

Section 5: Future aspirations

15. How do you see digital tools helping you in your future education or career?
16. What skills do you hope to gain from using these tools?

Concluding question

17. Is there anything you would like to add or share about your experiences with digital tools in education?

Appendix 5: Interview guide for educators

Greeting and introduction

*Hello, and thank you for meeting with me today. My name is **MUKAI MUSHORIWA**, and l appreciate your willingness to participate in this interview. The purpose of this discussion is to explore your experiences and insights regarding integration of digital tools in education, particularly for OVC in your community. Your perspective is crucial in my research study. L assure you that your responses will be kept confidential and your participation is completely voluntary. Feel free to share openly, there are no right or wrong answers; just your valuable thoughts and experiences.*

General information

Participant's sex …… Participant's age …….... Experience at work ……

Interview questions

Section 1: Current use and experience with digital tools and impact on educational outcomes

1. What types of digital tools like computers, tablets are currently available at your school for OVC?
2. How frequently do you incorporate these tools into your teaching practices?
3. Which subjects or activities do you find most effective for using these tools? Provide a reason for your answer.
4. Do you receive training or support to effectively integrate digital tools? If so, who provided?
5. With your experience in teaching, how does the digital tools influence the educational outcomes for OVC?
6. Have you observed any measurable improvements in their performance
7. What indicators should be used to evaluate effectiveness of digital tool integration in education for OVC?

Section 2: Challenges and barriers

8. What challenges do you face in integrating digital tools to your curriculum for OVC, provide examples?
9. In your own opinion, what socio-economic factors hinder OVC from accessing digital learning resources?
10. How do issues of internet connectivity, device availability, digital literacy and others among students affect your teaching effectively?

Section 3: Support and resources

11. Which resources (e.g. funding, training, community support) are available to you and students to aid in the integration of digital tools?
12. How do you collaborate with families and the community to support OVC in accessing digital tools for education?

Section 5: Strategies for improvement

13. What strategies do you think could enhance the integration of digital tools in education for OVC in marginalized areas?
14. What role do you think could be played by educators and social workers in advocating for better access to digital tools for OVC?

Concluding question

15. Is there anything else you would like to add regarding the integration of digital tools in education for OVC?

Appendix 6: Key informants interview guide

Greeting and introduction

*Hello, and thank you for meeting with me today. My name is **MUKAI MUSHORIWA**, I truly appreciate your willingness to participate in this interview. The purpose of this discussion is to gather your insights and expertise on the integration of digital tools in education, particularly for orphan and vulnerable children in your community. As a key informant, your perspective in invaluable in understanding the current landscape, challenges and opportunities in the community. I assure you that your responses will be kept private and confidential and your participation is voluntary. Please feel free to share openly, there are no right or wrong answers but just your informed views and experiences.*

General information

Participant's sex …… Participant's age …….... Experience at work ……

Position at work …….. Organization ……

Interview questions

Section 1: Current state of digital tools and impact on educational outcomes

1. What types of digital tools are currently available to orphans and vulnerable children (OVC) in Bindura district?
2. How are these utilized in educational settings for OVC?
3. What challenges do educators face in the integrating these digital tools into teaching practices?
4. In your opinion, how does the integration of digital tools affect the educational outcomes of OVC?
5. What indicators or measures do you believe should be used to evaluate the success of digital tool integration?

6. Can you share any success or positive outcomes resulting from the use of digital tools among OVC?

Section 2: Socio-economic challenges

7. Which socio-economic factors hinder OVC and educators from accessing digital learning resources?
8. How do issues such as income, infrastructure, internet access, digital literacy impact the use of technology in education for OVC?

9. Can you provide examples of specific barriers faced by OVC in accessing digital tools?

Section 3: Strategies for improvement

10. What strategies do you think could improve the integration of digital tools in education for OVC in marginalized areas?
11. What role should be played by community organizations and government in supporting digital tool integration?
12. How can educators be better trained to utilize digital tools effectively in their teaching?

Concluding question

13. Is there anything else you would like to add regarding the integration of digital tools in education for OVC?

Appendix 7: Interview consent form

I am **MUKAI MUSHORIWA**, a fourth-year student at Bindura University of Science Education studying Honours Bachelor's Science Degree in Social Work. To fulfil the requirements of the degree, the student is to carry out a research project to which I am inviting you to participate in. The research title is, ***Digital Tool Integration (DTI) programming and educational outcomes for Orphans and Vulnerable Children (OVC) in Bindura rural: A Social Work Perspective.*** This research aims to assess the current state of digital tools among orphans and vulnerable children (OVC) in Bindura district evaluating their impact on educational outcomes, identify socio-economic challenges in accessing digital learning and develop strategies for improving digital tool integration. As a participant to this study, you are being asked to engage in an interview approximately for 30 minutes, focusing on your experiences with digital tools in education, challenges you face and suggested insights on improving educational outcomes for OVC in your community. You may choose to participate or withdraw at any time without any negative consequences because your participation is entirely voluntary. Collected information from this study will be kept confidential, only used for academic purposes and your name and identifying details to be excluded from reporting and publications. However, your cooperation and participation will be greatly appreciated.

I have read and understood the information provided above. Henceforth, l agrees to participate in this research study.

Participant's signature…….

Researcher's signature…….

Date…….

Appendix 8: Interview consent form for children's guardians

I am **MUKAI MUSHORIWA**, a fourth-year student at Bindura University of Science Education studying Honours Bachelor's Science Degree in Social Work. To fulfil the requirements of the degree, the student is to carry out a research project to which I am inviting you to participate in. The research title is, ***Digital Tool Integration (DTI) programming and educational outcomes for Orphans and Vulnerable Children (OVC) in Bindura rural: A Social Work Perspective.*** This research aims to assess the current state of digital tools among orphans and vulnerable children (OVC) in Bindura district, identify socio-economic challenges in accessing digital learning, develop strategies for improving digital tool integration and evaluate the impact of these tools on educational outcomes.

As a guardian, your child is being asked to participate in the above research so I am kindly asking for your permission to allow him/her participate. The child will be asked to engage in an interview approximately for 30 minutes discussing his/her experiences with digital learning, challenges faced and suggestions to improve educational outcomes for OVC in their community. Your child may choose to participate or withdraw at any time without any negative consequences because his/her participation is entirely voluntary. Collected information from this study will be kept confidential, only used for academic purposes and your child's name and identifying details to be excluded from reporting and publications. There are no risks associated with the research study. However, your consent will be greatly appreciated and your child's cooperation and participation may help develop better educational strategies for OVC in your community.

I have read and understood the information provided above. Henceforth, l give permission for my child to participate in this research study.

Guardian's signature……

Child's signature……

Researcher's signature…….

Date…….