

UNIVERSITY OF DAR ES SALAAM



MKWAWA UNIVERSITY COLLEGE OF EDUCATION
FACULTY OF EDUCATION



Proceedings of the 1st International Conference on Education
Theme: Contemporary Issues in Education: Linking Research
and Practice

13th – 14th January 2022

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Edited by

Daniel Sidney Fussy, Hassan Iddy Hassan, Jaquiline Amani Moshi, Orestes Silverius Kapinga, Oscar Joel Magava, Selina Thomas Mkimbili and Vincent Jalang'o Cosmas

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Preface

It is with deep satisfaction that I write this preface to the **Proceedings of the 1st International Conference on Education** held at Mkwawa University College of Education (MUCE), Iringa Municipality, on January 13-14, 2022. Iringa is the home to the rich history of the region and the Great Chief of the Hehe tribe. Amid pleasant surroundings and friendly weather, MUCE was a delightful place for the conference. Around 200 scientific participants had many fruitful discussions and exchanges that contributed to the success of the conference. Participants from different countries made the conference truly international in scope.

The conference provided a setting for discussing recent developments in a wide variety of topics including Implementation of the Universal and Compulsory Primary Educational Policies in Tanzania, 1967-2013; Competence-Based English Language Teaching; Gender Education; Leadership Practices; Retirement Planning among Academics; Co-operative Education and Training (CET) for Sustainable Agricultural Marketing; Inclusive Education; Career Preparation of Students with Disabilities; Inquiry-Based Teaching and Learning; Digital Technology in Instructional Practices; and Open and Distance Learning (ODL). The conference has been a good opportunity for participants coming from Tanzania and beyond to present and discuss topics in their respective research areas.

I would like to thank all the participants for their contributions to the Conference programme and for their contributions to these Conference Proceedings. Our special thanks go to our Keynote Speakers: Prof. Eustella Bhalalusesa from the University of Dar es Salaam, School of Education and Dr. Wilberforce Meena from HakiElimu. I also express our sincere thanks to Dr. Daniel Sidney Fussy and his conference organising team for their help in preparing this volume of conference proceedings. It is my pleasant duty to acknowledge the financial support from MUCE, Tanzania Education Network/Mtandao wa Elimu Tanzania (TEN/MET), UDSM-Sida Programme at the University of Dar es Salaam, and Iringa Water Supply and Sanitation Authority (IRUWASA).

All in all, the 1st International Conference on Education in Iringa was very successful. The plenary lectures and paper presentations bridged the gap among different areas of education, allowing for non-experts in a given area to gain insight into new areas. Also, included among the speakers were several young scientists, namely, doctoral students, who brought new perspectives to their fields. Given the rapidity with which science is advancing in all of the areas covered by the 1st International Conference on Education, these proceedings will furnish researchers around the world with an excellent reference book. I trust that it will stimulate further studies and research in all the explored areas.

I am looking forward to the 2nd International Conference on Education planned to take place in 2024 at the same location.

Orestes S. Kapinga
Dean, Faculty of Education

About the Editors

Daniel Sidney Fussy is a Senior Lecturer in the Department of Educational Foundations and Management, Faculty of Education – Mkwawa University College of Education (MUCE). Daniel holds a PhD in Education from the University of Glasgow in the United Kingdom. Daniel’s research interests focus on research culture and researcher development, learning development, comparative education and teacher professionalism. In one of his widely acclaimed papers, *Policy Directions for Promoting University Research in Tanzania*, Daniel argues for a bifurcation model of research and teaching universities as opposed to the pure research university model, given the current limited level of fiscal, physical and human resources in most Tanzanian universities.

Hassan Iddy Hassan is a Senior Lecturer in the Faculty of Education at Mkwawa University College of Education (MUCE), Iringa, Tanzania. He pursued B.Ed. Arts at the University of Dar es Salaam in Tanzania. Thereafter, he went on to read for an MSc in Education at the University of Edinburgh in the United Kingdom, and doctoral studies at the University of Newcastle in Australia. Hassan’s research interests focuses on gender and education, equity in education, indigenous education, Indigenous Standpoint Theory (IST), international and comparative education, primary and secondary education research, qualitative research methods, Sustainable Development Goals (SDGs), and the Education for All (EFA) agenda. He has a vast experience in research and has published widely in international referred journals. His scholarly works, including the one titled *Changing Perceptions of the Value of Girls’ Secondary Education among the Parents in Rural Tanzania*, have centred on the notion of education as a basic human right and ensuring that the most vulnerable people can access and participate in quality education.

Jaquiline Amani Moshi is a Senior Lecturer at Mkwawa University College of Education in the Department of Educational Psychology and Curriculum Studies. Her research interests include education and psychology. As an experienced researcher, she has published in reputable journals at national and international levels. She has been engaged in various projects. These include: *The Role of Home and Classroom Environment in Promoting Reading and Arithmetic Skills in Tanzania Primary Schools*, under the Tanzania Ministry of Education, Science and

Technology and GPE-LANES, *National Trainer on 3Rs among Primary School Teachers* under EQUIP-T, *Tusome Pamoja 2016-2018* under USAID, *Mwanzo Mzuri* under HDIF and HakiElimu, and *Girls' Retention and Transition Initiative (GRTI)*, *Accountability for Girls Education* under HakiElimu, Improved Quality of Education (EQEP) Project in Geita under Pestalozzi Children Foundation.

Orestes Silverius Kapinga holds a PhD in Special Education from Åbo Akademi University (ÅAU), Finland. He is a Lecturer in Educational Psychology and Special Needs Education at Mkwawa University College of Education with over 16 years of experience in the teaching profession. He teaches courses in educational psychology and special needs education. He has been involved in several consultancy and research activities including Promoting Reading and Arithmetic Skills among Standard I and II Pupils in Tanzanian Primary Schools and The Role of Home and Classroom Environment under the Ministry of Education, Science and Technology and GPE LANES, National Trainer on 3Rs among Primary School Teachers under EQUIP-T, Tusome Pamoja 2016-2018 under USAID, and Mwanzo Mzuri under HDIF and HakiElimu. Orestes' research interest is on special needs and inclusive education.

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Notes to Contributors

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Vincent Jalang'o Cosmas is a Lecturer in the Department of Educational Psychology and Curriculum Studies at Mkwawa University College of Education (MUCE), a Constituent College of the University of Dar es Salaam in Tanzania. He doctorates the Educational Challenges and Coping Strategies among students

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Editorial Introduction

Daniel Sidney Fussy, Hassan Iddy Hassan, Jaquiline Amani Moshi, Orestes Silverius Kapinga, Oscar Joel Magava, Selina Thomas Mkimbili and Vincent Jalang'o Cosmas

Education is a pertinent drive towards achieving economic and social development in every society worldwide. Universities globally have been entrusted with this noble activity to ensure that they champion the process of educating the citizens to progress in economic and social growth through research activities. With that awareness, the Faculty of Education at Mkwawa University College of Education (MUCE), organised its first International Conference on Education with the theme; *Contemporary Issues in Education: Linking Research and Practice* to bring various educational researchers from different geographical locations to share their research experiences to inform and influence educational practices for better improvements in education field. The conference had the following objectives:

- i. Fostering exchange of evidence-based research in contemporary educational issues;
- ii. Encouraging innovative educational research and raising awareness to the public about the current innovations in education; and
- iii. Promoting relationship between researcher and practice in educational studies for sustainable development.

The conference was held at Mkwawa University College of Education from 13th to 14th January, 2022. It covered four sub-themes: Educational Reforms for the 21st Century; Inclusive Education for Sustainable Development; Science, Mathematics, Engineering and Technology Education; and Teacher Education and Professional Development. The Conference was officiated by the Honourable Queen Cuthbert Sendiga, the Former Regional Commissioner for Iringa Region, Tanzania, and the Current Regional Commissioner for Rukwa Region. The officiation by the Guest of Honour was well decorated by the keynote addresses from two renowned educational scholars in and out of

Tanzania such as Professor Eustella Bhalalusesa – a Professor of Adult Education from the School of Education (SoED) at the University of Dar es Salaam, who spoke about *Inclusive Education in Tanzania* during the conference; and Dr. Wilberforce Meena – an Educational Activist from HakiElimu, a non-governmental organisation dealing with education in the country, who spoke about *Developing Research-Based Teacher Education* during the conference.

These Conference Proceedings are organised into two parts: Part I presents the officiating ceremony through welcoming addresses from the organising committee, MUCE leadership and the Guest of Honour. In the keynote address in particular, Dr. Meena focuses on *Teachers Pedagogical Thinking: Developing Research-Based Teacher Education*. He proposes shifting from Knowledge-Based Curriculum and Competence-Based Curriculum to Research-Based Teacher Education with a focus on developing student-teachers to pedagogical researchers and thinkers, who can use research-driven competence in making decisions. Hence, this will enhance preparation of teachers who can apply research to questions or understanding. Due to the situation that was out of the organising committee's control, we were not able to receive and thus include in this conference proceedings the final full-length version of the keynote address from Professor Eustella Bhalalusesa.

Part II of the Conference Proceedings contains papers organised into four sub-themes which made up the main conference theme. The first-sub theme is **Educational Reforms for the 21st Century**, containing seven papers:

Jaquiline Amani and Oscar Joel Magava write about the retirement planning among academics in higher education: A matter of health, lifestyle, or financial planning. The authors note that a very few academics save as part of their preparation towards retirement. In that case, they recommend for a need to assist employees to make informed retirement planning.

Vincent J. Cosmas focuses on personality traits and career preferences among secondary school students in Tanzania: A match within introvert-extrovert and agreeable-less-agreeable traits. The study reveals that computational skills occupations are the most popular across the traits. The paper recommends for establishment of proper occupational counselling and guidance services in secondary schools in Tanzania.

Lulu Simon Mahai turns readers towards motives and challenges for participating in Open and Distance Learning (ODL) in higher education in Tanzania: A case of rural women. A number of motives have been revealed; the key being the need to transform socio-economic wellbeing and status. However, the main challenge reported is the poor rural infrastructures.

Hassan Iddy Hassan delves into girls abuse in Tanzania rural secondary schools. Despite such abuse of power by male teachers, it is observed that male teachers remain shielded from the consequences of sexually assaulting young school-girls, a situation which impedes efforts aimed to promote the education of the girl-child. The study proposes community-based interventions for preventing the abuse of the girl-child in schools.

Odax Lawrence, Sotco Komba, John Iwata and Gratian Rwekaza present an evaluation of Co-operative Education and Training (CET) for sustainable agricultural marketing co-operative societies in Ukerewe and Sengerema Districts, Tanzania. The findings show that the evaluation of CET has some shortfalls including being seasonal and unsatisfactory. The authors call for the CET institutional action towards having a centralised curriculum for all cooperatives and review CET regularly to suit the societal needs.

Gervas A. Kawonga in his Swahili based paper reminds the readers about a new perspective on Kiswahili language and higher education in Tanzania. The call of this article is that the scope of the use of Kiswahili in higher education should be extended to other academic fields after it has been shown to be effective in Kiswahili disciplines. *Mtazamo Mpya kuhusu Lugha ya Kiswahili na Elimu ya Juu Nchini Tanzania*. Wito wa makala haya ni kwamba wigo wa matumizi ya Kiswahili kufundishia elimu ya juu upanuliwe katika nyuga zingine za kitaaluma baada ya kuonesha ufanisi katika taaluma za Kiswahili. Wito huu unatolewa kutokana na urazini thabiti kwamba Kiswahili bado hakitumiki kufundishia elimu ya sekondari.

Fokas Nchimbi also in his Swahili based paper highlights the dilemma for the use of Kiswahili in education in Tanzania. For many decades, many policy statements and texts have been issued on the position, development and use of Kiswahili in Tanzania, but they have failed to create a productive and enabling environment for the development of Kiswahili. *Ombwe la Sera ya Lugha: Mtanziko kwa Matumizi ya Kiswahili katika Elimu Tanzania*. Kwa miongo mingi, matamko ya kisiasa na

maandiko mengi yameshuhudiwa yakitolewa kuhusu nafasi, maendeleo na matumizi ya lugha ya Kiswahili nchini Tanzania lakini hayajaweza kujenga mazingira fanisi na wezeshi kwa maendeleo ya lugha ya Kiswahili. Makala hii inasisitiza kuwepo kwa sera mahsusi ya lugha katika taifa la Tanzania.

The second sub-theme is **Teacher Education and Professional Development**, containing four papers:

Daniel Sidney Fussy attempts to dispel misconceptions about the concept of vocation in teaching and to educate teachers about the humanistic aspect of teaching. Fussy argues that in order to accomplish a sense of vocation, it is crucial for teachers to find a purpose and meaning in their work, to be committed to achieving their professional goals, and to recognise their own contribution to the lives of others.

Fortunatha Mtesigwa and Philpo John draw on a qualitative research approach to explore how potentials of the Competence-Based Language Teaching (CBLT) approach were utilised by the English Language subject teachers in Tanzanian lower secondary schools. Their study reveals that most teachers apply traditional teaching methods that do not enhance critical thinking and problem solving skills. The authors call for improving teacher education curriculum at universities and tertiary colleges so that the teachers graduate with relevant and adequate competence-based language teaching approaches and skills.

Andrea Lazaro, Ezelina Kibonde and Loti Kambey account on instructors and students' understanding of the role of humour in teaching and learning English as a foreign language. This paper unveils that respondents had an understanding of humour and favoured its use in English Literature classes as a pedagogical tool to understand the course content and they developed English language skills. The study recommends that English Literature instructors should use humour in their teaching to motivate students during the teaching and learning processes.

Salvatory Mhando explores the practice of co-curricular activities in Tanzanian primary schools. The study reveals a positive perception regarding the implementation of co-curricular activities among teachers. The paper recommends that the government and education stakeholders need to practically

sensitise the practice of co-curricular activities and accord similar status with the core curricular.

The third sub-theme is **Inclusive Education for Sustainable Development**, containing three papers:

Alida Kauki and Gunvor Wilhelmsen argue that pupils with vision disturbances in Tanzania often have problems following the education and are often mistakenly seen as hyperactive, passive or having dyslexia. From this study, the most significant finding is that vision can be improved through structured vision exercises in schools. The study concludes that functional vision assessment of children prior school enrolment and of pupils struggling in school is important for establishing intensive adapted education for better learning.

Orestes Silverius Kapinga examines the implementation of inclusive education in the context of fee free education in Tanzania. The paper shows that the government has been supportive in the provision of education for students with special needs by employing teachers with relevant qualifications and supplying schools with necessary equipment. The paper argues for the need to communicate strategies, policies and plans to all education stakeholders for successful implementation of inclusive education.

Miriam Loivotoki Laiser explores the status of inclusive education for learners with Autism Spectrum Disorders (ASD) in the elementary schools of Tanzania. The findings reveal that Tanzania has signed and committed to complying with the international declarations on inclusive education and stated clearly in its constitution, education and training policy that all learners will receive education in the inclusive setting. The study recommends clear and specific policies and acts on inclusive education as well as curriculum modifications and capacity building to schools and teachers.

The fourth sub-theme is **Science, Technology, Engineering and Mathematics Education**, containing four papers:

Selina Thomas Mkimbili critically reviews the implementation of inquiry-based science teaching (IBST) in Sub-Saharan Africa. She found that the IBST was prescribed by curriculum documents but insufficiently practiced. The paper

recommends more research to explore potentials for IBST for schools with various contextual challenges.

Willy Kasuga and Wadrine Maro examine the influence of Problem-Based Learning (PBL) on students' motivation in learning Biology in Tanzanian schools. Their study reveals that the use of PBL significantly increases students' scores and motivation in terms of assessment activities. The study, therefore, recommends a continuous use of learner-centred approaches like PBL in learning Biology to increase students' motivation.

Aimable Sibomana, Claude Karegeya and John Sentongo explore the potency of the Cooperative Learning (CL) approach in enhancing day school students' retention of Organic Chemistry knowledge through intervention in Rwanda. The paper reports that students who were taught Organic Chemistry with the use of CL performed significantly higher than those who were taught the same subject with conventional teaching methods. The authors suggest that Chemistry educators should implement a CL approach to efficiently and effectively teach Organic Chemistry to promote conceptual learning that enhances students' retention.

Baraka Gaitan Luvanga catches the attention of the readers with his paper about Chemistry teachers' knowledge and perceptions on Inquiry-Based Learning (IBL) in Tanzania. His work reveals that IBL was perceived as participatory method as well as learning by doing. Among other things, the study concludes that Chemistry teachers have different perceptions towards IBL; hence different interpretations and implementations in the classroom.

With this editorial introduction, we welcome our avid readers to enjoy this Conference Proceedings, which contain papers with a mixture of taste from education disciplines. We wish you enjoyable reading!

PART I

OPENING REMARKS AND KEYNOTE ADDRESSES

The Opening Speech by Professor Esther W. Dungumaro, Principal of Mkwawa University College of Education (MUCE), during the First Faculty of Education International Conference on Education, Held at MUCE from 13th to 14th January 2022

Guest of Honour, Honourable Queen Cuthbert Sendinga,
the Regional Commissioner for Iringa; Deputy Principal – Academic, Research
and Consultancy, Mkwawa University College of Education,

Dr. Evaristo Haulle; Deputy Principal – Planning, Finance and Administration,
Mkwawa University College of Education,

Dr. Fikira Kimbokota; Co-organiser of this Conference,

Mr. Ochola Wayoga - National Coordinator, Tanzania Education
Network/Mtandao wa Elimu Tanzania (TEN/MET);

Dean, Faculty of Education, Mkwawa University College of Education,
Dr. Orestes Kapinga;

Keynote Speakers of the Conference, Professor Eustella Peter Bhalalusesa, and
Dr. Wilberforce Meena;

Deans, Coordinators and Heads of Department; Organising Committee;
Media Personnel; Conference Participants;

Ladies and Gentlemen.

Good Morning!

Guest of Honour,

I am happy and honoured to welcome you and other guests at Mkwawa University College of Education (MUCE) to celebrate the First International Conference on Education, which is hosted by MUCE through the Faculty of Education. Our great honour is to have you, Honourable Queen Cuthbert Sendiga, Regional Commissioner for Iringa as our Guest of Honour. Thank you for setting aside

the time within your very busy schedule to come to our institution to officiate this conference. We understand that this is a critical time that all Regional Commissioners have been directed by the President of the United Republic of Tanzania, Her Excellency Samia Suluhu Hassan, to submit a comprehensive report on the implementation of the global fund to fight against the COVID-19 crisis. Despite this huge responsibility, you have managed to attend this important event. We truly appreciate your dedication to this conference and acknowledge your presence.

Guest of Honour,

This is a great day for us, and we are thrilled to share it with you! We welcome you to Mkwawa University College of Education. This is the first conference on education hosted by MUCE. We are aware that you have visited MUCE a number of times for different occasions. However, your visitation today is a special one. The last time you visited us was during the launching of the Iringa investment guide, which was held on 31st January 2021. During that time, we were still constructing tarmac roads within the campus and Chemistry laboratory. It is my pleasure to inform you that the construction of tarmac roads and the laboratory, which can take 240 students at a time, are completed. I am also happy to inform you that the College is expanding the Biology laboratory that will accommodate 240 students at a time compared to the existing capacity of accommodating 160 students.

I am delighted to inform you that MUCE is one of the public higher learning institutions benefiting from the Higher Education for Economic Transformation (HEET) project. The College will receive 8,000,000 USD to strengthen the learning environment and labour market orientation of programmes in priority disciplines. Through this project, among other things, we will be able to construct a multimedia and special needs education building, construct a Physics laboratory, supply ICT equipment, installation of Fibber optic to the existing buildings, and supply laboratory and research equipment and equipment for students with special needs.

I take this opportunity to convey our appreciation to the Government of the United Republic of Tanzania, particularly the Ministry of Education, Science and Technology, for the financial support and guidance to implement the HEET

project and construct Chemistry and Biology laboratories. We also thank the government for constructing tarmac roads within the campus.

Guest of Honour,

The Faculty of Education is the foundation for the establishment and existence of MUCE. It provides our students with a solid foundation in education to teach other subjects smoothly and efficiently. The Faculty of Education hosts a total of 2,841 students in different degree programmes, of which 1,202 are females, and 1,639 are males. Of the 2,841 students, 1,513 (53.2%) are enrolled in the science education programmes. The enrolment in science education programmes has been increasing due to the dedicated implementation of the MUCE Rolling Strategic Plan (RSP) 2014/2015-2019/2020, which was geared to respond to an increased demand for science teachers in secondary schools. Furthermore, the RSP responded to the Government emphasis on science education that promotes the development of science, technology, and innovation in the country.

Apart from teaching, the Faculty serves the public through different interventions. For example, in January 2019, the Faculty trained teachers from six secondary schools owned by the Evangelical Lutheran Church of Tanzania (ELCT), Diocese of Iringa. The training focused on the role of teachers in teaching and learning, school administration and construction of quality classrooms. In addition, as part of capacity building, in the same year, the Faculty has provided technical support on literacy and numeracy to primary school teachers, tutors and educational officers in Kigoma and Katavi regions sponsored by the Education Quality Improvement Programme (EQUIP-T).

Similarly, the Faculty implemented the *Mwanzo Mzuri Project* that aimed at improving the quality of teaching, learning and access to education for Tanzanian children. The intervention involved 40 kindergarten school teachers from 10 primary schools with their pre-primary classes in three districts in Tanzania, namely Iramba, Kilosa and Mpwapwa. The project was funded by UKAid through Human Development Innovation Fund and implemented in collaboration with MUCE, HakiElimu and VIA University College, Denmark. The project involved different stakeholders, including President's Office – Regional Administration and Local Government (PO-RALGs), Ministry of Education, Science and Technology), head teachers and parents.

I am very grateful for the efforts made by the staff members in the Faculty of Education to make all these achievements possible. I appreciate their time to innovate new ideas and secure grants to implement these projects. Dear Guest of Honour, alongside the same line, I sincerely appreciate the contribution of other faculties to the growth of our institution. The academic members in these faculties also work hard for this institution, just that their achievements have no chance to be pronounced on this occasion. Nevertheless, we will honour their contributions to the events planned in their faculties.

Guest of Honour,

Let me draw you back to our Conference on Education. This conference has drawn attendance from broad fields of education, including early childhood education, educational reforms, inclusive education, and teacher education and professional development. We have received a total of 30 abstracts from universities within and outside the country, including Rwanda and the United Kingdom.

We have a great line-up of keynote speakers, including Prof. Eustella Bhalalusesa who is a Professor of Adult Education from the School of Education, University of Dar es Salaam. Professor Bhalalusesa has a vast experience in education and has published widely on distance education, inclusive education and gender education. She has also served as the Commissioner for Education at the Ministry of Education, Science and Technology. She has supervised a good number of Masters and PhD students including some members of academic staff at MUCE. We also have Dr. Wilberforce Meena from HakiElimu. Dr. Meena has a vast experience as a College Tutor, Lecturer, and Curriculum Developer. He has been involved in various innovative research projects including Integrated Post-Primary Education (IPPE), School Readiness Programme (SRP), and Action Learning Approach for Pre-primary Teacher Professional Development. Both Keynote Speakers have outstanding records in education. This conference is an excellent opportunity for participants to meet with these great Keynote Speakers, share their views on subjects within the field of education, create a networking opportunity, share technical information, and build relationships.

Guest of Honour,

The Conference is a multi-disciplinary event. It has brought together researchers, teacher educators, innovators, curriculum developers, educational practitioners and other stakeholders. The conference covers five sub-themes:

- i. Inclusive Education for Sustainable Development
- ii. Educational Reforms for the 21st Century
- iii. Science, Mathematics, Engineering and Technology Education
- iv. Teacher Education and Professional Development
- v. Early Childhood Education

The advantage of such a wide variety of presentations is that, participants can learn about new ideas and opportunities and build new friendships. To all presenters, attendance at this conference will provide a chance to sound off your ideas. It will also provide you with feedback that can be used to benchmark your work. More importantly, the conference will give you the opportunity to publish your papers.

Guest of Honour,

I wish to thank the sponsors and all collaborators in this event for their valuable contribution to the success of this event. These include Tanzania Education Network/Mtandao wa Elimu Tanzania (TEN/MET), UDSM Sida, HakiElimu and IRUWASA. We sincerely appreciate their support in this conference. It is also our hope that we can count on their sponsorship and collaborations on future occasions. As researchers, we will continue to provide technical and professional support to societies and industries.

Let me also extend my sincere gratitude to the Dean Faculty of Education and the Organising Committee of this conference. It is difficult to mention each individual, but the College recognises and appreciates the effort of every individual who has worked tirelessly to ensure that this event is realised.

Guest of Honour,

Before I welcome you to officiate this event, let me use this opportunity to remind all participants about COVID-19. The disease is real and has costed the lives of our family members, friends and leaders. So let us all follow the directives as suggested by medical practitioners. But, more importantly, we are advised to get the vaccination. Mkwawa Health Centre offers vaccination for COVID-19. So

please, while you are here, I encourage you to visit our health centre and get vaccinated. This is the only way to prevent the disease's severe impact, including death.

Invited Guests, Distinguished Participants, Ladies and Gentlemen;

With these few remarks, I take this opportunity to welcome the Guest of Honour to address this gathering and grace our conference.

Welcome, Madam.

The Speech by the Guest of Honour, Honourable Queen Cuthbert Sendiga, the Former Regional Commissioner for Iringa, and the Current Regional Commissioner for Rukwa Region, during the Faculty of Education First International Conference in Education held at Mkwawa University College of Education (MUCE) from 13th to 14th January 2022

Principal of Mkwawa University College of Education, Professor Esther W. Dungumaro;

Keynote Speakers, Professor Eustella Peter Bhalalusesa, and Dr. Wilberforce Meena;

Deputy Principal – Academic, Research and Consultancy, Dr. Evaristo Haulle;

Deputy Principal – Planning, Finance and Administration, Dr. Fikira Kimbokota;

Dean, Faculty of Education, Dr. Orestes Kapinga;

Deans from other Faculties, Coordinators and Heads of Department;

Dear Presenters and Participants of this Conference;
Ladies and Gentlemen.

Good Morning!

At the outset, let me express my sincere appreciation for the honour I have been given as the Guest of Honour of this First International Conference in Education hosted by the Faculty of Education. It is my pleasure to visit MUCE and have the opportunity to speak with this gathering. I am so happy to see that MUCE has accomplished the construction of the Chemistry laboratory and tarmac roads. MUCE has a very clean and attractive environment. It has a good infrastructure for learning and sports grounds for students and visitors to exercise. Now, tarmac roads and a new Chemistry laboratory make MUCE look more beautiful. Congratulations on these achievements!

I am also very happy to see that the College is continuing with the expansion of the Biology laboratory. The construction of this building will help to reduce student congestion in small rooms during practical sessions; henceforth,

improving the results of the scientific investigations. It is great news to hear that you will receive funds through the HEET project to construct newer buildings, procure various equipment for improving the learning environment. I join you to thank the Government of the United Republic of Tanzania, led by the Excellency President Samia Suluhu Hassan, for the financial support to accomplish MUCE goals and plans.

Ladies and Gentlemen,

Now, allow me to join the previous speakers, Prof. Esther W. Dungumaro and Dr. Orestes Kapinga, to welcome all of you to this important gathering. The task of academicians in this country is very important in raising awareness of various issues and providing a solution to problems faced by the nation. I take this opportunity to thank and congratulate MUCE and the Faculty of Education specifically for organising this conference for the first time to enable researchers to present and share their ideas to each other and stay connected to others in their field of research and learn about the cutting-edge scholarship. I am pleased to hear that this event has drawn attendance from various institutions both public and private within and outside the country. Therefore, I am very pleased to join you in this wonderful event.

Ladies and Gentlemen,

The conference will allow us to show the progress we have made in improving the quality of education but at the same time highlight the issues that jeopardise the delivery of education to Tanzanian children. For example, concerning inclusive education, we all know that in the previous years most children with disabilities in Tanzania did not get a chance to get a good education because the community and parents viewed children with disabilities as unable to learn and they were rarely encouraged to go to school. Sometimes, they were even hidden away by their families. The problem was influenced by the lack of knowledge and skills to manage the teaching and learning of the children with special educational needs in our schools. The government made some efforts to address this programme. First, the schools were made possible to accommodate all children regardless of their physical, intellectual, social or other condition within their environment. Second, teachers, quality assurers, district education officers and ward education coordinators were trained to manage the teaching and learning of the children with special educational needs. Furthermore, the Government has created awareness regarding inclusive education to parents and the community

through various interventions. Despite these achievements, the Government is aware that inclusive education still faces some challenges. One of them is a lack of infrastructure for students with disabilities in schools. In many public schools, school environment is physically inaccessible. The government has also started to address this problem by re-innovating the infrastructure of the existing schools. All new schools and other education centres are built with the infrastructure that accommodates students with special needs. In this aspect, MUCE is one of the key higher education institutions in Tanzania that offers and exercises inclusive education.

Ladies and Gentlemen,

The Government initiatives to improve the quality of education in Tanzanian schools are also revealed in early childhood education. Tanzania is a developing country. Most parents are unable to enrol their children in schools. To increase enrolment and access to education, the Government of Tanzania made primary education compulsory and free. A major challenge in the provision of quality education, especially in pre-primary schools is the lack of resources and inadequate physical infrastructure. Furthermore, most teachers still use the traditional teaching styles that emphasise more literacy and numeracy skills and less on learning through play and discovery. Some initiatives have started to address this problem. Training on how to teach have been given to in-service teachers to enhance their teaching skills. Regarding this initiative, I take this chance to acknowledge MUCE in collaboration with VIA University (Denmark) and HAKIELIMU for coming up with the *Mwanzo Mzuri project*, which as Prof. Esther W. Dungumaro said, aimed at improving the quality of teaching and learning environment and access to education for Tanzanian children. The project helped in-service teachers by providing teaching styles that encourage the use of play and games in learning.

Ladies and Gentlemen,

The Government through the Tanzania Institute of Education has started to address the shortage of appropriate teaching resources. The major function of the Institute is to design, develop, test, review and revise curricular at the pre-school, primary, secondary and teacher training levels. I take this opportunity to urge private sectors and international organs to support the government in addressing the challenges in education. Discrepancies in education are easily dealt with through concerted efforts by all stakeholders.

Ladies and Gentlemen,

My role is to officiate this conference. I do not want to overwhelm you with a long speech or pre-empt the discussion that will follow the opening ceremony. I believe that this two-day forum will provide a platform for the participants to share their experiences and the results of their work. You will agree with me that most higher learning institutions in Tanzania are lagging in hosting international conferences. Instead, we spend hugely in sending our researchers abroad to attend conferences. Scholars in Tanzania and Africa in general mostly work in isolation and seem to possess limited exposure. The level of collaboration in research is very limited that leads to uncoordinated research, duplication of efforts and low efficiency and effectiveness.

Additionally, it is noticeable that a number of research findings are published in peer-reviewed journals. However, the dissemination of the published works through conferences and other platforms is notably meagre since the accessibility of those published articles is too expensive to many scholars and universities.

I am very confident that this conference will fill those existing gaps by bringing together researchers, academia, and innovators to share experiences in education for sustainable developments. The conference, as I have already said, will further create a regular and affordable platform for networking between participants from across the globe. This will strengthen education and research partnership.

Once again, I would like to congratulate you on this remarkable effort. I also want to thank sponsors who have willingly supported this event. The support rendered to MUCE by those stakeholders shows that MUCE has a motivated leadership working hard to improve the provision of quality education in Tanzania. I thank the organisers and the College Management for inviting me to officiate this commemorative occasion. It is my expectation that participants will find the occasion useful and contribute to the discussions to be followed.

Before I conclude, let me join the Principal, Professor Esther W. Dungumaro to remind you about COVID-19. Take all precautions throughout this conference. Stay safe and get vaccinated. We will all pass this moment by following the directives emphasised by medical practitioners.

Ladies and Gentlemen,

With these few remarks, it is now my pleasure to declare that the *First International Conference in Education* bearing the theme of *Contemporary Issues in Education: Linking Research and Practices* is officially opened and wish you all a successful commemoration.

Thank you for the opportunity to speak to this distinguished audience!

KEYNOTE ADDRESS

Teachers as Pedagogical Thinkers: Sketching a Road for Research-Based Teacher Education in Tanzania

Wilberforce E Meena
HakiElimu

1.0 Introduction

Teachers are constantly making decisions in their work. Pedagogical thinking is a teacher's professional thinking, which is related to decision making process in educational contexts particularly in supporting students' learning. What describes teacher pedagogical thinking is the ability to justify the decisions based on the prevailing evidences. Within this perspective, teacher education has focused in educating student and practicing teachers to become reflective practitioners who can be considered as pedagogically thinking teachers (Krokfors et al., 2006). It is widely acknowledged that reflection is a prerequisite for in-depth understanding of teaching and for furthering teachers' professional development (Aaltonen, 2013). The aim to educate teachers to be able to conceptualise each phenomenon in their own work in support of learning has attracted much interest in Tanzania. Since early 2000s we have noted continuous discussion in teacher education which has focused on promoting the approach of preparing student and practicing teachers to be able to adopt inquiry or reflective stance in their work. In the school system, reflection is emphasised during teaching and learning process. It was termed as paradigm shift as teachers become facilitators of learning compared to knowledge givers.

However, not much has been achieved in Tanzania struggle for educating student and practicing teachers who can be characterised as pedagogically thinking teachers. In teacher education, student teachers are prepared as technicians or pedagogical clerks, who are incapable of making important decisions about their own work. They are rarely educated to make evidence-based decisions in their work. Although practicing teachers are expected to be reflective practitioners in the actual teaching and learning process, they are still struggling on how they can apply reflection in their daily work. A teacher's pedagogical expertise is realised in his/her pedagogical thinking (Aaltonen, 2013). However, for more than two

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decades now teacher's guide for various subjects provide guidance on how teachers can reflect on their work but it has never produced the desired results. Teachers' lessons reflections are often focused on 'how' the teaching is organised and 'what' can be done differently. In fact, it is more of the lesson evaluation which mostly deals with student ability in answering questions asked at the end of lessons.

To prepare teachers who are capable of supporting students to cope with the demand of 21st century, teacher education programmes should adapt curriculum approaches that promote student and practicing teachers to become knowledge makers. Curriculum for teacher education can be organised in various approaches. In Tanzania, three approaches are common, namely discipline-based, practice-based and competence-based. In discipline-based or knowledge-based curriculum emphasis is on subject knowledge and the skills of delivering. The structure is often linear and associated with educational disciplines and the subject disciplines of the school curriculum (Cheng, 2001). This approach has been part of Tanzania teacher education especially university-based teacher education where teaching is focused on transmitting facts to student teachers.

In 2002, the practice-based curriculum was used in educating primary school teachers as an attempt to address the high demand of teachers in primary education. Two-tier programme was introduced, which covers one year of theoretical preparation at teachers' college, and one year of practical preparation at schools. However, the Tanzanian two-tier system was criticised for producing underqualified teachers because emphasis was placed on assessment compared to teachers learning. It was abolished and followed by introduction of competence-based curriculum in college-based teacher education. In this curriculum, the focus is to enable student-teachers to master the knowledge, skills, abilities and attitude needed for the teaching profession (Viebahn, 2003). Again, like other curriculum approaches, implementation of competence-based curriculum is not supporting student teachers to become reflective practitioners. In order to address these challenges, we proposed teacher education to adapt research-based curriculum. In this article, I present dimensions of how reflective practice, inquiry stance and pedagogical thinking can be developed through research-based teacher education.

2.0 Research-Based Teacher Education

As mentioned, teacher education in Tanzania is facing a challenge in educating student teachers as pedagogical thinkers. The research-based education approach establishes the development of student teachers' pedagogical thinking processes as its primary educational goal (Ion et al., 2014). The aim is to develop teachers who have the capacity to use research and research-derived competences in their on-going teaching and decision-making. The goal also presupposes a general understanding of research methods, as well as a positive attitude towards research (Odunaiya, 2016; Westbury et al., 2005). However, the focus is not to prepare professional researchers, but rather to enable student teachers to develop competences of applying what they have learned, observing their pupils, and analysing their thinking.

The dimensions of research-based teacher education are indicated in Table 1, where teaching is concern with pedagogical decisions while research, implies inquiry into one's own work as a teacher.

Table 1: Levels of Research-Based Education

Level	Teaching	Researching
General level	<ul style="list-style-type: none"> • metacognition • reflection • pedagogical thinking 	<ul style="list-style-type: none"> • producing • expertise
Basic level	<ul style="list-style-type: none"> • everyday thinking • skills-based teaching • teaching recipes, routines, tips 	<ul style="list-style-type: none"> • adaptation • consuming • knowledge-based
Making Pedagogical decisions Inquiring one's own work Research-Based Teacher Education		

In basic level, the focus here is usually on the acquisition of the practical skills and fundamental knowledge that cover the whole instructional process, and a variety of subject matter pedagogical content knowledge courses. General level aims at the sustained development in teacher's work; it refers to reflection, thinking, discussion, and other research-related activities (Kansanen, 2004).

In Tanzania, not much is said about preparing student teachers as researchers despite the fact that they study scientific research methods in their programmes. This raises a question regarding the purpose of including research methods in teacher education curricula. Nevertheless, it implies that research competence is recognised as essential component in teacher education. According to Niemi (2008), without research competence teachers are merely actors who are applying orders coming from outside their practice. They need scientific literacy in order to understand on which grounds they can build their work. Without this understanding they have very few opportunities to learn new and question earlier knowledge and practices. For example, teachers have to be familiar with the latest knowledge developing about the subject matter and how can be transformed in relevant ways to benefit different learners.

3.0 Curriculum as the Basis of Developing Research Competences to Student Teachers

Teacher educators use curriculum as a basis for planning their work. In order for educators to educate student teachers as pedagogical thinkers curriculum has to place emphasis on the intersection between research and teaching. The intersection can help explore how the products and tools of research can be applied to teaching (Hine, 2013). Research-based curriculum design focuses on the students' learning as participants in research and supporting their understanding of the processes and practices of research in their discipline or professional areas (Jenkins & Healey, 2012). Depending on the type of teacher education (Healey et al., 2014, p. 15) curriculum can contain the following aspects:-

Research-led: learning about current research in the discipline. Here the curriculum focus is to ensure that what students learn clearly reflects current and ongoing research in their discipline. This may include research done by staff teaching them.

Research-oriented: developing research skills and techniques. Here the focus is on developing students' knowledge of and ability to carry out the research methodologies and methods appropriate to their discipline(s).

Research-based: undertaking research and inquiry. Here the curriculum focus is on ensuring that, as much as possible, the student learns in research and/or

inquiry mode (i.e. the students become producers of knowledge not just consumers). The strongest curricula form of this is in those special undergraduate programmes for selected students, but such research and inquiry may also be mainstreamed for all or many students.

Research-tutored: engaging in research discussions. Here the focus is on students and staff critically discussing research in the discipline as, for example, in many seminar-based courses.

The main question is how can we ensure curriculum provide a balance of all four categories. As already mentioned, the current practices in Tanzania associates research with small projects, including independent studies or thesis written at the end of a programme. For example, student teachers in 'Tanzanian teachers' colleges learn about research in the course of research, measurement and evaluation of which is taught in the classroom, like other subjects. This process ends by conducting small projects, which may take several forms, for example essay writing, story writing, designing and constructing teaching material and actual research. A small-scale research project comprises a common procedure used in any research projects such as proposal writing, data collection and report writing. However, it seems the research activities conducted in teacher education institutions are not well communicated to students, it even become difficult for them to realise if they are engaged in research activities.

4.0 Making Research Studies Cross-Curricular Issue

In order to educate student teachers as researchers, entire curriculum needs to be grounded in the notion of research-based education. Writing scientific thesis or independent studies alone is not enough to characterised teacher education as research-based. The cross-curricular approach involves combining units of work from different subject areas that contribute in purposeful ways to the unit's whole. The themes or topics as a whole must be strengthened by connections in other subject areas, and the connections should not focus solely on content but also on the skills and concepts (Earley, 2019). In integrating research across different learning areas, the distinction can be made between curriculum for pre-primary, primary and secondary school teachers and the type of programme such as certificate, diploma or university degree.

The study conducted in Swedish teacher education found that in primary school teacher programmes, student teachers' pedagogical identity in relation to education research and discipline research seemed to be more diffuse and uncertain, especially in relation to their ability to make critical analysis of research work (Alvunger & Wahlström, 2018). This finding can be transferred to Tanzania where certificate programme for primary school teachers has focused much on subject matter and how to teach. In general, teacher educators are less sensitive to applying what is learnt beyond the classroom and subject context, which seems to be the main focus of competence-based curriculum used in collage-based teacher education (Nzima, 2016). On the other hand, Kiswahili is used as a medium of instruction in primary school teacher certificate programmes while the majority of research reports in education are written in English Language. In this following section, three broad strategies for teaching research across curriculum are presented:

Realise research studies and practice at the beginning of the programme: In the current practice, research skills are rarely stressed in the first year of the pre-service programmes. In most of the programmes, student teachers are involved in pre-service and postgraduate research at the final year of the programmes. To produce desired results, research skills teaching and learning have to be integrated across all years of the curricula focusing on early contextualisation of research methods learning and hands on experiences (Davidson & Palermo, 2015). As already mentioned, it implies that research should be integrated in subject matter knowledge or content knowledge, methods and education studies. However, in teacher education, studying the content or subject matter creates additional problems. Student teachers often study subject matter in the departments of content knowledge (e.g., department of mathematics, physics, languages, etc.). Many times, the contents of subject matter courses are not matching with the school curriculum and bear no connection to teacher education. This practice creates the possibility of providing less emphasis on conducting research that focuses on subject matter for teaching.

Use practicum to link research and teaching: In Tanzania, practicum period is dominated by traditional student teacher supervision based on a unit of analysis (Rodgers & Keil, 2007). It has become another assessment technique rather than a learning period. However, in the research-based education, the role of practicum has to be modified to become a learning period. Practicum can be organised into a form of levels or stages with the entire programme. Drawing from experience from other

context and traditions (Rorrison et al., 2021), practicum can be organised in stages as presented below:

- i. **The novice:** the focus is on the pre-service teacher's own role and conduct with the aim of acquiring general knowledge of the teaching assignment and developing a professional approach based on inquiry and observation.
- ii. **Advanced beginner:** the focus is moved to the teaching and learning situation meaning that the pre-service teacher acquires knowledge of the teaching assignment and develops his/her own practice through active observation, analysis, examination and reconsideration.
- iii. **Professional beginner:** means that the focus is now on the children and their learning. Pre-service teachers are required to develop their ability to formulate the teaching assignment and to translate their teaching knowledge into action. They should also develop an ability to critically examine their own action and draw relevant conclusions.

Link research studies and school curriculum: Traditional teacher education curriculum corresponds with school curriculum as seen in certificate and diploma programmes offered in teachers' college (Maandag et al., 2007). Although, research is not emphasised in schools but students from primary schools to advanced level secondary education are engaged in activities which could be described as research activities. For example, form four and form six students are supposed to complete project as part of continuous assessment and they choose their topics from among subject taught in schools. In this situation, they are supposed to be guided by teachers who are knowledgeable in research and supervision. However, secondary school teachers are rarely prepared to conduct research and support students in project work.

5.0 Concluding Thoughts

In this article, I have argued for creating a coherent research basis for student teachers and teacher education in Tanzania. I have also questioned the aim of research methods course if student teachers are not given opportunity to engage in research activities. Similarly, I questioned why teacher educators are engaged in research activities and publish in the peer reviewed journals if they rarely work with student teachers to build a knowledge base for teacher education where teaching and research are integrated. To address the problem highlighted in this article, I have presented how research-based teacher education could be developed as an attempt to enable student teachers to adopt the role of

practitioner researcher in their daily work. On the language, I see a need of allowing student teachers to use English or Kiswahili in their pre-service and postgraduate research activities. The use of Kiswahili will increase research audience and perhaps the utilisation of the research outputs.

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THEME I: EDUCATIONAL REFORMS FOR THE 21ST CENTURY

Retirement Planning among Academics in Higher Education: A Matter of Health, Lifestyle, or Financial Planning?

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Abstract

This article presents the findings of a study which investigated the retirement planning of academics of Mkwawa University College of Education. The study employed a survey research design with the questionnaires as main data collection tool. Data were analysed using descriptive and inferential statistics. The objectives of the research were twofold: (a) to determine academics' perceptions towards retirement planning and (b) to identify the potential threats to retirement among academics. Results revealed respondents' high scores in the financial planning (mean= 16.1), followed by health (mean=14.5) then life style (mean=11.5). The findings imply that majority of respondents perceived less prepared for their health and life style than for financial matters. In terms of saving behaviour, the results show that majority of respondents manage to save less than Tshs. 100,000 per month. Most of them reported to save for meeting life demands and achieving life satisfaction. Very few save as part of their preparations towards retirement. Four major threats to retirement were ranked higher-losing social engagements, running out of money, declining in physical health, and not having daily routine. The findings imply a call for a need to assist employees make informed retirement planning through seminars. The recommendations are made to enhancing retirement preparations along financial, health, and psychosocial parameters.

Keywords: Retirement planning, saving behaviour, threats to retirement, academics, Tanzania

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1.0 Introduction

Planning and feeling prepared for retirement and its associated outcomes are critical aspects to retiree's adjustment to life after work. Studies have consistently found that early retirement planning is beneficial in several ways. For example, previous research shows that satisfaction in retirement is closely associated with pre-retirement planning (Nyaboke, 2010; Tacchino, 2013; Wang & Shi, 2014; Barbosa, Monteiro & Murta, 2016). Empirical evidence indicates further that realistic pre-retirement planning improves the chances of making a good adjustment to retirement (Talib & Manaf, 2017) and increases retirement confidence (Kim, Kwon & Anderson, 2005). It is argued that failure of retirement planning has impact on individuals' financial stability, health and wellbeing (Murphy & Mckenna, 2011). For example, individuals who prepare prior to their retirement age are more likely to feel more financially secured compared to individuals that did not have advance planning related to life after retirement (Talib & Manaf, 2017).

Retirement has been defined differently by scholars based on context, policy and legal frameworks across countries. Kleiber and Linde (2014) for example, view retirement as a transition from being in occupation to other life options such as leisure, volunteering to help others or to engaging in business activities. Watson (1992) defined retirement as a voluntary or forced cessation of work in an occupation for which a person is paid an agreed wage or salary. Luborsky and LeBlank (2003) define retirement as an age-fixed and socially mandated final phase in the employment in which a person is excluded from full time career jobs, is entitled to financial support without the stigma of dependency, and is personally responsible for managing his or her own life (p. 254). From these conceptions, retirement can be defined as the time when one permanently leaves his or her paid work due to either official or personal reasons. There are two broad categories of retirement: mandatory and voluntary retirement (Akinade, 2009). Mandatory retirement refers to the time one is required to stop working upon attaining the retirement age which varies depending on the laws of respective countries (Akinboye, 2004). Early or voluntary retirement is a type of retirement caused by either employee or employer due to various reasons such as pressure from family, illness or any other reason (Abdulkadir, Rasaq, & Isiaka, 2018). Following adoption of new Public Service Social Security Fund (PSSSF) Act in Tanzania, a compulsory age for retirement of academics in the universities and university colleges whose rank is a Lecturer is sixty years while voluntary

retirement age is fifty five years (URT, 2018). For the academics with the rank of Senior Lecturer and above one may voluntarily retire at the age of 60 years while at the age of 65 retirement is compulsory (URT, 2018).

Planning for retirement is a lifelong process which is determined by various motives. The earliest work of Beehr (1986) grouped determinants of retirement planning into personal and environmental factors. Personal factors include health, psychological and economic well-being while environmental factors include occupational goals, job characteristics, marital and family situations, and leisure pursuits (Beehr, 1986). Next to Beehr's review was a study by Talaga and Beehr (1989) which extended the Beehr's review on retirement by adding age, gender and education level to the retirement planning process. Moreover, in 1994, Feldman through his research came up with two antecedents of retirement planning including individual, and organisational. For Feldman, the individual level factors comprise of gender, marital status, health, work history, attitude towards work and retirement, while factors like employee's wage, pension, flexibility in work, and attitude of employer fall under organisational factors. Despite the recognition of the importance of retirement planning to individuals' economic and psychosocial wellbeing, evidence from empirical studies indicate that many employees fail to adequately plan early for their retirement (Talib & Manaf, 2017; Phua & McNally, 2008). As such, this situation affects the retirement decision making, post-retirement life and adjustment. Therefore, a study on retirement preparation among academics is worthwhile towards recommending effective strategies for informed retirement planning and decisions.

1.1 Conceptualising Retirement: Review of Literature

Retirement as a Decision Making

From psychological perspective, retirement has often been conceptualised as a decision-making process (Wang & Shi, 2014; Wang, 2007; Wang et al., 2008). This means that it is a motivated behaviour. Essentially, the conceptualisation is based on the informed decision making approach which assumes the responsibility of the employee to search for and evaluate information about himself, his work and non-work environment (Wang & Shi, 2014; Wang & Shultz, 2010). In other words, this approach puts retirement preparation information at the centre of retirement decisions. Based on this perspective, searching for and evaluating the relevant information before reaching the final decision about retirement is key

(Wang & Shultz, 2010). This conceptualisation also views retirement decision as a major life event determined by several motives such as health, family care needs, attitudes toward one's job, employer, and career, and desires for leisure pursuits (Chevalier et al., 2013). Generally, this approach to retirement, subscribes to image and role theories which posit that, prior to retirement, people perceive themselves and their roles in wider societal context and critically evaluate whether or not the retirement decision matches their self-images or roles (Wang & Shi, 2014, p. 211). People also compare between the financial resources available and financial resource needed for post-retirement life satisfaction before they make retirement decision (Hershey & Henkens, 2013; Wang & Shultz, 2010). In this regard, should they find a good match between the two, the retirement decision becomes obvious (Wang & Shultz, 2010).

Retirement as an Adjustment Process

As an adjustment process, retirement incorporates both the retirement transition, that is, from employment to retirement, and post-retirement life (Wang & Shi, 2013; Wang, 2007; Wang et al., 2011). According to van Solinge and Henkens (2008), in this process, retirement is not only the decision to retire but an adjustment made by the retiree in order to achieve post-retirement psychological satisfaction and wellbeing. Therefore, viewing the retirement as an adjustment process suggests that one thinks of the proper timing of the retirement, pre-retirement preparation, the resources available in retirement, and the role change resulting from the retirement (Van Solinge & Henkens, 2008). Thus, retirement is perceived as a longitudinal developmental process characterised by adjustment depending on timing, planning and resources held by retirees.

Retirement as a Career Development

The third assumption regarding retirement views it as a career development stage (Wang & Shi, 2014) From this perspective, retirement is an opportunity for further career advancement rather than exiting from labour force (Wang et al., 2011; Wang & Shi, 2014). Scholars agree that retirement is a late-career development stage that recognises the continued potential for growth and renewal of careers in people's retirement life (Asebedo & Seay, 2014; Wang & Shultz, 2010; Chevalier et al., 2013). This conceptualisation pays great attention to how retirees may align their career goals with their work and leisure activities in retirement life. It also emphasises examining unique factors that are associated with retirees' career potential and career pursuit, which may inform retirees'

workforce participation activities and patterns after they retire (Wang & Shi, 2014, p. 213). Based on the foregoing review, the conceptualisation of retirement process falls under three main stages that gradually unfold, namely; *retirement planning*, *retirement decision making*, and *retirement transition and adjustment*. Each of these stage is perceived differently by employees based on how one has prepared, work experiences and motivation, attitudes and perceptions towards retirement (Chevalier et al., 2013; Houlfort et al., 2015). The focus of this study was on the retirement planning for employees who are still working in the public sector, particularly, academics in Tanzania. Retirement planning as the first stage predicts a decision to retire and how one adjusts to it. The study explores perceptions of academics on retirement preparations and potential threats to retirement with an intention to recommend best practices for smooth transition and adjustment to retirement

1.2 Statement of the Problem

Based on the reviewed literature, it is apparent that whether one works for the public or private sector, will experience either a mandatory or voluntary retirement. Being a transition period, retirement is reported to bring both pleasing and challenging experiences. For example, retirement period is associated with reduced financial gain, activity and responsibility (Tirindi, 2012), life uncertainties such as fear, stress, anxiety, loneliness and a low life satisfaction (Ejionueme et al., 2012; Nikolova & Graham, 2014). Due to these challenges, it is worth arguing that meaningful adjustment to retirement requires proper planning. Studies have shown that unplanned retirement lead to mental and physical illness, depression and sometimes premature death (Tirindi, 2012) due to cut off from the work related benefits, change of work roles and identity, sudden loss in finances and poor adjustment strategies (Musila et al., 2019). Much of what is known from the previous research on retirement planning among academics in higher education focused on role of financial knowledge (Mndzebele & Kwenda, 2020), perceived experiences of retirement (Cahill et al., 2018), factors associated with satisfaction before and after retirement (Dorfman, 1992), retirement transition and post-retirement life career transitions (Cahill et al., 2021). In Tanzania, few studies have investigated terminal benefit payment practices and their associated challenges (Haule, 2013; Sulle, 2016). Moreover, Makona (2020) also examined age-based perceptions on retirement income spending plans and actual spending upon retirement among individuals from higher education institutions (HEIs). None of the reviewed studies explored the in-service academics' perceptions on retirement

preparations and the perceived threats to retirement. Therefore, this study was designed to fill this gap in knowledge by addressing two questions: (1) what are the perceptions of academics towards retirement planning? (2) What are the potential threats to retirement among academics?

2.0 Methods and Procedures

This study adopted a cross sectional survey design to generate the required data. A total of 85 academic staff from Mkwawa University College of Education conveniently participated in the survey by filling in the questionnaires. The questionnaire consisted of 16 items measuring retirement preparation which were adopted from Noone (2010) to measure financial, health, and lifestyle retirement planning of academic. Another section of the questionnaire assessed the demographic information of the respondents, saving behaviour and reasons for individual's decision to save money. Financial planning had 6 items which were related to issues which aid individuals to achieve financial security in later life, such as regular savings or property ownership. Example of the items included: *"If I will retire at age 60 or 65, I will have enough money to cope well with post retirement challenges"* and *"The likelihood of owning a home without a mortgage before retirement"*. Health preparedness was assessed by five items which focused on the undertaking of healthy or unhealthy behaviours. For example, *"I avoid all unhealthy behaviours"* and *"I never get medical screening for diseases such as cancer, diabetes, and heart disease"*. Life style planning consisted of 5 items which assessed individual's ability to maintain and establish a supportive social network and to develop new and enjoyable hobbies for their post-retirement life (items 12-16). *For example "I have many interests outside of work that I would like to pursue"*.

Data analysis was done through SPSS 25 Version for both descriptive and inferential statistics. Frequencies, percentages and means were computed to describe background information and scores for retirement planning items. Ethical procedures such as informed consent, anonymity and confidentiality were effectively adhered to during data collection, analysis and discussion. Written informed consent was sought from all respondents prior to their participation in the survey.

3.0 Results

3.1 Respondents' Profile

The respondents were 85 (Males = 62; Females = 23) recruited from three faculties namely; Faculty of Education (FoEd), Faculty of Science (FoS) and Faculty of Humanities and Social Sciences (FoHSS). The descriptive statistics indicate that majority 46 (56.8%) of these respondents were young with the age of 31-40 years, followed by 19 (23.5%) academics aged 41-50 years. Analysis indicates further that the respondents' lowest age was 26 while the highest age was 56 ($M = 38$; $SD = 7.1$). As indicated in Table 1, the majority of the respondents were males 74.1 % while females were 25.9 %. Moreover, in terms of academic ranks, a good number of respondents who participated in this study were assistant lecturers (48.2%) and lecturers (40%) while Senior lecturers and Tutorial assistants constituted were less than 10% of the total number of respondents. Out of 85 respondents, less than 20% had worked for less than 5 years, 25.9 % had working experience between 5 to 10 years, 43.5 % had experience of 11-15 years, while less than 12.9 % of the respondents had a working experience of 16 years and beyond. From the background information of the respondents, we learn that the majority of the academics were young and still in the training post (Assistant Lecturers and Tutorial Assistants). More importantly, the sample comprised of mixed age categories, newly employees and prospective retirees (that is those with more than 50 years). Therefore, understanding their perception and experiences regarding retirement preparation was worthwhile. Table 1 summarises the respondents' profile.

Table 1: Respondents' Characteristics

Variables	Categories	N	%
Sex	Male	62	72.9
	Female	23	27.1
Faculty	Education	25	29.4
	Humanities and Social Sciences	31	36.5
	Science	29	34.1
Age	< 30 year	13	16
	31-40 years	46	56.8
	41-50 years	19	23.5
	51-60 years	3	3.7

Academic Rank	Senior Lecturers	4	4.7
	Lecturers	34	40
	Assistant Lecturers	41	48.2
	Tutorial Assistants	6	7.1
Work Experience	< 5 years	13	15.3
	5-10 years	23	25.9
	11-15 years	37	43.5
	16-20 years	11	12.9
	Above 20 years	2	2.4

3.2 Academics' Retirement Preparedness

Retirement preparation was measured using one item on saving behaviour and reasons for one's decision to save money and 16 items adopted from Noone (2010) which measured respondents' specific retirement preparations across three dimensions, that is, healthy, financial and lifestyle. The findings in Figure 1 revealed that in terms of saving behaviour, 60.5 % of the respondents reported ability to save less than Tsh.100,000/= per month, followed by 20.5% who managed to save between Tsh.100,000-Tsh.500,000 per month. It was revealed further that only 8.8% can save more than Tsh. 500,000 while 10.3% cannot manage to save a single shilling. A chi-square test of independence showed that the saving behaviour did not differ by sex $\chi^2 = (3, N=83) = 4.9, p > .05$, meaning that there is no significant association between sex and financial saving behaviour. When the respondents were asked about the reasons as to why they save money, it was found that academics' financial saving behaviour was linked to improve the standard of living (51.8%), be independent (25.9%), meet unexpected expenses (20%), prepare wealth for children to inherit (14.1%) and for retirement planning (12.9%), From these findings, it is clear that saving for retirement planning receives very little considerations.

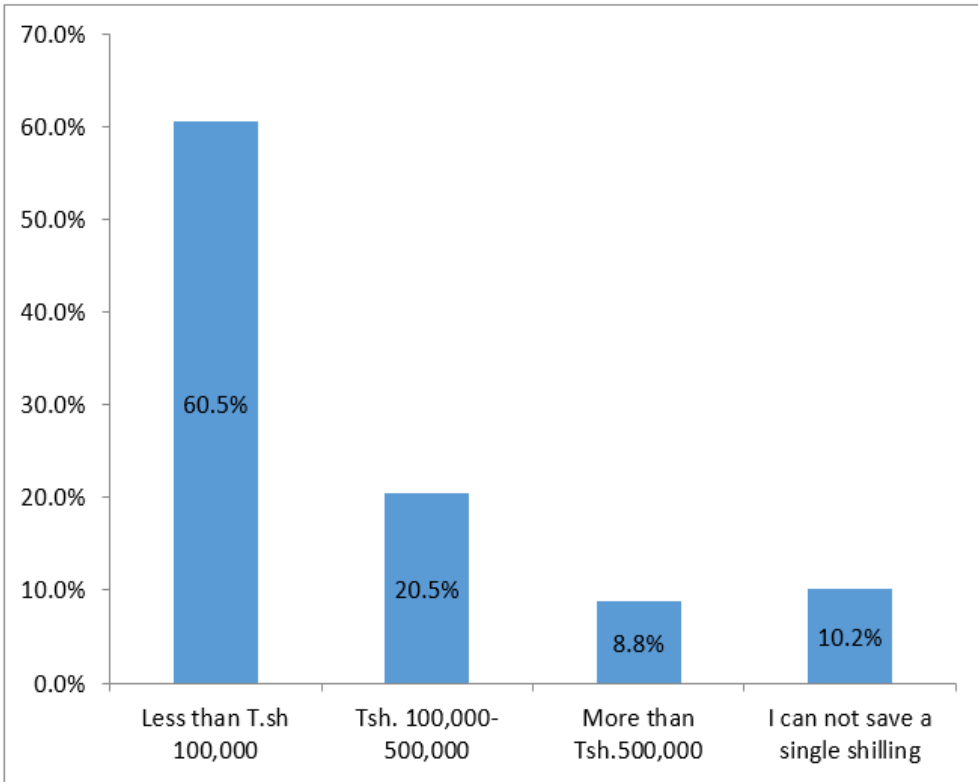


Figure 1: Academics' Average Savings on Monthly Basis

Further analysis was done to assess academics' retirement preparation in terms of healthy, financial and lifestyle. Results indicated that the average score for financial planning sub-scale was 16.1, health planning (mean=14.5) and life style (mean=11.5). The overall mean score for all 16 items in the retirement planning scale was 42.1, with the minimum score of 30, maximum score of 83 and standard deviation of 6.9. Analysis indicate further that for financial planning sub-scale, 45 (50.6%) scored above the mean. For the Health Planning and Life Style sub-scales, the findings show that 39 (45.8%) and 36 (42.4%) scored above the mean respectively. The findings imply that more than 50 percent of the respondents perceived to be unprepared for their health and life style while 50 percent of the respondents perceived to be financial literate as far as financial planning is concerned. The percentage and mean score for specific item are presented in Table 2.

Table 2: Retirement Preparation among Academics (N=85)

S/N	Items	Agree		Disagree	
		N	%	N	%
1.	If I was forced to retire today, I would have enough money to cope well with life after retirement	6	7	79	93
2.	If I will retire at age 60 or 65, I will have enough money to cope well with post retirement challenges.	60	70.2	25	29.8
3.	Members of my household are able to invest a sufficient proportion of our income for our future life.	33	38.8	52	61.2
4.	By the time I retire, I will have sufficient income to ensure the standard of living I want after retirement.	63	73.8	22	26.2
5.	By the time I retire, I will own my house.	79	93.6	5	6
6.	By the time I retire, I will have enough money to pay for any unexpected expenses	55	64.7	30	35.3
7.	I only eat foods that will benefit my long-term health.	58	68.3	27	31.7
8.	I avoid all unhealthy behaviours.	18	21.2	67	78.8
9.	I try to keep physically active (e.g., by taking regular walks, playing sports etc.).	24	28.6	60	71.5
10.	I never get medical screening for diseases such as cancer, diabetes, and heart disease.	43	50.6	42	49.5
11.	I never have regular general medical check-ups.	61	71.8	24	28.2
12.	There are many things I could do with my time if I was forced to retire today.	54	63.6	31	36.4
13.	I have recently taken up new interests, activities, or hobbies.	63	74.1	22	25.9
14.	I have many interests outside of work that I would like to pursue.	8	9.4	77	90.6
15.	I'm starting to separate myself from my work.	18	11.2	67	78.8
16.	I am reducing or will soon reduce my working hours.	14	16.5	71	83.5

From Table 2, it was found that 93% of the respondents disagreed with the item which states that “If I was forced to retire today, I would have enough money to cope well with life after retirement”. The findings show further that 70.2 % of the respondents agreed that if they will retire at age 60 or 65, will have enough money to cope well with post retirement challenges. These findings imply that the respondents’ foresee their retirement lifestyle to be manageable if they have more time to prepare for it. This matches the responses in items 4-6 on financial security for improving standard of living, unexpected expenses, and housing. In terms of health planning, the findings indicated that although the majority of respondents reported to eat healthy food (68.3%), they are not adequately engaging in activities which improve their physical wellbeing (28.6%), very few avoid unhealthy behaviours (21.2%) while 50.6% never get medical screening for diseases such as cancer, diabetes, and heart disease. The overall implication is that a good number of respondents seemed to pay attention much on financial preparations for post-retirement life than their health planning. Moreover, the study, through items 13 to 16 assessed whether or not academics were detaching from their work or change work roles as part of their retirement planning. The findings revealed that 74.1% of the respondents have already taken up new interests, activities, or hobbies.

The study went further to examine things which the employees fear when they think of retirement. The findings indicated that losing social engagements (40%) followed by running out of money (38.8%), declining in physical health (35.5%) and not having daily routine were the most leading threats to retirement (see Figure 2). This means that retirement planning is a function of economic, health, social and psychological factors, implying that careful planning of the same is critical for smooth transition.

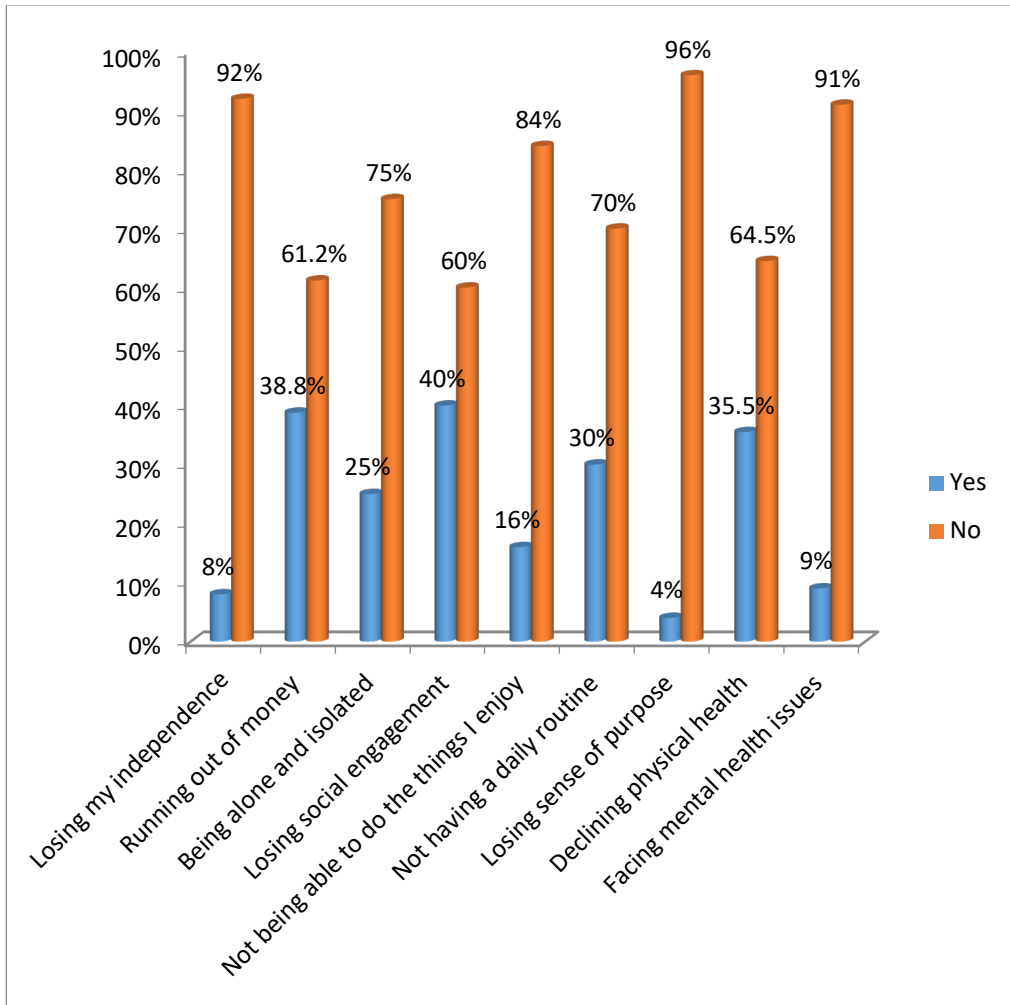


Figure 2: Threats to Retirements among Academics

4.0 Discussion

This research investigated academics’ perceptions towards retirement planning and key potential threats to retirement. The results reveal that the majority of the respondents perceived less prepared for their health and life style than for the financial matters. It was also found that most of the respondents save very little money for their retirement planning while no significant differences were noted between male and female academics on savings status. It is obvious that the transition of academics to retirement requires effective planning in different aspects. This study established that perceptions of employees regarding financial,

lifestyle and health mean a lot in the retirement preparation process. However, it should be noted that effective preparations under each category require adequate knowledge and readiness. Literature shows for example, individuals who are financial literate are more likely to plan and be ready for retirement than the ones with inadequate knowledge of financial planning (Young et al., 2017). Financial knowledge helps employees cope with retirement challenges including how to adequately save and invest for retirement (Van Rooije et al., 2011). In a similar argument, Wang and Shi (2014) contend that being financially prepared positively influence employee's well-being and adjustment in retirement.

It is also worth noting that financial preparedness, lifestyle preparedness and health preparedness are not only interrelated but depend on one another (Barbosa et al., 2016; Hershey et al., 2013; Petkoska & Earl, 2009). This fact implies that when lifestyle influence ones' health, the health also affects financial security and vice versa. This concurs with O'Neill (2009) who found that individuals tend to be happier and more economically secure when they are healthy. In addition, Carr et al. (2013) assert that individuals who engage in health information seeking behaviours such as reading books, content and nutrition details of food labels are more likely to be well knowledgeable with retirement health planning activities. Although proper retirement planning entails awareness of how individuals' health, financial and lifestyle are connected to smooth adjustment and wellbeing in retirement, Wang and Shi (2014) remind us that retirement planning not only means how people plan for it but also how they feel the retirement process. As such, a need for awareness on holistic approach to retirement planning among employees is imperative. As reported earlier, retirement as a lifelong event is associated with mixt of fear and uncertainties. In this study the respondents were much worried about losing social engagements, running out of money, declined physical health, and not having similar daily routine when thinking about retirement. Once people retire from work, they experience loneliness, change in daily routine, reduced income and identity (Tirindi, 2012). Therefore, there is a need for workers to learn how to cope with new statuses, identities, new financial conditions and time use (Ejorue, 2012) to cope smoothly with the retirement outcomes. Similarly, Wilson and Aggrey (2012) contend that retirement could become a threat to many workers who may not know what to do with their time and money after retirement. In particular, retirement threats might manifest in terms of stress related to changes in routine, personal habits, and opportunities for social interaction (Wilson & Aggrey, 2012). The implications of these findings

call for a need to assist each employee of key issues to consider when planning for retirement through seminars or workshops. This is because, early retirement training is essential to ensure a smooth retirement transitions and adjustment.

5.0 Conclusion and Recommendations

Based on the findings of this research, it is apparent that retirement planning is essential for economic, social and psychological wellbeing. Although the financial planning seems to be a major priority among the academics, it is worth recognising the importance of other inter-related retirement planning dimensions for positive retirement outcomes. Since retirement is a major life transition stage, early planning on retirement is paramount in enhancing smooth retirement transition. Proper planning and decisions will not only help employees engage successfully in response of varied post retirement life uncertainties, but also proper investments decisions, leisure activities and social engagements and hence reduce fear to retirement. The findings of this study suggest a need for strengthening career guidance and counselling in work place, and supporting academics' realistic retirement planning through retirement planning education.

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Personality Traits and Career Preferences among Secondary School Students in Tanzania: A Match within Introvert-Extrovert and Agreeable-Less-Agreeable Traits

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Abstract

This paper presents findings regarding career preferences among secondary school students within personality traits of introvert-extrovert and agreeable-less-agreeable. The study was a quantitative, employing survey design. The study involved a sample of 369 Form IV students: 161 males, and 208 females who filled in the Extrovert-Introvert Personality Scale, Agreeable-Less Agreeable Personality Scale, and Career Check List. The sample was obtained through simple random sampling technique. The data were subjected to statistical analysis using Statistical Package for the Social Sciences (SPSS), Version 20.0 to produce descriptive statistics. Then cross tabulation was run to establish students' career preferences in relation to their personality traits. The findings revealed that 62% of the introverts, 61.9% of the agreeable, and 55.6% of the extraverts chose computation skills careers. The study recommends that the best way to make students choose career paths that match their personality traits, and academic ability, is through the establishment of a proper career and educational guidance and counselling services in schools and educate students to understand their personality traits for a proper career matching.

Keywords: Personality traits, extrovert, introvert, agreeable, career preferences, secondary school, Tanzania.

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1.0 Introduction

It is an indisputable fact that human beings are quite different. The differences are observable in terms of psychological, behavioural, physical appearances, grades, gender, academic achievement and social economic status (Schmitt-Wilson & Welsh, 2012). These differences have a great influence on how people behave, think, and feel. Such differences have made psychologists to set out for a search of what shapes individual characteristics as well as the life choices they make. One important area that has called great attention among scholars is the process of career choice and development. Psychologists and other educators have built interest towards understanding the process, and factors that shape career choice and development across various members of the human population. Great attention set on youths, especially those in schools.

Career choice and development among secondary school students is a very important process of which students have to go through during their course of studies (Idd, 2007). The process is not an easy one. It is influenced by many factors, such as personality, learning experiences, self-efficacy, outcome expectations, and interests and personal goals, skills and abilities, gender, and level of vocational knowledge (Kirdök & Korkmaz, 2018; Schmitt-Wilson & Welsh, 2012; Taasobshirazi, 2007). Sometimes, it becomes a difficult process due to unemployment and underemployment, which are very big challenges in developing countries, Tanzania included. The world of work has become so complex that individuals are supposedly relying heavily on their own capabilities to effectively influence their environment and regulate their behaviour in order to succeed in work settings (Converse et al., 2012).

2.0 The Concept of Career Choice

The term career is described as an “interaction of work roles and other life roles over a person’s lifespan including both paid and unpaid work in an individual’s life” (United Nations Educational, Science, and Cultural Organisation [UNESCO], 2002). People create career patterns as they make decisions about education, work, family and other life roles. It encompasses the work history of an individual. Scholars like Gelso and Fretz (2001) consider career as the sequences of major positions held by a person throughout his or her pre-career years, working years, and retirement years.

On the other hand, career choice and development, according to Idd (2007), entails individuals' life long process of engaging with the world of work through choosing among employment opportunities made available for them. Arguably, it is the process by which individuals choose careers or career paths to enter and develop throughout their lives. Isaackson (1985) asserted that throughout history, career choice and development has been subjected to powerful pressures and influences caused by factors such as social status, family, tradition, and societal views among others. Sometimes, the process becomes difficult when there is either too many or too few job openings from which a student has to choose.

Research in the fields of counselling and vocational psychology calls for an understanding of the process by which individuals make career decisions. Since Parsons (1909) proposed the concept of person–job fit, psychologists have attempted to identify how decisions are made and the optimal way to make them. Traditionally, career researchers have attributed career decision making to a variety of variables, with particular importance placed on factors like personality and emotional intelligence (Converse et al., 2012; Kirdok & Korkmaz, 2018); vocational interests, skills, values, available opportunities, and perceived abilities (Duffy & Sedlacek, 2007); individual differences in grade, gender, social economic status and academic achievement (Schmitt-Wilson & Welsh, 2012). Career choice remains a critical decision that has obvious impact on the future life pattern of an individual (Orenuga & Da Costa, 2006). Given the nature of the process, an individual needs to make a wise career choice by considering factors like clear understanding of the self, attitude, ability, interests, ambition, resources and limitations, knowledge requirements, and conditions of work aspired for.

3.0 The Concept of Personality Traits

The concept of personality arises from the fascinating spectrum of human individuality (Passer & Smith, 2004). It has been observed that people differ meaningfully, and have distinctive behaviour patterns that help to define one's identity as a person. Personality is the distinctive and relatively enduring ways of thinking, feeling, and acting that characterises a person's responses to life situations (Holland, 1985; Passer & Smith, 2004).

It has been purported that the personality characteristics of individuals relate to job and career outcomes; however, establishing these relationships empirically has proved difficult (Guthrie et al., 1998). For a number of years, there was inadequate

psychometric evidence on the reliability and validity of available personality instruments (Guthrie et al., 1998). A fundamental problem was the absence of an accepted taxonomy for normal personality. Recent years have witnessed a rebirth of interest in the utility of personality testing in work settings. Thus, after more than fifty years of personality research, there is a common agreement in the field that five core personality dimensions form the basis of personality (Heinrich, 2004; Larsen & Buss, 2005; McAdams, 1994). The five core personality dimensions are (1). Extraversion (e.g. being sociable, gregarious, assertive); (2). Agreeableness (e.g. being empathic, good-natured, cooperative); (3). Emotional Stability (viewed from the negative pole, e.g., being anxious, depressed, emotional, nervous); (4). Conscientiousness (e.g., being dependable, reliable, careful, thorough); and (5). Openness to Experience (e.g., being imaginative, curious, original, and broadminded). These have been given various labels such as the “Five Factors Model”, the “Big Five” and the “High Five” (Costa & McCrae, 1998; Larsen & Buss, 2005).

3.1 Personality and Career Choice

Holland (1997) contends that people gravitate towards careers and work environment congruent with their personal orientations. As a result, the choice of career and its development is interpreted as an attempt to fulfil a desired way of life through one’s work. Thus, career choices reflect a person’s self-perception regarding his/her ability, values and personality along with assessments of how these individual aspects fit within a particular career (Guthrie et al., 1998). Moreover, Santrock (2006) referring to Holland’s personality theory, argued that individuals are more likely to enjoy the work and stay in the job longer when they find careers that fit their personality traits. Therefore, a good match between personality and career aspirations is very important in developing and maintaining individuality.

However, even though there are various career opportunities in the world of work, some people, especially young adolescents are facing challenges in the process of selecting, processing, and maintaining their careers (Biswal, 1996). In the study of career choices, the major initial task is that of classifying careers into meaningful categories. In Tanzania for instance, the formal career choice and development starts when school youths enter their third year of study in ordinary secondary education circle. In many secondary schools, both public and private, students have to choose to stream either in Science or Art oriented subjects which

will lead them into choosing a combination of three subject to study in their advanced level of secondary education. Later, for those who continue with college or university education, such streaming forms a foundation for career choice and development. In this streaming process, little is known about what informs students' career choices, though most of the time the streaming is based on the history of academic ability of the student. Similarly, there are scarce empirical studies in Tanzania that relate career choice and personality traits among secondary school students. Despite the obvious importance of deciding which career to pursue, little is known about the influence of personality on career choice and development (Vuust et al., 2010). On that background, the study was set to answer the following questions:

- i. What types of careers are chosen by students with personality trait of extravert-introvert?
- ii. What types of careers are chosen by students with personality trait of agreeable-less agreeable and career choices?

4.0 Methodology

4.1 Research Design

This study employed a survey research design to generate large sets of descriptive data, frequencies and percentages which helped the researcher describe the variables of the study (Creswell, 2009; McMillan & Schumacher, 2006). According to McMillan and Schumacher (2006), the design offers the best way of obtaining a representative description of traits, beliefs, attitudes, and behaviours of a population. This was possible, as the design provided the respondents with an opportunity to complete the questionnaires by themselves.

4.2 Theoretical Framework

This study was informed by person-vocational fit as postulated by *the theory of vocational personality types* (Holland, 1985). Holland (1985) argues that individuals are drawn to work environments in which they can express their interests. The essence of this theory is based on the individual unique set of characteristics or traits. Parsons (1909) maintained that people are different from each other so are jobs. Thus, there should be congruence or correspondence between a person and the career aspired. It suggests that a wise vocational choice and development requires a clear understanding of self, including attitudes, abilities, interests,

ambitions, resources, and limitations; knowledge of requirement and conditions in various line of work as well as true reasoning to discover the relationship between the sets of data (Isaackson, 1985).

4.3 The Sample Size

The sample size of this study included 369 Form IV students obtained from four secondary schools in Iringa Municipality. The sample size was determined by using the confidence levels and confidence intervals for random samples as suggested by Cohen et al. (2017). In that case, 369 students were selected randomly, with a confidence level of 95% and sampling error of 5% from the purposively selected secondary schools within Iringa Municipality. The selection of these schools was based on the following characteristics: first, the age of school-the schools that had been in operation longer than others within the Municipality were prioritised. Second, schools enrolling both boys and girls were also included in the sample. Third, single sex schools were also included. The sample was carefully selected with close observations of characteristics like age, gender, and grade level. Among the respondents, 43.6% were males and 56.4% were females.

4.4 Data Collection Instruments, Analysis and Presentation

A questionnaire combining three instruments was used to obtain data for this study. Part one of the instruments included, Student's Career Check List as classified by Biswalo (1996), part two covered Extravert-Introvert Personality Scale (EIPS), and part three included Agreeable-Less Agreeable Personality Scale (ALPS). These personality scales were adapted from Shepherd (1994). Document reviews was also carried out to obtain the annual examination results at the end of Form III. These results represented academic performance and were matched with student's personality traits. The obtained data were subjected to statistical analysis using Statistical Package for the Social Sciences (SPSS), Version 20.0. Descriptive analysis was performed to produce simple descriptive statistics to establish numbers and percentage of individuals in each category of personality trait and the preferred careers. The descriptive data are presented in tables supported with in-text explanation. Career preferences were established at two levels: In level one, students within each personality trait ranked major careers by three positions (i.e. first, second and third ranking). In level two, students ranked the specific careers within the major careers in a similar way as they did with major careers. Thereafter, a cross tabulation was run to determine students' career

preferences in relation to their personality traits to establish the match between personality type and preferred career.

5.0 Findings

5.1 Personality Traits and Career Choices

The current study was set out to investigate the type of careers chosen by students with personality trait of extravert-introvert and agreeableness. The association was explored using descriptive statistics technique whereby distribution of extraverts and introverts, and agreeable and less agreeable in terms of frequencies and percentages across career categories in order of respondents' preferences were observed cross tabulated with personality traits and presented. Each career chosen by each personality trait are subsequently presented.

5.2 Extraversion Personality Trait and Career Choices

Table 1 shows the findings on students' extraversion personality trait and associated career preferences. It was observed that a majority of the extraverts, 110 (55.6%), indicated computation skills careers as their most preferred first choice, and about 63 (31.8%) of them chose social services careers as their most preferred second choice, while 166 (83.8%) indicated mechanical careers as their most preferred third choice. On the other hand, a majority of introverts, about 106 (62%), indicated computation skills careers as their most preferred first choice, and about 54 (31.6%) indicated communication careers as their most preferred second choice, while 143 (83.6%) of them indicated mechanical careers as their most preferred third choice.

The findings further revealed that career choices among extraverts and introverts were the same as the majority in both groups indicated computation skills careers, and mechanical careers their most preferred first and third choices respectively. The divergence between extraverts and introverts was observed in their second choices, where about 31.8% of extraverts indicated social services careers, while 31.6% of the introverts indicating communication careers. Thus, the findings suggested that extraversion personality trait was associated with the choice of careers in computation skills careers, social services careers, and mechanical careers. Similarly, introversion personality trait was associated with the choice of computation skills careers, communication careers, and mechanical careers.

Table 1: Pattern of Career Choices for Extraversion (N=369)

Careers		Personality Trait															
		Extraverts (n=198)								Introverts (n=171)							
		1		2		3		Missing		1		2		3		Missing	
F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%		
1	Outdoor Careers	38	19.2	53	26.8	104	52.5	3	1.5	30	17.5	37	21.6	96	56.1	8	4.7
2	Social Services Careers	98	49.5	63	31.8	33	16.7	4	2.0	86	50.3	49	28.7	28	16.4	8	4.7
3	Scientific Careers	94	47.5	48	24.2	52	26.3	4	2.0	85	49.7	41	24.0	36	21.1	9	5.3
4	Computation Skills Careers	110	55.6	46	23.2	38	19.2	4	2.0	106	62.0	30	17.5	29	17.0	6	3.5
5	Mechanical Careers	8	4.0	19	9.6	166	83.8	5	2.5	6	3.5	13	7.6	143	83.6	9	5.3
6	Health Services Careers	88	44.4	56	28.3	49	24.7	5	2.5	72	42.1	53	31.0	38	22.2	8	4.7
7	Communication Careers	104	52.5	52	26.3	37	18.7	5	2.5	84	49.1	54	31.6	26	15.2	7	4.1
8	Artistic Careers	45	22.7	50	25.3	97	49.0	6	3.0	26	15.2	49	28.7	90	52.6	6	3.5

5.3 Agreeableness Personality Trait and Career Choices

The pattern of career choices was explored using descriptive statistics technique, where distributions of agreeable and less agreeable in terms of frequencies and percentage across career categories were computed. Table 2 presents the findings. The results indicate that the majority of the agreeable, about 99 (61.9%), indicated computation skills careers as their most preferred first choice, 50 (31.3%) of them indicated social services careers as their most preferred second choice, and 139 (86.9%) chose mechanical careers as their most preferred third choice.

The results also showed that about 117 (56%) of less agreeable indicated computation skills careers as their most highly preferred first choice, and about 66 (31.6%), indicated health science careers as their most preferred second choice, whereas about 170 (81.3%) indicated mechanical careers as their most preferred third choice.

The observations in Table 2 suggest that there is an association between agreeableness personality trait and career choices in computation skills careers, social services careers, and mechanical careers. Likewise, the findings suggest that there is an association between less agreeableness personality trait and career choices in computation skills careers, health science careers, and mechanical careers.

Table 2: Agreeableness and Major Career Choices (N=369)

Careers	Personality Trait															
	Agreeable (n=160)								Less Agreeable (n=209)							
	1		2		3		Missing		1		2		3		Missing	
	F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Outdoor Careers	23	14.4	39	24.4	93	58.1	5	3.1	45	21.5	51	24.4	107	51.2	6	2.9
2 Social Services Careers	81	50.6	50	31.3	25	15.6	4	2.5	103	49.3	62	29.7	36	17.2	8	3.8
3 Scientific Careers	87	54.4	36	22.5	31	19.4	6	3.8	92	44.0	53	25.4	57	27.3	7	3.3
4 Computation Skills Careers	99	61.9	36	22.5	21	13.1	4	2.5	117	56.0	40	19.1	46	22.0	6	2.9
5 Mechanical Careers	5	3.1	10	6.3	139	86.9	6	3.8	9	4.3	22	10.5	170	81.3	8	3.8
6 Health Services Careers	78	48.8	43	26.9	34	21.3	5	3.1	82	39.2	66	31.6	53	25.4	8	3.8
7 Communication Careers	74	46.3	47	29.4	33	20.6	6	3.8	114	54.5	59	28.2	30	14.4	6	2.9
8 Artistic Careers	21	13.1	49	30.6	86	53.8	4	2.5	50	23.9	50	23.9	101	48.3	8	3.8

5.4 Personality Traits and Specific Career Choices

The respondents were presented with eight career categories and three examples of jobs within each category, of which they had to indicate their career choices in order of their preferences. Descriptive statistical analyses were carried out to explore what jobs within each major career category were mostly ranked number one, two, and three. Findings are presented in Tables 3 and 4.

5.4.1 Extraversion Personality Trait and Specific Career Choices

The results in Table 3 show the highly ranked number one job sub categories as an indication of first choices by extraverts within their highly rated first, second, and third choices of the major career categories as follows; within computation skills careers, banking was the mostly rated career by about 81 (40.9%) of the extraverts. Within social services careers, law was the highly rated career by about 117 (59.1%) of extraverts, whereas manufacturing was the most preferred first choice within mechanical careers by about 127 (64.1%) of extraverts.

For the introverts, banking was the most preferred first choice within computation skills careers by about 64 (37.4%), and within the communication careers, the most preferred first choice career was information technology by about 78 (45.6%), while manufacturing was chosen by about 102 (59.6%) of the introverts as the most preferred first choice within mechanical careers.

Table 3: Extraversion and Specific Career Choices

Careers		Personality Trait															
		Extraverts (n=198)								Introverts (n=171)							
		Ranking				Ranking				Ranking				Ranking			
Career Categories	Sub Categories	1		2		3		Missing		1		2		3		Missing	
		F	%	F	%	F	%	F	%	F	%	F	%	F	%	F	%
Outdoor Careers	Agriculture	42	21.2	107	54	33	16.7	16	8.1	31	18.1	91	53.2	33	19.3	16	9.4
	Fishery	3	1.5	43	21.7	136	68.7	16	8.1	2	1.2	40	23.4	113	66.1	16	9.4
	Flying/Pilot	138	69.7	32	16.2	13	6.6	15	7.6	122	71.3	24	14.0	9	5.3	16	9.4
Social Services Careers	Teaching	30	15.2	71	35.9	80	40.4	17	8.6	32	18.7	64	37.4	59	34.5	16	9.4
	Law	117	59.1	42	21.2	22	11.1	17	8.6	99	57.9	43	25.1	13	7.6	16	9.4
Scientific Careers	Army	34	17.2	68	34.3	79	39.9	17	8.6	24	14.0	48	28.1	83	48.5	16	9.4
	Laboratory Technician	47	23.7	92	46.5	42	21.2	17	8.6	47	27.5	72	42.1	36	21.1	16	9.4
	Physics	29	14.6	41	20.7	111	56.1	17	8.6	23	13.5	41	24.0	91	53.2	16	9.4
Computation Skills Careers	Medical Doctor	105	53.0	48	24.2	28	14.1	17	8.6	85	49.7	42	24.6	28	16.4	16	9.4
	Book Keeping	41	20.7	25	12.6	116	58.6	16	9.4	27	15.8	27	15.8	101	59.1	16	9.4
	Banking	81	40.9	80	40.4	21	10.6	16	9.4	72	42.1	64	37.4	19	11.1	16	9.4
Mechanical Careers	Accountancy	61	30.8	77	38.9	44	22.2	16	9.4	56	32.7	64	37.4	35	20.5	16	9.4
	Building	13	6.6	9	34.8	99	50.0	17	8.6	20	11.7	64	37.4	70	40.9	17	10.0
	Manufacturing	127	64.1	42	21.2	12	6.1	17	8.6	102	59.6	46	26.9	6	3.5	17	10.0
Health Services Careers	Mining	41	20.7	70	35.4	70	35.4	17	8.6	33	19.3	44	25.7	78	45.6	16	9.4
	Dentistry	69	34.8	70	35.4	42	21.2	17	8.6	74	43.3	50	29.2	31	18.1	16	9.4
	Pharmacy	56	28.3	63	31.8	62	31.3	17	8.6	41	24.0	57	33.3	57	33.3	16	9.4
Communication Careers	Veterinary	56	28.3	48	24.2	77	38.9	17	8.6	39	22.8	49	28.7	67	39.2	16	9.4
	Editing & Publishing	15	7.6	75	37.9	92	46.5	16	9.4	9	5.3	53	31.0	92	53.8	17	10.0
	Journalism	68	34.3	58	29.3	56	28.3	16	9.4	67	39.2	55	32.2	32	18.7	17	10.0
Artistic Careers	Information Technology	99	50.0	49	24.7	34	17.2	16	8.1	78	45.6	46	26.9	30	17.5	17	10.0
	Drawing	49	24.7	100	50.5	31	15.7	18	9.1	56	32.7	67	39.2	32	18.7	16	9.4
	Painting	17	8.6	54	27.3	109	55.1	18	9.1	26	15.2	64	37.4	65	38.0	16	9.4
	Music	114	57.6	26	13.1	40	20.2	18	9.1	72	42.1	25	14.6	58	33.9	16	9.4

5.4.2 Agreeableness Personality Trait and Specific Career Choices

Table 4 shows career preferences by the agreeable and less agreeable. The most preferred first choice career within computation skills careers was banking by about 68 (42.5%) of the agreeable, and within social services careers, law was the most preferred first choice by about 100 (62.5%) of agreeable, while manufacturing was the most preferred first choice by about 106 (66.3%) of the agreeable within mechanical careers.

Lastly, for the less agreeable, about 85 (40.7%) of them had banking as their most preferred first choice career within computation skills careers. Furthermore, about 73 (34.9%) of them indicated dentistry as their most preferred first choice within health sciences careers, while within mechanical careers, the most preferred first choice career was manufacturing by about 123 (58.9%) of the less agreeable.

Table 4: Agreeableness and Specific Career Choices

Careers		Personality Trait															
		Agreeable								Less Agreeable							
		Ranking				Missing				Ranking				Missing			
Major Career Categories	Some Sub Categories	1		2		3		Missing		1		2		3		Missing	
		F	%	F	%	F	%	F	%	F	%	F	%	F	%		
Outdoor Careers	Agriculture	31	19.4	97	60.6	23	14.4	9	5.6	42	20.1	101	48.3	43	20.6	23	11.0
	Fishery	1	0.6	28	17.5	122	76.3	9	5.6	4	1.9	55	26.3	127	60.8	23	11.0
	Flying/Pilot	120	75.0	26	16.3	6	3.8	8	5.0	140	67.0	30	14.4	16	7.7	23	11.0
Social Services Careers	Teaching	30	18.8	62	38.8	59	36.9	9	5.6	32	15.3	73	34.9	80	38.3	24	11.5
	Law	100	62.5	35	21.9	16	10.0	9	5.6	116	55.5	50	23.9	19	9.1	24	11.5
	Army	21	13.1	54	33.8	76	47.5	9	5.6	37	17.7	62	29.7	86	41.1	24	11.5
Scientific Careers	Laboratory Technician	36	22.5	78	48.8	37	23.1	9	5.6	58	27.8	86	41.1	41	19.6	24	11.5
	Physics	22	13.8	37	23.1	92	57.5	9	5.6	30	14.4	45	21.5	110	52.6	24	11.5
	Medical Doctor	93	58.1	36	22.5	22	13.8	9	5.6	97	46.4	54	25.8	34	16.3	24	11.5
Computation Skills Careers	Book Keeping	28	17.5	20	12.5	103	64.4	9	5.6	40	19.1	32	15.3	114	54.5	23	11.0
Mechanical Careers	Banking	68	42.5	64	11.9	19	11.9	9	5.6	85	40.7	80	38.3	21	10.0	23	11.0
	Accountancy	56	35.0	67	41.9	28	17.5	9	5.6	61	29.2	74	35.4	51	24.4	23	11.0
	Building	9	5.6	70	43.8	71	44.4	10	6.3	24	11.5	63	30.1	98	46.9	24	11.5
Health Services Careers	Manufacturing	106	66.3	35	21.9	9	5.6	10	6.3	123	58.9	53	25.4	9	4.3	24	11.5
	Mining	36	22.5	45	28.1	70	43.8	9	5.6	38	18.2	69	33.0	78	37.3	24	11.5
	Dentistry	70	43.8	50	31.3	31	19.4	9	5.6	73	34.9	70	33.5	42	20.1	24	11.5
Communication Careers	Pharmacy	41	25.6	56	35.0	54	33.8	9	5.6	56	26.8	64	30.6	65	31.1	24	11.5
	Veterinary	39	24.4	46	28.8	66	41.3	9	5.6	56	26.8	51	24.4	78	37.3	24	11.5
	Editing & Publishing	10	6.3	53	33.1	87	54.4	10	6.3	14	6.7	75	35.9	97	46.4	23	11.0
Artistic Careers	Journalism	64	40.0	52	32.5	34	21.3	10	6.3	71	34.0	61	29.2	54	25.8	23	11.0
	Information Technology	76	47.5	45	28.1	29	18.1	10	6.3	101	48.3	50	23.9	35	16.7	23	11.0
	Drawing	49	30.6	72	45.0	30	18.8	9	5.6	56	26.8	95	45.5	33	15.8	25	12.0
Artistic Careers	Painting	17	10.6	56	35.0	78	48.8	9	5.6	26	12.4	62	29.7	96	45.9	25	12.0
	Music	85	53.1	23	14.4	43	26.9	9	5.6	101	48.3	28	13.4	55	26.3	25	12.0

6.0 Discussion

The current study revealed that the majority of extraverts had indicated computation skills careers as their most preferred first choice careers, followed by social services, and mechanical careers as their most preferred second and third choices respectively. Whereas, majority of introverts indicated computation skills careers, communication careers and mechanical careers as their most preferred first, second, and third career choices consecutively. These findings are quite similar to the previous findings in which extraversion was found to have a high correlation with social and enterprising careers (Hammond, 2001). Thus, extraversion had shown to be a predictor for success in training activities and in sales and management careers (Hammond, 2001), with the extraverts showing likeability to succeed in training activities. On the other hand, many introverts showed more interest in social and/or enterprising careers. However, Hammond argued further that introverts had more interest in social and enterprising careers, they had a tendency to verbalise less and greater difficulties in expressing themselves in social situations, unlike their counterparts, the extraverts, who were socially oriented and feel more comfortable in social situations. Similarly, Salami (2008), reported extraversion personality trait to have a significant positive, but low correlation with artistic careers ($r=0.21, p<0.05$), with musical careers ($r=0.38, p<0.05$), and with social services careers ($r=0.37, p<0.05$).

Moreover, the current study revealed that agreeableness personality trait was associated with the choice of careers in computational skills careers, social services careers, health services careers, and mechanical careers. These findings deviate from the previous ones. For instance, Salami (2008) reported a significant and negative but low correlation of $r=-0.27, p<0.05$ between agreeableness and outdoor careers. However, Salami found a significant and positive, but low correlation of $r=0.23, p<0.05$ between agreeableness and clerical careers. The present study indicates that the highly rated career by students in agreeable personality category was computation skills careers, of which clerical job is a sub-category.

In addition, the findings showed that a good number of agreeable and less agreeable persons similarly preferred more computation skills careers than other careers. From such findings, it was exciting to note that extraverts and introverts as well as agreeable and less agreeable were showing interest into similar careers. However, basing on the personal environmental fit theory (Holland, 1997), one

would expect that different personalities choose different careers as they have different interest orientations. This was not the case. Arguably, it could be thought that, probably, the respondents were confusing computation skills careers with computer knowledge, or the implication might be that the career choices were being influenced by other factors rather than personality trait of an individual. With specific career categories, the most highly rated jobs across the two personality traits were banking, law, information technology, dentistry, and manufacturing. Majority of the extravert, introvert, agreeable, and less agreeable were attracted towards banking as their most preferred career to enter and develop upon the completion of their studies. Such rating of careers is very different from those obtained by Owuamanam (1982), in his study on career prestige and career aspirations among adolescent students. Owuamanam's findings showed that the most highly rated careers were engineering ($\bar{X} = 4.51$), university lecturing ($\bar{X} = 4.34$), and medicine ($\bar{X} = 4.27$). The results are also different from those of Masamu (2006), who found that dentistry was placed as first career choice by 65.3% followed by medicine (24.8%), while other careers, mostly in biology and health sciences, by about 9.9% of the respondents. Omari (1976), also reported law and medicine most attractive than other careers among the university candidates.

From the findings in the present study, it can be argued that, to some extent, there is a mismatch between personality traits and career choices, especially in the specific career choices. This mismatch might be due to the fact that the study has been conducted in a different environment from those in other countries, especially the developed ones, where students demonstrate awareness of different careers due to a well-established career guidance and counselling and other necessary services which equip students with proper information on various careers.

7.0 Conclusion

In developing countries, Tanzania included, proper career preferences might be hindered by students' ignorance about their personality traits coupled with a lack of proper career information, guidance and counselling in schools. Such situations make students to have unrealistic career choices which do not match their personality traits. Mutie and Ndambuki (1999) argued that for students to have an intelligent matching between them and the career, they should have enough information and knowledge of the careers, industrial, and labour structure of the

country, career classifications, entry requirements, entrance procedures, career distribution, training opportunities, and employment prospects. Similarly, Petters and Asuquo (2009) reasoned that when youths are not formally provided with career information, which is the basis for realistic career choice, some often accept any job for which they are not well prepared. This results in inefficiency, low productivity and frustration. Therefore, career preferences among secondary school students in Tanzania might be reflecting unrealistic career choices since there is no well-established career guidance and counselling as stipulated in the education policy of the country. From such experiences, Sima (2006) strongly emphasised the need to offer secondary school students with reliable guidance and counselling services which could help them cope with different psychological and social problems.

Lack of well-established career guidance and counselling services aligns with the lack of documented career lists. It is important that this type of information be available, up to date, relevant, easily accessible, and reflective of the nature of the world of work and current possibilities for students. This kind of a system allows individuals to expand their options when they are searching job possibilities (UNESCO, 2002). In Tanzania, such system of classification of careers, where specific jobs that are related have been grouped together is not well established and is unknown to many students, and those, which are available, are not current enough and not easily accessible by the clients. Therefore, the Tanzania's government through the Ministry of Education, Science and Technology (MoEST) in collaboration with Prime Minister's Office, Work, Employment, Youth and People with Disabilities Ministry should step up efforts to train and post qualified career and academic guidance counsellors to secondary schools whose main duty should be that of providing guidance and counselling services to students only. There is also a need to educated students to become aware of their personality traits and type of careers which fit them so that they can make well informed career choices which match their personalities and academic ability. Such education can be organised on a regular basis through career and academic guidance and counselling, career days, and career visits. Similarly, the government through the Ministry of Labour, Youth Development and Sports, the Department of Labour Exchange Centre, in collaboration with the MoEST should compile the list of available careers in the country with the qualifications required for one to join them. Such document should be disseminated to all levels of education so

that students become well informed about various job opportunities in the country. This will help students make rational career choices and development.

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Motives and Challenges for Participating in Open and Distance Learning in Higher Education in Tanzania: A Case of Rural Women

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Abstract

This qualitative study looked at rural women's participation in higher education learning through the Open and Distance Learning (ODL) modes. It explored the motives and challenges in addition to proposing measures for improving rural women's participation in learning in higher education via ODL in Tanzania. The study used purposive and snowball sampling to select the participants. Moreover, the study used interviews and documentary review to gather data. The findings show that women participated in higher education via ODL primarily because of the need to transform their socio-economic wellbeing and status. Other specific motivators include qualifying for promotion, salary increment, recognition, enhanced employment opportunities, and retirement benefits in addition to acquiring life event management skills. Women students' challenges included poor infrastructure, socio-cultural limitations, health challenges, financial barriers, increased learning costs, lack of quality learning space, and poor access to human and inadequate learning resources. Overall, the poor rural infrastructure emerged to be the main barrier to the full participation of women in learning. The study, therefore, calls for the improvement of social, infrastructural and human resources to increase rural women participation in learning.

Keywords: women's participation, higher education, rural women, open and distance learning

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1.0 Introduction

Higher education is a vital tool for enhancing socio-economic and political development in any society. Higher education system is renowned for developing intellectual and human resources with potentials of bringing about development in society (Satyanarayana & Meduri, 2013). As women constitute the majority in society, they aspire to participate in higher education to harness potentials that could improve their career-path and wellbeing. However, the chances for their full participation are narrowed by socio-cultural responsibilities (Mhehe, 2003) that disadvantage women in a mainly conservative societies influenced by patriarchal values. The situation is more challenging for women in rural areas in developing countries (Manuwar & Akhter, 2017).

Prerequisites such as high entry qualifications, financial logistics, space and distance from the location of institutions tend to deter women from effective participation in formal education system. In many African societies, women are largely affected by the patriarchal system (Mhehe, 2003). Moreover, the nature of societal stratification of the gender roles of women disadvantages them. Specifically, domestic work, childcare and marriage responsibilities sometimes require fulltime engagement, thus restricting the women's mobility to other places. Hence, educational avenues which could accommodate women's needs are essential. As a result, education through ODL remains an alternative route to enhancing the women's participation in higher education. The ODL mode is flexible, cost-effective and accessible (Nyaruwata, 2014; UNESCO, 2002). It can support learning in selected places, including rural areas that tend to lack proper infrastructure. It also enables learners to determine the pace of learning while undertaking domestic chores. Women can, thus, benefit from flexible practices such as ODL that blend seamlessly socio-economic and academic activities.

Generally, women participate in learning for their development, as their empowerment and the transformation largely depend on the formal education they get. Many studies on ODL indicate that urban areas are endowed with more resources that are potentially supportive of women's development than the rural areas (Mahai, 2012; Ng'umbi, 2009). Other studies confirm that ICT and tutor support as well as library services are more accessible in urban areas than they are in rural areas (Bhalalusesa, 2001; Gudhlanga et al., 2012; Kwapong, 2007). This scenario naturally disadvantages rural based women seeking to get requisite support for ODL under such circumstance.

Studies from various areas in both developing and developed countries indicate that women's participation in higher education results from motives such as socio-economic and political motives. Yet, poor technology, various costs and social cultural factors tend to limit the realisation of such motives. Generally in Africa, internet access and availability distance from the study and regional centres and limited tutor support affects women participation in learning (Gudhlanga et al., 2012). This affects possibility of realising their dreams. Specific studies from rural areas also show that the area faces infrastructural, and socio-economic challenges (Fan et al., 2005, Gaal & Afrah, 2017; Mutatana, 2019). The rural area face limited access to internet services and electricity which are central to the effective practices of ODL (Gocotano et al., 2021; Mahai, 2012; Mbukusa, 2009; Rotas & Cahapay, 2020). Under such strenuous circumstances, one wonders how women manage to take part in learning in such a context.

Effective communication and interactions provided through synchronous and asynchronous mode are central to effective participation of women in ODL (Chaka et al., 2017; Jones & Graham, 2013; Lephala & Makoe, 2012). This allows women to engage in discussion forums, participate in learning sessions, share experiences and access tutor support. Given the unsupportive rural conditions, it remains questionable whether they could participate and excel in their studies. Similarly, one wonders whether rural conditions were supportive enough of women's socio-economic motives observable other areas. The current study explore motives and challenges that rural women experience when participating in ODL higher learning education. It seeks to contribute to the debate on women's participation in higher education by mapping practices from rural Tanzania and further stimulating debate on salient issues.

1.1. Purpose

This study aimed to explore the rural women's motives and challenges for participating in Open and Distance Learning (ODL) to gain higher education through the Open University of Tanzania (OUT).

1.2 Research Questions

The study was guided by the following questions:

- i. What are the motives for rural women participation in higher education through ODL at OUT?

- ii. What kind of challenges do rural women face in participating in higher education through ODL at OUT?

2.0 Review of Literature Motives for Women Participation in Higher Education

Women motives to partake in higher education are diverse. Generally many aspire to pursue higher education to elevate socio-cultural, economic and political status (Manuwar & Akhter, 2017; Nyaruwata, 2014; Rwegerera & Bhalalusesa, 2005). Education, as a tool for socio-economic transformation, enables women to develop skills and acquire knowledge essential for full functioning in the world of work (Brock & Commish, 1993). Similarly, women pursue education to maintain job security and the expectation of a better future (Manuwar & Akhter, 2017). ODL facilitates learning since it does not require women to leave their workplaces. On the contrary, this kind of flexibility enables women to arrange for appropriate learning schedules for them to continue with their socio-economic responsibilities while studying via ODL. On the other hand, women's participation in learning is associated with psychological and social motives (Bhalalusesa, 2001; Moore, 1987; Mushi, 2010). Education provides avenues for establishing new relationships, getting spouses, socialisation and possible access to guidance and counselling (Bhalalusesa, 2001; Mushi, 2010). Equally, education provides an opportunity to develop a sense of belongingness and coping strategies necessary for managing life events (Kwaah & Essilfie, 2017; Simpson, 2002).

Similarly, gender inequality and discrimination based on gender create an inner desire for women to participate in education and get the freedom many crave (Brock & Commish, 1993; Mhehe, 2003; UNESCO 2010). A study that was conducted in Pakistan also found that women participate in education to develop leadership qualities and develop decision-making skills (Manuwar & Akhter, 2017). These skills are essential in enhancing development at the individual, community and national levels. In short, gender inequality and the need for socio-economic empowerment, among others act as a driving force for women engagement in higher education.

2.1 Challenges to Women's Participation in Learning in Higher Education

Learning through ODL is usually hampered by the absence of effective academic and non-academic support. Therefore, access to relevant supportive infrastructures such as internet, availability of learning resources and learning devices, is paramount for effective ODL provision. Support such as tutor support, provision of learning resources, interactions and participation in online activities depend on having proper access to informative information and communication infrastructure (Mtebe & Raphael, 2017, Skordis-Worrall et al., 2015). The reverse could inhibit access to such potential services in ODL and across contexts. Empirical evidence from Africa confirm that women students in ODL in the rural context experience poor access to internet services, lack of electricity and low bandwidth (Gudhlanga et al., 2012; Mahai, 2012). In fact, poor access to internet and electricity services affect learning since ODL is electronic-based learning. This situation can also limit interactions by discussions forums, blogs, wikis and journals. As such, these are essential tools for sustaining women's learning in synchronous and asynchronous forms.

Studies conducted in Ghana and Zimbabwe also show that women students lacked access to ICT facilities, which undermined their participation in academic activities (Gudhlanga et al., 2012; Kwapong, 2007). Specifically, rural women seeking higher education get frustrated by existing infrastructural challenges in their locations and experience fear, isolation, lack of confidence, anxiety, and lack of self-motivation (Baharudin et al., 2013; Cosmas, 2018; Msoffe, 2016; Osafo, 2016). Moreover, the unavailability of a proper mechanism for addressing these psychological challenges could result in the women's inferior performance in academic pursuit and they might even drop out. Overall, financial challenges and inflexible learning and examination schedules could also limit the women's participation in learning (Cosmas, 2018; Kwaah & Essilfie, 2017).

Women's challenges are also deep-rooted in the socio-cultural context. Women have marital obligations, child-caring and domestic works to consider alongside their other exertions (Gudhlanga et al., 2012; Mahai, 2012; Msoffe, 2016). Inevitably, balancing socio-cultural roles with learning responsibilities may not be easy, hence challenging and frustrating. Similar challenges were observable in delays pertaining to their submission of assignments and completion of studies, which results from socio-cultural challenges (Angara et al., 2015; Davis, 2017; Nyaruwata 2014; Ngunyale, 2019). The challenges reviewed are numerous and

instrumental. Crucially, rural socio-economic and infrastructural limitations could result in context-specific problems. This raises the need to explore ODL-related challenges that women in rural areas face in their pursuit of higher education.

2.2 Theoretical Framework

This study is guided by the liberal feminism, a branch of feminism, whose primary premise is that women get discriminated and face limitations in terms of their participation in various societal sectors including education. Yet, gender equality and participation are crucial in widening women's education opportunities. ODL, as a development tool in education, provides equal opportunities for women to study within their locations without forcing them to leave their socio-economic activities. The theory works on the assumption that gender inequality is produced and reproduced by discriminatory systems and unequal distribution of resources and adherence to human rights mainly because of patriarchal norms and values. Thus, the theory agitates for the transformation, which enhances gender equality (Hardman et al., 2010). ODL, as a system, reduces discrimination in terms of access and participation in learning. The motives for participation in learning are linked to the powers to make informed decision and access socio-economic opportunities engendered by education. As such, women's participation in learning is essential for acquiring necessary development tools. However, the social, cultural, infrastructure and academic limitations tend to limit effective women participation in higher education and, thus, deter efforts aimed to attain gender equality.

Overall, the liberal feminism theory is relevant in this study as it supports women participation as a weapon towards improving their wellbeing in a society that usually marginalises women. Moreover, the theory emphasises the removal of gender-based barriers, which tend to limit women's progress. This framework facilitated the highlighting of the women's motives and challenges. Recommendations for increasing rural women participation in learning through ODL were made for a good cause.

3.0 Methodology

3.1 Research Approach and Design

The study used the qualitative approach to gather information from the rural context from where women students participated in learning through ODL. This

approach enabled the study to generate rich and in-depth information that formed a base for data presentation, analysis and discussion. The study also used a case study design to unearth women’s motives and challenges associated with participating in higher education via ODL in the rural context.

3.2 Study Area

The study was conducted at the Open University of Tanzania (OUT), which operates in 32 regional centres countrywide. OUT is the only university whose sole mission is to provide education through Open and Distance Learning (ODL) in Tanzania (United Republic of Tanzania, 1990). The study was conducted at OUT’s Katavi regional centre. The region’s rural features such as poor economic development, lack of adequate social services and poor access to educational opportunities (World Bank, 2020) made the area ideal for the current study in achieving its research objectives. The study region is also distantly located from OUT headquarters in Dar es Salaam, which made students from this area lack some of the physical resources that are near the country’s commercial hub access. Furthermore, the persistent small number of women enrolment in the region’s centre relative to other regions influenced the selection of the Katavi regional centre (Open University of Tanzania, 2020) for this study. This was contrary to regions such as Arusha, Mwanza and Mbeya. Table 1 presents the distribution of students (female) in the selected area for five consecutive years:

Table 1: Students’ Distribution in Region under Review

Year	Katavi	
	Male	Female
2015/2016	126	45
2016/2017	77	30
2017/2018	19	1
2018/2019	90	35
2019/2020	84	33

Source: OUT Facts and Figures (2020)

3.3 Sampling Procedures

The study used purposive and snowball sampling to draw its study participants. The sample comprised 21 study participants, fifteen (15) of whom were women students. Other study participants were three (3) tutors, one (1) regional director

and two (2) top OUT headquarters officials. The tutor and OUT leaders were overseers of the teaching, learning and support practices extended to women ODL learners in the rural areas. The tutors' and management's involvement in the study helped to inform, shape and clarify various issues which were raised by the women students' participants during the research.

3.4 Data Collection Methods

The study used semi-structured interviews and documentary reviews as the main data collection methods. Face-to-face interviews were held with ten (10) women students, three (3) OUT tutors, one (1) regional director and two (2) OUT top officials. Telephone interviews, on the other hand, involved five (5) women students. Additionally, the study reviewed documents containing data as well as other policy documents to supplement information gathered for the study using principal data collection methods.

3.5 Data Analysis and Trustworthiness

The study used content analysis to analyse data. The process began with the coding of words and sentences before forming themes and subthemes in accordance with the objectives of the study. Moreover, the study obtained informed consent from participants in addition to maintaining confidentiality and keeping proper documentation of data collection. Furthermore, the study ensured that data analysis maintained the research rigour and validity.

4.0 Data Presentation and Analysis

4.1 Women's Motives for Participating in Higher Education

Women students' motives for studying through ODL varied. They encompassed social and economic motives.

4.1.1 Economic Motives

Most of women students identified primarily economic and secondarily social motives as triggers of their pursuit of higher education. The rather unfriendly social and limited economic opportunities in the rural areas contributed significantly to the women's decision to participate in learning. They believed that education would unlock their economic barriers and provide a wide opening for high paying jobs. To them, education was a tool for improving skills and knowledge required to add value to their work in addition to assuring them that

they would eventually have better salaries and other remunerations. One of the participants looked at these opportunities beyond the borders of the country, thusly:

I have spotted some opportunities in KiSwahili languages. I want to complete my education and look for opportunities to teach KiSwahili outside Tanzania. I want to go international. My wish is to develop skills and teach KiSwahili to foreigners.

In this regard, the decision to embark on further studies was market-driven. Women students were aware that they could eventually improve their skills and strengthen their economic status through better salaries and remuneration.

Job security also emerged as a motive for some of the women to embark on such higher education pursuit via ODL. They feared that they might lose their jobs when they failed to embark on higher education. Some of them had to safeguard their positions by acquiring more education. These included magistrates, school-heads and discipline masters/mistresses. They decided to pursue learning through ODL, a flexible mode free from restrictions associated with fulltime participation in learning. Some women treated academic success as an opportunity for getting promotion in their jobs. In this regard, one of them said:

My salary will be higher and that will give me a better opportunity to serve my family [better]. Some of my old friends who completed their degree studies became heads of school and some [became] District Education Officers [DEOs].

A promising future seems to beckoning for women who participated in acquiring higher education through ODL. The upward mobility in work positions emerged in this study to be a powerful driver as they strongly believed that it would give them the power to lead and influence the decision-making process at their institutions. Thus, the power to negotiate was a motive for further education. Similarly, they reported that the acquisition of higher education would increase their retirement benefit. This added benefit was hardly noted in the literature reviewed. A 54-year-old woman participant who had only a few years before her compulsory retirement age of 60 said:

Once you retire as a degree holder, the retirement benefits are higher than that of a diploma or certificate holder. I have lofty expectations that I will complete my studies soon and submit my certificate to the government to get my [much improved] retirement benefits.

This statement shows that the participant's motive to pursue further studies was not only for economic gains. An assurance that learning would translate into long-lasting increased benefits in her life was enough impetus for her to participate in higher education. She was convinced that getting a degree, despite her old age, would enable her to achieve her objective. Implicitly, the determination to realise personal goals and freedom in economic spheres were overriding factors that made women pursue higher education through ODL.

4.1.2 Social Motives

One of the reasons for women studied to pursue higher education via ODL in Tanzania is socialisation. Their experiences on social challenges such as divorce and death of their spouses made them feel bitter experiences. Their engagement in education, therefore, made them interact with others through online discussion groups and, sometimes, meet with their colleagues at regional centres. They also enjoyed the sense of togetherness and some said they obtained inner happiness. The ability to get counselling from tutors and peers also consoled them. These practices motivated women to study hard and come to terms with those social challenges.

On the other hand, women studied to *gain recognition and respect* in their respective communities. They reported that they were tired of being perceived as inferior, undermined and regarded as uneducated by the general population largely because of patriarchal norms and values that disadvantaged them in many socio-economic spheres. They also wanted to do away with their inferiority complex. Indeed, they reported that they were uncomfortable when their colleagues talked about university education when they had none. As a result, they were determined to ensure that they were ultimately categorised as educated by having a degree in their possession. Consequently, women's participation in education gave them impetus to cope with social challenges.

4.2 Challenges Facing Rural Women in Participating in ODL

The study findings reveal various challenges that women faced when participating in learning in rural areas. These challenges include: socio-cultural demands, health-related challenges, cost of education, lack of quality learning space, poor infrastructure as well as limited access to financial support.

4.2.1 Socio-Cultural Demands

The first challenge was associated with the community's expectations and family obligations. Families and community members expected that women students would assume their household responsibilities. In this regard, one of the responding women said:

I postponed my studies as I had a sick child to take care of. It is difficult to continue studying when you have family issues. People believe that it is our obligation to take care of the family. I am also responsible for household chores such as cooking and cleaning.

These social responsibilities seem to dominate and consume women's lives. The possibility of compromising learning roles is much higher in the absence of counselling and time management skills. Moreover, women students were also responsible for participating in community social events such as marriages and burial ceremonies. Furthermore, communal lives in rural societies required them to engage in community activities. Failure to engage in the community activities could result in social exclusion and separation. Inevitably, community rules guided their participation in communal activities. However, their engagement consumed time and distracted them from learning.

4.2.2 Health-Related Challenges

Health issues associated with pregnancies also limited women's participation in the learning process. In this regard, one of the women said: "I applied for ODL [admission] in 2016 and became pregnant in my second year. I had to continue with studies in a hard way. I developed serious pressure, which made me postpone my studies." Health issues could sometimes delay the timely completion of studies and, thus, make women fail to realise their dream of acquiring higher education via ODL. Other women postponed studies because of a long illness of family members. In such a case, specialised learning support could enable women to balance their biological and health roles.

4.2.3 Cost of Education

The findings indicate that some women students incurred excessive costs when buying devices and internet bundle in addition to meeting travelling costs to regional centres to facilitate their ODL learning. Women students had to travel to regional centre for examinations, and to access tutor and ICT support. The general expectation is that ODL would reduce educational costs by engendering the cost-effective principle. Unfortunately, this was not the case. The poor infrastructures remained an inhibiting factor that piled the costs up in rural areas.

4.2.4 Lack of Quality Learning Space

The study findings also show that many of the women complained about a limited and constrained learning environment. They explained that they studied at home and in their offices. The main complaint was on the lack of superior quality learning space. At the office, they had to contend with some interference with employers' activities. Meanwhile, at home, the learning environment had noises from children; they also had unscheduled and unplanned for disruptive visitors. A combination of these affected their learning schedules. As one of the women ODL students explained:

You know with rural life, no one makes an appointment when coming to your house. You could be coming from work with the intention to study just to find that the whole clan is in your house. My home space is also full of noises. My children and those at neighbourhood do play together and make a lot of noise. It is hard to control such an environment.

The creation of quality space to facilitate women students' learning is important. The home environment is indeed a challenge for women concentration in learning. This could affect their academic performance in the absence of the institution of proper measures. Perhaps, a shift of learning time might be necessary to accommodate the situation at home.

4.2.5 Poor Infrastructure

The study findings noted that women students lacked a proper access to internet services, digital devices and physical libraries. This situation seemed to have the limited interactions and access to learning resources. Interviews with regional directors and tutors revealed that ODL established good online

system to support students learning in various locations. However, the situation was contrary to the experiences noted from women students in rural areas. The poor rural infrastructure was a barrier to harnessing OUT online potentials. Some women students said:

We do not have good access to learning resources. Our studies are online and we need to access materials and discussion forums. Poor access to internet is our main limitation. I sometime need to move away from my area just to access to the internet.

It is hard for me to participate in online discussion forums. I sometimes fail to participate in organised Zoom sessions. Our teachers also send assignments and course materials in Moodle. Access is really an issue in our context.

Women students needed improved online learning practices. The rural technological and infrastructural gap affected the use of online learning at OUT. The same problem emerged as a challenge for OUT's efficiency to deliver education to rural women. Perhaps, there is a need to integrate traditional practices to facilitate accessibility and participation of the rural women in learning.

4.2.6 Limited Access to Financial Support

Women students also indicated that limited access to financial support to pay for their tuition, travel costs to regional centres, internet bundle expenses, and the cost for participation in online forums proved to be counterproductive. Indeed, lack of financial resources posed a barrier to women academic achievements. Under such trying circumstances, the study also sought to establish whether students had access to loans. Their responses indicate that most of them were unaware of the existing loans arrangements at OUT. Clarifications from OUT officials indicated that the application for Higher Education Students Loans Board was open to all the students. However, the criteria for means test excluded some of the students. Moreover, OUT provided guidance on securing loans from financial institutions. Overall, limited awareness on sources of financial support among rural women students contributed to their limited participation in ODL learning.

5.0 Discussion

The use of ODL to facilitate the women student' acquisition of higher education in various areas seems to have positive contribution to development. ODL enabled women studied at their own time and pace, hence enabling them to deal flexibly with socio-economic responsibilities while continuing with learning. In this regard, this paper explored rural women's motives for pursuing higher education through ODL and determines their challenges to improving the learning practices. Consistent with previous studies (Brock & Commish, 1993; Manuwar & Akhter, 2017; Nyaruwata, 2014; Rwegerera & Bhalalusesa, 2005), this study found that women's engagement through ODL was mostly influenced by socio-economic motives. Indeed, economic hardship in the rural areas acted as push factors towards women's participation in learning. The general is a cry for emancipating themselves from the harsh conditions in the rural areas triggered by the poor the social, economic and infrastructural challenges (Fan et al., 2005; Gaal & Afrah, 2017). The hostile conditions influenced women to study to get better employment opportunities, promotion and, hopefully, high paying jobs. However, factors such as job market needs facilitate access to the world of work. In essence, education, as a transformation tool, can enable women to develop consciousness, confidence and acquire more employable skills, which are crucial in accessing new opportunities.

Notably, some women studied through ODL to obtain higher education level qualification in bid improve their retirement benefits. A 54-year-old woman, for example, was determined to unlock economic barriers through education. The woman hoped for sustaining a better post-retirement economic life. The decision to participate in education was attributable to the desire to gain economic strength during old age. Few women of her age could pursue an undergraduate degree. Moreover, it signals that ODL is suitable for different age groups regardless of geographical location. However, supportive teaching and a conducive learning environment are a prerequisite for nurturing students' unique motives to its full realisation.

Meanwhile, studies by Bhalalusesa (2001), Mushi (2010), Brock and Commish (1993), Mhehe (2003) and UNESCO (2010) also corroborated the results of this study in which women students had social motives. The findings indicated that women in their lifetime experienced social challenges such as bereavement and divorce. Women need social space and interactions to enable them to cope with

unfriendly situation. In this regard, ODL provided an opportunity for these women students to share experiences and get counselling to enable them to concentrate on studies. This means that their participation in ODL enabled them to develop social bond relevant for transforming their past.

Other motives for study hinged on recognition and appreciation as elite in the rural communities. Women wanted to get rid of the seemingly intractable inferiority complex, which resulted from their lack of a degree coupled with socially sanctioned belief that subjected women. Findings from earlier studies showed that women advanced themselves with a view to getting spouses (Mushi, 2010). This motive was not part of women's agenda in the current study as the majority of the responding ODL women students were already married. Moreover, gender-based violence and gender discrimination did not emerge as motives for women students' participation in learning (Brock & Commish, 1993; Mhehe, 2003). Further analysis of motives indicates that women needed to gain freedom from socio-cultural ties, which consumed their learning time.

The study also identified challenges that limited rural women students' participation in ODL learning for higher education acquisition. One of the notable findings was associated with poor rural infrastructure as women students reported struggling access internet services. This lack of internet access deterred them from participating in synchronous and asynchronous learning. In consequence, their desire to participate in learning at their convenient time and space could hardly be realised in such a situation. Equally, women experienced low bandwidth and others lacked complete access to internet. The farther away the women students were located from the established regional centres and urban settings, the more internet service-based challenges they experienced. However, the problem of poor infrastructure is not unique to rural students at OUT. It was an agenda in other parts of rural developing countries (Gocotano et al., 2021; Mahai, 2012; Mbukusa, 2009; Rotas & Cahapay, 2020).

Nevertheless, such challenge is discriminatory as it reduces women students' ODL opportunities and freedom of participation in learning. The utilisation of potential tools such as Zoom, Moodle and discussion forums remained a nightmare to some of the students, when these digital tools are globally-accepted as essential in the interaction and learning. Yet, the rural dimension in the area studied remained largely inaccessible for enabling women to access and optimally

benefit from ODL potentials. The poor access to infrastructure in rural areas contrast with ODL practices (Chaka et al., 2017; Jones & Graham, 2013; Lephhalala & Makoe, 2012). This situation calls for integration of non-online (traditional) strategies in a bid to facilitate women's active and effective participation in ODL for their higher education qualification.

Furthermore, women students had to contend with prohibitive costs of education as they largely had to pay from their own pockets, lack of time, poor learning environment and financial challenges. This finding is consistent with those of studies by Cosmas (2018) and Kwaah and Essilfie (2017). Issues of quality learning space also emerged in rural areas. The study found that women students' homes were largely unconducive for private study due to noise by children and interruptions from impromptu visits. Making appointments before visiting others was hardly a culture in rural communities under review. On the contrary, a communal culture created freedom of movements and interaction without restrictions among people. Indeed, experiences from other women students indicated that there was some interference in learning schedules, which limited attention and concentration for studies.

The findings further show that poor access to financial support limited the women's participation in ODL learning. Women students needed money for learning devices, internet and access human and learning resources. This situation favoured those with good financial capacity to access human and online resources, hence creating inequalities in the application of learning strategies as well as challenges to academic achievement. Improving rural infrastructure could, therefore, be an important agenda for supporting women's participation in higher education learning through ODL. Still, integrating non-online and online learning strategies should be considered for accommodating the needs of rural-based women OLD students. In the same manner, directing efforts towards improving rural infrastructure should be taken relevant for improving gender equality and keeping pace with ODL technological development in the world.

6.0 Conclusion and Recommendations

This paper has provided some insights into the rural women's participation in ODL at the Open University of Tanzania in their pursuit for higher education. The need to improve their socio-economic wellbeing and standing largely influenced the women's decision to participate in ODL learning to acquire higher

education. However, socio-economic, academic and infrastructural challenges were limitations that frustrated women's active and effective participation in learning in rural areas. Such encounters, if not addressed, could result in women's failure to attain their socio-economic aspirations. Overall, the complex nature of rural infrastructure limited the women's effective participation in learning. The rural picture calls for integrating non-online strategies to complement the current system. Doing so could allow the use of collaborative online tools as well as printed materials, access to physical tutor support at regional centres, recorded lectures in video, audio and storage of learning materials in flash. Moreover, there is a need to consider provision of financial scholarships, access to potential information, financial guidance and soft loans to ease the women's socio-economic challenges particularly in rural areas. Furthermore, there was need for enhanced collaboration of the government, educational providers and private sectors in a build to improve rural infrastructure and turn ODL practices into reality in rural Tanzania. These study findings are transferable and applicable to areas with similar characteristics. Also, a large-scale study using mixed methods approach could be conducted to allow the generalisation of the findings.

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Girls' Abuse in Tanzania Rural Secondary Schools

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Abstract

Considerable research has been conducted on the abuse of girls and women; however, there is little qualitative and smaller scale studies that are specific to Tanzania to provide particularised nuanced accounts of localised situations. Within a theoretical framework of African feminisms, this study explores the abuse of girls in one secondary school in a rural community of Tanzania. The data is from interviews and document review. The findings indicate that the girls experience sexual, physical, verbal or psychological abuse at school at the hands of their male teachers, which impact largely negatively upon their education. Despite such abuse of power by male teachers, it was observed that male teachers remain shielded from the consequences of sexually assaulting young school-girls, a situation which impedes efforts aimed to promote the education of the girl-child. The results provide crucial evidence on how to propose community-based interventions for preventing the abuse of the girl-child in schools.

Keywords: Girl abuse in schools, secondary education, African feminisms, Tanzania

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1.0 Introduction

Abusive behaviour towards girls in school is a global problem and a source of grave concern (Leach et al., 2014). It represents a violation of human rights and can have a negative impact on the girls' enrolment, attendance, participation and performance in schools. It is an obstacle to the attainment of gender equality in schools. Literature acknowledges that gender equality is integral to the achievement of universal quality basic education for all (Leach et al., 2014; United Nations [UN], 2016). As such, a country cannot claim to have attained universal access to quality basic education when most of its girls are abused in education settings.

The abuse of girls in and out of school has been a universal concern for years and has attracted the attention of the international community. The major international legal frameworks, such as the 1948 Universal Declaration of Human Rights, the 1960 Convention against Discrimination in Education, the 1979 Convention on the Elimination of all forms of Discrimination against Women, the 1989 Convention on the Rights of the Child, and the 1995 Beijing Declaration and Platform for Action condemn violence and abusive behaviour against girls and women. They also call for all member countries to take appropriate measures to protect all the people, particularly girls and women, from all forms of violence and abuse. In 2015, the international community adopted the 2030 Agenda for sustainable development and its 17 Sustainable Development Goals (SDGs). Goal Four of the SDGs (SDG 4), and its corresponding targets, call for action by all countries to provide 'inclusive and equitable quality education and to promote lifelong learning opportunities for all' (UN, 2016). Furthermore, SDG 5 calls for member countries to eliminate all forms of discrimination, violence and abuse against women and girls to ensure gender equality (UN, 2016). African countries are striving to accomplish these goals and Tanzania is no exception.

Over the past two decades, Tanzania has made considerable efforts in improving the enrolment, participation, and performance of girls in secondary schools, through the establishment of the Secondary Education Development Programme I (SEDP I) from 2004 to 2009 and SEDP II from 2010 to 2015. Although enrolments in lower secondary education indicate more females' enrolment than males (1,103,810 males and 1,218,449 females for governmental and non-governmental secondary schools) in 2020, this increased enrolment has not necessarily translated into improvement in the learning for many girls, especially

those living in rural areas. Some of the girls enrolled in secondary schools fail to complete their studies or repeat their grades whereas the majority of those who complete their secondary education fail to achieve good results in their final examinations relative to boys (United Republic of Tanzania [URT], 2020).

Though the reasons that lead to significant negative impacts on girls' educational experience and long-term outcomes in Tanzania are well known (Iddy, 2021a; 2021b; 2018), this study seeks to clarify the role that abusive behaviour plays in limiting the girls' educational opportunities and outcomes in Tanzania. Whereas many studies in Tanzania point to sexual abuse and violence against girls by teachers and boys in schools (McCran, 2017; Mlyakado & Li, 2019; URT, 2011), there are a few qualitative and smaller scale studies on the subject to provide more nuanced accounts of localised situations. Thus, this study attempts to fill this gap. It investigates the abuse of girls by teachers in one junior secondary school in one rural community of Tanzania. Furthermore, this study is unique as very few studies on girls' education in Tanzania have used African feminisms (a theoretical perspective for studying African girls and women living in Africa) to illuminate the data (Otieno, 2016). In this regard, this study adds to the breadth of studies in Tanzania and Africa in general that have utilised African feminisms in examining the girl-child dilemma.

2.0 Literature Review

In this study, the term 'abusive behaviour' against women refers to any act 'that results in, or is likely to result in, physical, sexual or psychological harm or suffering to women, including threats of such acts, coercion or arbitrary deprivation of liberty, whether occurring in public or in private life' (UN General Assembly, 1993). In the school context, a corporal punishment by teachers or prefects against girls constitute a physical abuse. Male teachers who engage in illicit sexual liaisons with school-girls are guilty of abuse. Likewise, teachers who engage in intimidating and aggressive behaviour of girls are guilty of committing such abuse (Mlyakado & Li, 2019).

Generally, a significant number of research studies identify violence and abusive behaviours at the hands of both teachers and male students towards the girl-child to be detrimental to her educational opportunities (Bisika et al., 2009; Chisamya et al., 2012). Some male teachers reportedly abuse their power as teachers to persuade the girls to have sexual trysts with them (Bhana, 2012). Sexual abuse by

teachers can have serious repercussions to school-girls as they may experience difficulties in concentrating in their studies, which in turn can lead to poor academic results.

Evidence shows that some school-girls are forced in illicit sexual affairs with their male teachers—who abuse their authority—for various reasons, including money, clothes, good grades and fear from violent repercussions from the male teachers should their advances be spurned (Jones, 2011; Leach et al., 2003). However, it is common for school-girls to refrain from willingly talking about their own sexual encounters with their male teachers, but instead to talk about other school-girls whom they know are having sex with their teachers (Leach et al., 2003). This is possibly due to the shame and stigma attached to such behaviour and a fear of being punished if a girl is found to be having sexual liaison with her teacher, which normally should be out of bounds.

This tendency of distancing from the offence also extends to male teachers. Generally, male teachers rarely admit having sexual trysts with their students (as it is unethical and irresponsible), but instead point at school boys having sexual relations with girls or refer to other male teachers from other schools (Iddy, 2018; Jones, 2011). This should not be surprising because such behaviour breaches their professional code of ethics in addition to abusing the trust society entrusts in them. Inevitably, the penalty is outright dismissal for any teacher caught condoning such behaviour.

Because of the secretive and abusive nature of such acts, most of the sexual abuses by male teachers upon hapless girls go unreported to the relevant authorities for them to obtain redress because the victims are largely unwilling to talk about their experience, do not know whether such incidents are offences, do not know the school procedure to follow to report, fear revenge from the perpetrators, dread the teachers will be punished, fear that they will not be trusted or unduly fear that they will be blamed for causing problems to the teacher (Bisika et al., 2009; Iddy, 2018). However, when such behaviours are officially reported by the girls or their parents, evidence shows that teachers are not punished let alone is any disciplinary measures taken against them for their illicit sexual behaviours against girls (Grant, 2011). Instead, girls who report such behaviours are regularly victimised, mocked and stigmatised by the teachers and students (Leach et al., 2003). This discourages girls from reporting the sexual incidents by their teachers. In consequence, they

continue suffering silently the consequences, particularly under the infamous culture of silence, which in turn may affect their active and effective participation in academic activities, with a negative effect on their results.

Apart from abusive sexual behaviours, male teachers also resort to abusive language towards the girls. A study by Leach et al. (2003) found teachers to use phrases such as ‘useless people’, ‘villagers/bush people’, and ‘children of the poor’ when communicating with girls. Teachers were reported to deliver sexist comments. When girls responded to the questions, teachers reportedly commanded them not to respond as though they were responding to their boyfriends. Or when they swept the floor, the teacher who was not satisfied with the sweeping reportedly said: ‘Is that how you clean your boyfriend’s room?’ These are sexist and derogatory remarks. In another study by Dunne (2007), a teacher greeted a girl as his wife. This kind of language may affect the girls’ behaviour and affect their full participation in the classroom and school in general and may cause dropout cases and/or poor performances.

3.0 African Feminism(s)

‘African feminisms’ provide useful theoretical framework through which to explore the experiences of African girls and women living in Africa. African feminisms are not only concerned with the right to vote, the female body, gender and/or sexuality as it is the case with Western radical and liberal feminisms. Instead, they are humanistic feminisms (Steady, 1987, p. 4), because they ‘recognise the inherent, multiple roles of women and men in reproduction, production, and the distribution of wealth, power, and responsibility for sustaining human life’ (Badejo, 1998, p. 94). Arndt (2002) describes four features that define African feminisms. First, African feminisms emphasise the idea of co-operation with men to improve the status of women. Secondly, they aim to criticise and challenge patriarchal structures. Third, African feminisms aim to discuss the roles of men and women in the context of other oppressive mechanisms, including cultural imperialism, neo-colonialism and racism. Fourth, African feminisms, apart from criticising the patriarchal structures, endeavour to find new alternatives likely to free women from oppression.

Extant literature (see, for example, Atanga, 2013; Chiweshe, 2018; Tamale, 2014) shows that there is no single African feminism, but various ‘African feminisms’ due to cultural, linguistic, political, religious and geographical diversities prevailing

on the continent which interact with and affect the way African women's conceptualisation of feminism. Given this diversity, many African feminist scholars suggest the usage of the term African feminisms rather than the singular African feminism (Atanga, 2013; Chiweshe, 2018; Tamale, 2014). Apart from these differences, African feminisms share several things. First, they all reject the Western meaning and origin of the term 'feminism', because they tend to redefine the concept to represent rightly African women's cultural experience (Nkealah, 2016). Second, they all depend on indigenous models, as they draw the necessary tools for empowering women and educating men on the histories and cultures of African people (Nkealah, 2016). Third, they all insist on gender inclusion, collaboration and the accommodation of both women and men to improve the living conditions of women in Africa (Chiweshe, 2018; Nkealah, 2016). Fourth, they all fight against patriarchal dominance, which manifests itself in social, political, cultural and economic structures, such as the family, employment, education, law and religion (Nkealah, 2006). Furthermore, they all fight against oppressive and harmful cultural traditions (Nkealah, 2006), against the poor economic and living conditions of African women (Ampofo et al., 2008) and against sexual assault (Oyekan, 2014).

African feminisms consider the different roles and responsibilities that men and women assume to ensure the continuous survival of their families and communities (Atanga, 2013). As men and women perform their roles in the communities, which could be biological, cultural, socio-economic and other roles, many problems emerge for women (Badejo, 1998; Steady, 1987). A typical example of such problems is the failure of girls and women to participate effectively in education. In a similar situation, the theory attributes the subordination of girls and women to structures and institutions that adhere to the patriarchal system, which is the system of domination of men over women, manifesting itself within the family, institutions, community and the nation (Atanga, 2013; Mekgwe, 2008). In other words, men have supreme power over all matters and are the ones who control and own the resources and the decision-making process (Coetzee, 2001; McFadden, 1997). As such, this system affects women, because all the power in the family, community and the nation remain completely in the hands of men.

In the same vein, African feminisms treat women's oppression and subordination as an integral part of the socialisation process within the family (McFadden, 1997).

Moreover, the morals instilled into the girls by their parents during childhood affect the girls' future participation in economic, social and political sectors (McFadden, 1997). Under the traditional African set-up, girls tend to be sufficiently inculcated with values and attitudes to prepare them to assume their future roles as wives and mothers (Apusigah, 2009). In consequence, this socialisation denies girls an opportunity to shine in other activities that are beyond the home environment. Furthermore, girls are instilled with culturally inscribed beliefs of minimal power aspiration, respect, obedience and submission, and greater dependency on men (McFadden, 1997). Such qualities are at odds with the notion of placing girls in an equal position with men. Such qualities also compel girls to feel inferiors to males, hence making them defenceless against verbal, sexual and physical harassment and abuse (Hari, 1998).

Furthermore, African feminisms recognise that women's oppression is caused by religious and cultural traditions as well as norms that discriminate against women (Chukwuma, 2007). Such traditions include child marriages, dowry payment, polygamy, female genital mutilation and nutritional taboos (Onaeme, 2012). Similarly, women's oppression and subordination in Africa result from harsh economic conditions and poverty (Chukwuma, 2007; Steady, 1987). African feminisms also treat women's oppression to be caused by some policies and laws that discriminate against women (for example, the disciplinary policy of expelling pregnant girls from schools, the Marriage Act), a lack of laws that protect girls and women from violence and other forms of oppression, and the poor implementation of the existing policies (Kolawole, 1997; Mikell, 1995).

4.0 Methodology

This study was conducted in one rural community found in Tabora region of Tanzania. To observe ethical issues, the name of the study village remains anonymous. Tabora region was purposively chosen primarily because it ranks among the lowest regions in the country in terms of female school enrolments, attendance, and performance relative to boys in secondary schools (URT, 2020). The village was deliberately selected based on my familiarity with the area. I was born, grew up and attended the local primary school in this village. This familiarity of the place was important in securing entry into the village and in gaining access to potential participants.

Based on the 2020 data available at the office of the Village Executive Officer (VEO), 5,033 people live in the selected village, of which 2,465 are males and 2,568 are females. The village is not occupied by any homogeneous groups. Whereas the native people of the village are the Sukuma; other ethnic groups include the Nyamwezi, Nyiramba, Waha, and the Nyaturu. The village is characterised by a tropical climatic condition, with most people practising agriculture, livestock keeping and business as the main economic activities.

The village has one secondary school, which was the focus of my study. This secondary school was established in 2006, with the first students graduating in 2009. By December 2020, the records indicate that the school had 520 students (Form I to IV), of which 295 were girls. There were 12 male teachers and three female teachers. Since its establishment, this secondary school has succeeded in sending 64 students (between 2010 and 20120) to Form V and tertiary colleges, but only 21 were girls due to the low performance of girls in the final national Form IV Examinations relative to boys.

The study adopted a qualitative research approach and specifically employed an ethnographic research design to capture the lived experiences of girls' abuse and violence in one secondary school. This approach facilitated an understanding of the views and perceptions of respondents on the abuse of girls in secondary schools. This paper represents the views of 16 participants who were purposively engaged in the study, comprising four school-girls, two school-boys, three teachers, one headmaster, four parents, one VEO, and one District Education Officer (DEO). All the participants voluntarily agreed to participate in the study and could withdraw from the study at any time if they so wished.

Relevant data for this study was collected using interviews and document review. Participants were invited to participate in a single semi-structured interview lasting no more than an hour. The interview sessions were audio-recorded with informed consent from the participants. All the interviews were conducted mainly in Kiswahili, the national language, and later transcribed and translated into English. Furthermore, three documents, which were largely accessed online, were subjected to a critical examination. These documents include the Basic Education Statistics in Education, the professional code of ethics for teachers in Tanzania, and the 1997 Constitution of the United Republic of Tanzania (URT).

All the data collected were analysed using Creswell's thematic analysis which consists of five stages: Preparing and organising data for analysis, reading and memoing, describing and analysing data into themes, interpreting the data and representing the data (Creswell, 2013). The study was informed by African feminisms as a theoretical perspective, which supported the interpretation of the findings.

The study obtained approval from the Human Research Ethics Committee of the University of Newcastle (Australia) and permits from the University of Dar es Salaam in Tanzania, Regional Administrative Secretary of Tabora region, District Executive Director, VEO and the head of school. All the participants signed a consent form. Parents or guardians of school children signed parental consent forms to allow their children to participate in the study. Moreover, all the participating children, whose parents had signed the parental consent forms, signed a consent form. Accordingly, all the participants' names have been deidentified when quoting their statements during the reporting of the findings to ensure anonymity and confidentiality. I have used pseudonyms instead of real names.

5.0. Results and Discussion

5.1 Male Teachers Abusing Their Power as Educators

Analysis of the interview data shows that there were a number of consistent references from different research participant cohorts that mentioned the problem of male teachers abusing their power as educators. For example, Sofia, a school-girl aged 17, explained the difficulties:

A girl can go to school and find her teacher seducing her. So, if she refuses, she can find herself being punished every day. So, a girl uses more time thinking about that relationship rather than thinking about studies (Sofia, school-girl).

Another school girl, Aisha also aged 17, said:

Another challenge comes from male teachers. Some of them seduce female students. If they are rejected, they make female students fail examinations or administer unnecessary punishment to them (Aisha, school-girl).

School boys also seemed to be aware of the problem:

The girls may be seduced by their teachers. This makes the girl uncomfortable when the teacher is in the class teaching. Sometimes, the girl may be given unnecessary punishments by that teacher if she repulses the advances (Paul, school-boy).

There seems to be a consensus that a school-girl is placed in a difficult position and may even be punished if she does not agree to illicit sexual liaisons. Some mothers also seemed to be aware of this problem: “She may be in the class, for example, and her teacher wants to start an illicit love affair with her. That is one of the challenges...” (Judith, mother).

However, not all parents were sympathetic to the difficulties school-girls face:

You find that some teachers are not ethical. Instead of teaching the girls what they are supposed to teach, they start seducing them. And since some girls are cowards, they accept to be in relationship with their teachers... So, this may result in teenage pregnancies (Azzah, mother).

Azzah reflects the seriousness of pregnancies outside marriage and perpetuates a range of stereotypes on the sexuality of young girls. In this extract the responsibility of resisting sexual advances rests with a young girl and if a pregnancy does eventuate the blame, responsibility would also fall squarely on the girl-child. This goes against the Department of Education’s policy which requires teachers to abstain from having illicit sexual trysts with school-girls (URT, 2002), but in rural and remote areas local attitudes prevail and proving a teacher’s culpability is extremely difficult. This finding regarding the sexual abuse of girls by male teachers is consistent with the findings of other studies undertaken in Africa (see, for example, Bhana, 2012; Chisamya et al., 2012; Grant, 2011; Jones, 2011). Implicitly, sexual relations between male teachers and school-girls can result teen-age pregnancies that curtail the education of the girl-child. Indeed, this situation in turn leads to school expulsion for the school-girls affected:

There are legal actions that we take based on government directives. That, once a girl is pregnant and it is proved beyond doubt,

according to the directives, she is expelled from studies (Magesa, Headmaster).

This exemplifies the legalised practice which oppresses women. In this regard, African feminisms proffer that some laws, policies and guidelines punctuate problems for women and, therefore, call for the reform of such policies (Kolawole, 1997; Mikell, 1995). This practice violates girls' right to access education as stipulated in the Constitution of the URT.

The comment by Azzah above also raises an important issue. Tatu admitted that school-girls were disturbed by some of the misbehaving male teachers who proposed 'love'. Although Tatu condemned male teachers for being unethical, she also placed the blame on the girls, stating that they were cowardly and consented to sleep with their teachers. The question worth asking here is: Why is it that some mothers blame the girl-child for this situation? Some African feminist theorists try to explain this situation by observing that this is how marginalised groups survive in society. As women, they are still marginalised and oppressed in the society and, therefore, vulnerable as adults. So, to survive, they have to take on the thinking of males, the dominant group, namely the patriarchy (Monagan, 2009; Nanda, 2012). In other words, it is a protective mechanism for surviving in an oppressive patriarchal society. So, from the perspective of Azzah and other mothers, they are in a situation where they are powerless, and need to justify this behaviour. As it is hard for mothers in a male-dominated society to speak out on a male teacher abuse of the girl-child. And if that happens, these mothers would no doubt be in trouble and their husbands would be horrified. So, Azzah's comment could indicate how marginalised groups survive in the Tanzanian rural society.

5.2 Society's Attitudes Perpetuate the Continuance of Sexual Abuse

Another aspect for emphasis is how the participants of this study talked about these sexual abuses by male teachers. They used soft words or euphemisms to express the behaviours of the male teachers, such as 'love relations', 'seducing' or 'love affairs'. This is influenced by society, as it remains taboo to talk openly about such things. For example, Sofia, a school-girl aged 17, used the following words in her narrative about male teachers' sexual abuse.

Some girls do engage in love affairs with their teachers for fear of being punished every day. So, when a girl is in sexual relationship

with her teacher, do you think there is learning there? (Sofia, school-girl).

Again, Azzah's narrative above "... since some girls are cowards, they accept to be in relationship with their teachers..." suggests the use of soft words when noting a sexual abuse done by teachers. This is a significant challenge in fighting the abuse of girls by male teachers. Such words contribute to allowing such behaviours to happen and keeping male teachers safe. 'Love' relations imply there is consensus and a more equal relationship of power than is apparent from the evidence. These behaviours by male teachers towards school-girls deserve no other label than being termed as sexual assaults and an abuse of power. In other words, if male teachers have illicit sexual liaisons with school-girls this constitutes sexual assault and an abuse of their power. Such naming and shaming can help reduce the conduct of such behaviours. Therefore, society's attitudes that perpetuate the continuance of these behaviours by male teachers by normalising such practices, even when there are laws and policies making such behaviour illegal.

5.3 Some Girls are not Willing to Report Cases of Sexual Abuse

Interestingly, only one school-girl admitted being propositioned by a male teacher and rejecting the 'love' proposal: "I was seduced by a certain male teacher. I rejected his proposal... (Sofia, school-girl)." This situation created troubles as she started experiencing frequent beatings, insults and harassment from the teacher she had rejected. The other three school-girls were not willing to talk about their own experiences. Instead, they talked about other girls whom they said were seduced or having 'love affairs' with their teachers. References to this behaviour were made by school-girls as well as school boys and mothers. The participants had knowledge of unwanted sexual advances from teachers; therefore, this appears to be a serious and an all too common practice. Leach et al. (2003) also came up with similar results, as some school-girls confessed to have faced illicit advances from teachers. However, no one admitted to having illicit sex with a teacher. This appears to be a common practice used by most of the school-girls to distance themselves from the offence. This may be due to the social stigma attached to such behaviour or the fear of being held responsible as it is against school law and can lead to expulsion if found culpable (Iddy, 2021a; 2018). In this study, the school-girl, who admitted being sexually-harassed by her male teacher,

is a courageous young girl for speaking out against a vice that continues unabated based on evidence from the girls, boys and parents.

From an African feminist viewpoint, this research indicates that there is unequal relationship of power that relates to both gender and class. The current cultural context of male dominance and patriarchy is so powerful that some women are unwilling to see the lack of agency available to young vulnerable girls; and the position of male teachers seem unassailable, hence largely unchallenged. The consequences for young school-girls is that they see school as a dangerous place and not a haven, with some mothers and fathers preferring their daughters not to go to school at all.

5.4 Teachers' Reactions to Girl-child Abuse Issue

Female Teachers Agree that Girls Experience Sexual Abuse

A female teacher agreed that male teachers made advances to their students. She also confirmed that girls were frequently punished and insulted if they spurned the advances of their teacher:

Of course, one of the challenges is that of being seduced by their teachers... When the teacher seduces a girl and the girl rejects him, in any way that girl will be in trouble. She can frequently be punished and insulted (Vick, female teacher).

In another account, she added:

Girls feel shy to come to our office to ask questions because there are some male teachers who seduce them. As a result, they know that asking questions will result in awkward answers from male teachers whose sexual advances they have spurned (Vick, female teacher).

At this school, 11 teachers shared one office space that served as a staffroom. The headmaster, second master, academic master and discipline master respectively—all males—had separate individual offices. The lack of privacy in the staffroom made many girls reluctant to go there for any academic related inquiry for fear of being verbally harassed by the teachers whose advances they had spurned. This situation is likely to affect girls negatively in relation to both their school

attendance and performance. Such girls avoid visiting the staffroom to avoid exposing themselves to a predatory male teacher hell-bent on abusing his authority. In this context, this avoidance serves as a defensive mechanism that allowed them to steer clear of the prying eyes errant male teachers.

Male Teachers Reject Abusing Girls Sexually

On the other hand, male teachers blatantly dismissed such allegations, arguing that the school-girls fabricated this issue against them to tarnish their image. For example, Denis, a male teacher explained:

Problems sometimes happen. When you advise a girl on her errant conduct and she receives the advice negatively, she can create some falsified claims against you as a way of reacting against your goodwill towards her. She can lie that you have seduced her, knowing that it is not true. That tendency discourages teachers from helping school-girls (Denis, male teacher).

Similarly, Mathias, another male teacher, said:

A certain student wrote to a teacher a message on a piece of paper that read 'If you continue monitoring or punishing me, I will tarnish your image, I will tell your fellow teachers that you are seducing me' (Alan, male teacher).

Implicit in the two statements from the male teachers is a case of shifting blame. As such, they were either not making advances to their students as they claim, or they were unwilling to admit to luring girls into illicit sexual affairs. Instead, they suggested that the school-girls were telling lies to revenge against teachers who were actively monitoring their behaviour in and outside the school. On the other hand, the teachers were avoiding implicating themselves in what they know is unprofessional and unethical. Certainly, the incriminating girls' testimony and that of the female teacher indicate that there was something amiss in the behaviour of some of the male teachers. In any case, if they were the perpetrators they could not admit publicly, a common strategy men use when they abuse their power to maintain control.

Whereas the male teachers blatantly refused to acknowledge that they harassed the school-girls, the only female teacher who participated in this study openly admitted that such malpractices existed in the school, though she did not reveal the identities of the culprits. This finding is consistent with that of Leach et al. (2003), who found that female teachers admitted that some male teachers had sexual liaisons with their school-girls despite the male teachers denying such claims. In other words, educated women can fight to improve the living conditions of fellow women in society (Iddy, 2018). Implicitly, women's status in society is likely to improve when all women have a sound education.

5.5 Males Support Each Other to Oppress Females

The VEO and the DEO were also asked about the allegations of male teachers engaging in illicit sex activities with their female students. In particular, the VEO defended the male teachers, refusing to believe that this type of behaviour still existed. He cited two examples to show the extent to which male teachers spent time monitoring and punishing students who were involved in love affairs. He argued that if the teachers were implicated in illicit sexual affairs with their students, then they would not see the value of following up and punishing female students who engaged in premarital sexual behaviours. Furthermore, in defence of the male teachers, he said that even if such errant behaviours, it would be on a very negligible scale:

This has never happened. It may be just rumours from parents. I remember it was either in 2013 or in 2014 when teachers... took trouble to investigate and punish a school-girl who was caught involving in sexual affairs. If male teachers had this behaviour, they would have not seen the need to follow up the conduct of this school-girl. For this, I defend the teachers. I have never heard of it... Anyway, maybe I shouldn't say much and if there are any, it may be so small a percentage (Marco, VEO).

On the other hand, the DEO was not categorical as he said that it was possible that some male teachers engaged in illicit sexual affairs with their students, but he had not received any formal complaint from the students or their parents. He said that may be such issues had been reported and addressed appropriately by the school headmaster at the school level:

Such allegations have not yet been reported to me officially by students or their parents. I think it is possible that such issues happen at the school level. But it is also possible that students decide to report the incidents to the headmaster, not to me here. The headmaster has an authority to address them depending on the nature of the allegations (Dilunga, DEO).

When asked about this issue, the headmaster responded as follows:

I also hear the rumours from the people in the streets. The girls have not reported such cases to me. So, as the head of school, I cannot work on the rumours... (Magesa, Headmaster).

The headmaster's statement needs qualification. He appears to be defensive to protect the image of his school and his fellow male teachers. As this study's findings illustrate, cases of sexual abuse have been brought to the attention of the school authorities. For example, consider the following testimonies of the girls interviewed for this study:

There was a male teacher who was proposing to a girl, that girl rejected and reported the issue to the matron and head of school. However, no action was taken against that teacher. We see him continuing with his duties... (Martha, school-girl).

I was seduced by a certain male teacher and rejected his advances. But the teacher continued approaching me, promising that he will give me money if I accept him. I finally reported the matter to the headmaster for further action... (Sofia, school-girl).

Thus, how come the headmaster speaks of none of the cases having been reached his office when both these incidents occurred in his school? This denial exemplifies of how men support each other when women are oppressed. Yet, the protecting of the male teacher accused of sexually harassing young school-girls sends wrong signals to both the victims and the perpetrators. Paradoxically, it is almost 53 years since the first president of Tanzania, Julius Kambarage Nyerere, said in 1968, 'Let us have an equal society in which all members have equal rights and equal opportunities and that nobody can be exploited or exploit' (Nyerere,

1968 in Brock-Utne, 2004). The question worth exploring here is: Why are there so many people protecting abusive male teachers?

One possible answer could be that there are teacher shortages in the country. Since the law requires the teacher to be expelled and jailed for 30 years in prison if found guilty of sleeping with a school-girl (URT, 2016), hiding the sexual abuse seemed to be a possible short-term solution to maintaining the few available teachers. Another way to explain this situation is that, according to feminist theories, this strategy is a continuation of male chauvinism and sexism fostered by the dominance the male gender enjoys, thus perpetuating the system that already disadvantages school-girls in so many ways. In patriarchal societies, men generally tend to support other men regardless of whether they are breaking the law, to maintain male power (Acker, 1987; Arnot, 2007). As findings from the current study indicate, any girl who accuses a male teacher of sexual abuse and harassment is dubbed a liar or a trouble-maker, or there are denials that such behaviours are non-existent. Under these circumstances, girls get blamed for what is happening or are labelled as liars because their vulnerability and lack of power in the teacher-student in-equilibrium.

As was mentioned above, African feminisms insist on the idea of the teamwork of both women and men to improve the poor conditions of women in societies (Arndt, 2002; Chiweshe, 2018; Nkealah, 2016). This runs counter to some Western feminist theories, which to some extent focus on excluding men in the battle to improve women's conditions (Hussain & Asad, 2012). However, African feminisms try to find a space where there is recognition of the value of women's work to society alongside recognition of the value of men's work to society, and how both genders can work together to improve life and women's condition in society (Chiweshe, 2018; Nkealah, 2016). Therefore, as male teachers are still protected by male government officials and the head of the school whilst sexually assaulting school-girls because of their lack of an awareness of the unequal power relations, it seems that there is a long way to go towards improving the status of women in African societies and rural Tanzania in particular. Women's conditions would improve when men change their actions and start collaborating with women effectively to produce better living conditions for both men and women.

5.6 Girls are Verbally Harassed by Male Teachers

Another way that male teachers behaved inappropriately, as reported by research participants, was the use of abusive language towards the girls:

One day while we were sweeping the floor in the morning at school, a male teacher passed by and greeted a girl in public as his wife... (Zurfa, school girl).

A certain male teacher called me a useless and stupid person and that I will not pass the final examination; I will end up being married (Martha, school girl).

Studies by Dunne (2007) in Ghana and Botswana and Leach et al. (2003) in Ghana, Malawi, and Zimbabwe came up with similar findings. In other words, this malpractice that disadvantages the girl-child in the school environment is not just a local problem as it appears to be widespread. The female teacher, Vick, claimed that girls reported to her (as a matron) that male teachers used words such as ‘failures’, ‘losers’, ‘useless people’ and ‘future wives’. This kind of verbal abuse disappointed and discouraged girls. Such words—coming as they do from teachers, who are supposed to serve as role models—have significant negative impacts on girls’ ability to learn. In consequence, the girls start believing that they are only meant for marriage, something that augurs well with traditional modes of socialisation in a patriarchal society. Some might even be prompted to quit school and get married.

This study, alongside others in Africa (Bhana, 2012; Bisika et al., 2009; Chisamya et al., 2012; Dunne, 2007; Grant, 2011; Leach et al., 2003), confirms that teacher behaviour which is an abuse of power relates to both class and gender continues in male-dominated patriarchal societies where men feel the need to assert authority. For female students, in particular, this tendency contributes to schools being unsafe places in addition to contributing to lowering the school performance levels of the girl-child and female students’ withdrawal from education.

6.0 Conclusion

This paper has taken an African feminisms approach as a theoretical tool for analysing the abuse of girls in one secondary school in one rural community in

the Tabora region of Tanzania. The results provide evidence that abusive behaviours against girls continue unabated in school, which impact upon their education. It has shown that girls experience various forms of abuse at the school which are sexual, physical, verbal or psychological at the hands of their teachers. This situation can lead to teenage pregnancies (which in turn leads to school expulsion) and the illicit sexual liaisons with their teachers could also lead to girls contracting sexually-transmitted diseases, including the dreaded and still incurable HIV/AIDS. Furthermore, the multi-faceted abuses of the school-girls can lead to poor attendance, lower academic performance and high dropout rates for girls, because school is no longer a safe place for them. Despite the abuse of power by male teachers towards the girls, it was observed that male teachers were still protected from the consequences of sexually assaulting young school girls. This scenario impedes efforts aimed to promote girls' education. Based on the evidence from this study, it is apparent that abusive behaviour against school-girls is both a cause and consequence of inequalities between male and female obtaining in a society.

Indeed, abusive behaviour against girls in school is a major threat to national development and our efforts to realise the Tanzania Development Vision 2025 (TDV 2025) and to reach the Sustainable Development Goals. The TDV 2025 aims to transform Tanzania into a middle-income (semi-industrialised) country by 2025. This goal can be compromised if girls—an important segment of society—continue to be abused in school. Furthermore, an inclusive and equitable quality secondary education, as stated in SDGs, will not be achieved unless girls feel and are safe in school. The war against HIV/AIDS will also not be won unless sexual abuse is stopped especially for girls. Similarly, the incidences of physical and mental health problems among adults could not be reduced until all forms of abuse against children are eliminated. Indeed, exposure to abuse or violence during childhood can lead to a broad range of mental and physical health problems during adulthood (URT, 2011). Therefore, building a better future must start with ensuring the safety of each girl at school by creating safe and supportive learning environment, which are free from fear, abuse and discrimination. When girls stay safe in school and have access to a better-quality education, they can reduce poverty, increase their income, improve agriculture, control population, improve their family health, educate their children, reduce child mortality rates, and end child marriages (Sperling et al., 2016).

The research reported here has, therefore, helped to fill the gap with respect to smaller scale qualitative studies on the abuse of girls. It has provided evidence of the extent and severity of girls' abuse in a rural community. Moreover, it has added to the breadth of studies in Tanzania and African that utilise African feminisms, showing how patriarchy affects girls' secondary schooling. Using African feminisms, as a theoretical lens, has helped to place the study within the realities of an African context. Overall, until the abuse of girls in school is acknowledged and strong measures put in place to mitigate it, Tanzania will be unable to provide truly inclusive and equitable quality universal secondary education by 2030.

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Evaluation of Co-operative Education and Training for Sustainable Agricultural Marketing Co-operative Societies in Ukerewe and Sengerema Districts, Tanzania

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Abstract

In the world today, co-operative societies are important to the extent that co-operators have opted to ensure their sustainability by establishing guiding principles, education and training. With this regard, the Tanzanian government has made efforts to ensure regular provision of Co-operative Education and Training (CET) in each co-operative society. However, CET provision in Tanzania remains unevaluated and mal-evaluated, resulting in unsustainable, dormant and extinct co-operative societies. Yet, the extant studies on CET are too general as they cover the overall performance of the co-operatives, leaving out CET evaluation unexplored. This study evaluates CET in Tanzania by determining the status of CET and examining the practice of CET evaluation in Ukerewe and Sengerema districts. Findings were drawn from 64 respondents using purposive sampling technique. Data were collected through focus group discussions, key informant interviews and documentary review. Thematic analysis was used to analyse data. The study used a context, input, process, and product (CIPP) model of education evaluation to examine the practice of CET evaluation. The findings revealed that regardless of the existence of CET evaluation both formative and summative, there were some shortfalls. In terms of practice, the findings revealed that CET was seasonal while the context, input, process and product evaluation were unsatisfactory; hence confirming the poor trend of co-operative societies' development. The study concludes that CET is still a necessity to ensure both the status of CET and practice. The study recommends CET institutions to prepare a centralised curriculum for all co-operatives and review CET regularly to suit societal needs. The government should set aside funds for CET and needs assessment to avoid irrelevant knowledge to the co-operators.

Keywords: Co-operative society, education, training and sustainability

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1.0 Introduction

Worldwide, evaluation remains one of the vital means of measuring the performance of any activity. Its necessity is determined by the goal of making judgement as to whether the activity is performing well or not (Birchal & Simmons, 2010; Sharan & Tisdell, 2016). Aldapit and Suharjana (2019) report that every society in the past has implemented some forms of performance tracking systems (evaluation) and that the ancient Egyptians regularly evaluated output in grain and livestock production 5000 years ago. Since then, evaluation has been used as a means to change the lifestyle and practises for betterment of today and the future (Idapit & Suharjana, 2019). Woodin (2015, p 23) citing Socrates, the ancient Greece philosopher, states that “unexamined life is not worth living”.

In the co-operative sector, just like in other sectors, evaluation has been growing simultaneously with the societal transformation (Birchal & Simmons, 2010; Goldie, 2009). Historically, evaluation of co-operatives has taken place in different phases; notably during their creation, running, failures and in the re-establishment moments (Okoli & Ezenwafor, 2018). In all evaluation processes, pertinent areas have been touched including that of education and training. In the 19th century, the Rochdale society in England managed to establish the modern co-operative society after strengthening the education and training section, having learnt from previous failures (United Republic of Tanzania [URT], 1966; Birchal & Simmons, 2010; ICA, 2016).

In Tanzania, co-operative societies have been striving to improve their performance through various initiatives, evaluation of their CET programme inclusive. Maghimbi (2010) reports that evaluation of co-operative education and training helps to measure the extent to which goals and objectives of such education and training have been achieved. More specifically, CET programme evaluation allows the co-operators to know the direction to which co-operative heads in terms of knowledge provision, noting failures and success if any, and possible purpose necessity changes in the implementation of CET curricular.

Given the necessity of co-operative societies in Tanzania, the government has been establishing various education programmes so as to promote co-operative development and sustainability. In 2017, the government through Tanzania Co-operative Development Centre (TCDC) established and implemented the Co-operative Education and Training Programme for co-operators (members, the

management and employees). The rationales for establishing CET programme resulted from various reports, Mkapa's 2001 report, 2018's Savings and Credit Co-operative Societies (SACCOS) world report, Co-operative Audit Corporation (COASCO) report of 2018 and 2019) stating the presence of various challenges in co-operative societies in Tanzania, of which wanting member education and training, irresponsible leaders, failure to prepare reports pertaining to income and expenditures were mentioned as one of the core reasons. This programme has since then been decentralised, each region having its own committee through which can harmonise its programme and implement its conduction based on the specific contexts.

In the Mwanza region, co-operative education and training programmes have been implemented so as to promote co-operative development and sustainability. From 2017 to date, the Mwanza Region Co-operative Committee has launched the Annual Capacity Building Co-operative Programme for members of which the structure suggested CET for members to be provided through the regional committee. The programme has identified courses for management in AMCOS (Agricultural Marketing Co-operative Societies) including leadership and ethics of leaders, compliance with co-operative laws and regulations, internal control, Information and Communication Technology (ICT) use, strategic and/or business planning, budget preparation, debt reduction strategies, production, marketing and facilitation, value addition, domestic demand development, preparation of meeting minutes and summaries as well as financial statements (URT, 2017). Members on their side, the trainings suggested for them include the concept of corporate, member responsibility and rights, commodity business and entrepreneurship, translation of auditor and auditor's opinion, budget and debt limit, preparation and operation of meetings, production and value addition of products, capital expansion and investment, marketing of products and rules, regulations and terms of associations.

It is further stated in the programme that the training costs will be paid by the respective co-operative society and the expected result (end product of this programme) is that training in crop and marketing cooperatives will help to have associations operating its operations in accordance with the rules and regulations to meet the economic and social needs of its members (URT, 2017). The regional co-operative education committee will be engineering the training process, the committee members being assistant registrar (chairperson), college regional

officer (secretary), district co-operative officers, COASCO regional officer, members from the unions as well as Tanzania Federation of Co-operatives (IFC) and Savings and Credit Cooperative Union League of Tanzania (SCCULT) SCCULT LTD representatives.

Regardless of the implementation of Co-operative Education and Training through specific annual training programmes, there is enough evidence that co-operative societies are underperforming on a daily basis and they encounter a lot of challenges including improper supervision (Anania & Rwekaza, 2018). It was also expected that provision of co-operative education and training in the stated areas would help in improving economic status of the co-operative societies and increase membership. However, the TCDC report of 2020 shows a gradual decrease in the number of members in the AMCOS and decreased profit per organisations. Again, there is an increased trend of the dormant AMCOS, and all these are dangerous for the sustainability of co-operative societies in Tanzania.

It is from this context, one would want to know what is actually happening in the CET provision in terms of contexts, inputs, process and product (CIPP) of CET since problems might be resulting from the selection and recruitment of resources (physical and human), the curriculum itself, the teaching methodologies, aims and goals of the curriculum, or even the evaluation process if at all CET is being provided. Therefore, this study seeks to answer the following questions: What is the status of CET provision in Ukerewe and Sengerema Districts? What are the contexts of CET provision? How are the inputs integrated into the provision of CET? How is the process of CET conducted? What are the products of CET?

This study was informed by the Context, Input, Process and Product (CIPP) Model of education evaluation. The model provides a systematic way of evaluating an education system in which the kind of knowledge, skills, attitudes, habits that learners acquire in their educational process is the actual product (Stufflebeam, 2000). Aziz (2018) concedes that in the CIPP Model in education and training context, the term context refers to missions, objectives and goals of AMCOS while inputs are the physical and human resources including infrastructures and trainers. Besides, the process demonstrates input utilisation to achieve the desired products. In tandem, products are the general outcomes of educated, responsible and trained employees or leaders of AMCOS.

2.0 Methodology

This study employed a constructivist paradigm to evaluate CET in co-operatives. The paradigm demonstrates that evaluation of knowledge and understanding of a phenomenon is done through interaction using dialogue and reasoning (references) (Fusch et al., 2018; Cohen & Marion, 2018). Thus, it gives an understanding of the reconstruction of meanings that people hold about co-operatives and evaluation of CET in particular (Cresswell & Poth, 2018; Farrugia, 2019). A cross-sectional design was used to collect data once at a time from different participants while variables were observed without being influenced by the researchers' personal beliefs (Bloomberg & Volpe, 2019; Marczyk, Dematteo & Festinger, 2005).

Qualitative approach was suitable to be used in this study as it allowed study participants to freely disclose their experiences, thoughts and feelings without constraints (Awasthy, 2020; Cooper et al., 2006). Phenomenological method was used to understand how AMCOS members make meaning of the evaluation of CET in co-operatives and to identify relationships of meanings that build new knowledge (Peterson, 2017). Besides, this study employed a small number of subjects as phenomenology is effective in studying a small number of subjects (in this study 64) (Cohen et al., 2018). In qualitative studies, a researcher needs enough time for verbal interaction with each respondent to capture their individualised experience of an event so as to avoid shallow results (Creswell, 2017).

The purpose of qualitative research is not to obtain breadth and impartial data rather achieving depth and capture deeper meaning (Awasthy, 2020). Thus, the sample size which is enough qualitative study according to Sharan and Tisdell (2016) is the one which can answer research questions to the point of saturation, redundancy or till nothing new can be said or observed. Data collection and analysis activities were intricately woven together throughout the study. Primary data were therefore collected through face-to-face interviews with AMCOS key study participants and series of focus group discussions (FGDs) sessions, each consisting of active male and female AMCOS members. Each FGD had 4 study participants as suggested by Ubandoma et al. (2019) and Creswell (2017).

The study was conducted in Ukerewe and Sengerema due to the existence of dormant co-operatives regardless of the existence of CET programmes. Also the

report by COASCO for the year 2018/19 shows that Ukerewe and Sengerema Districts are among 93.13 which got adverse opinions (URT, 2021), and one of the basic reasons given was poor provision of education and training to co-operators. However, choice of the specific AMCOS that made a part in this study considered four criteria namely registration status of AMCOS, (only registered AMCOS were visited), a number of members (AMCOS with the most and the those with fewest members), the invested capital (AMCOS with highest capital and those with smallest capital investment) and convenience, meaning that readiness of the management to accept being interviewed was a determinant of the AMCOS which were chosen. Therefore, out of 13 registered AMCOS in Ukerewe District, only three active AMCOS namely Bugorola, Murutunguru and Musozi AMCOS were confined in the study and formed a basic unit of analysis. In Sengerema District, out of 19 registered AMCOS thirteen active AMCOS namely Busulwagili, Butonga, Buzilasoga, Chamabanda, Ibondo, Igulumuki, Ileanilo, Irunda, Ishishang'olo, Nyamatongo, Nyamtelela, Nyasenga and Sima were included in the study. The dormant AMCOS never surfaced as study participants, but were represented by key informants of this study. Purposive sampling technique was employed to study the board members and district co-operative leaders by virtue of their positions since they were responsible for coordinating the functions of AMCOS. Naming of the study participants followed the pseudo codes given such as P1U (Cresswell & Poth, 2018) in which the letter "P" represented the term participant, number 1 and other numbers represented the number code of a participant and letter "U and S" represented Ukerewe and Sengerema districts respectively.

Data were analysed qualitatively in which content analysis was used to identify, analyse and report by the aid of Atlas.ti7 as suggested by Kalu (2017) and Rosenthal (2016). Content analysis was used to generate themes from data collected through focus group discussions. In the study, the researcher pinpointed and recorded themes from data collected through focus group discussions. In processing these data, several stages were followed. After collecting qualitative data from focus group discussions and interviews, data were written down followed by the process of coding so as to identify specific pieces of data that correspond to differing themes. In the process of coding, specific data were selected and used in the study while data that did not provide evidence of themes were left out. Open coding was used to generate concepts. After that, data were grouped and turned into categories. Data were grouped into themes based on

specific objectives. After that data were transcribed based on objectives and finally were interpreted.

The procedures for analysing data were as follows: First, development of initial codes: The researcher identified the key concepts or the variables as initial coding categories. Then the researcher reviewed the definitions of the variables which were initial coding categories. Second, transcription of data: This process involved the representation of audible and visual data into written form. The researcher listened to the recorded data from the in-depth interview, FGDs, and key informant interviews and wrote exactly what was said. Third, text categorisation: After transcription, texts were categorised within the initial coding categories with the help of the reviewed definitions. The texts which did not fit into the coding categories were given a new code.

Fourth, coding: this process involves organising data and provides a means to introduce the interpretations through reading the transcribed data and demarcate segments within it. The coding process was done manually according to the research questions. Fifth, reading and interpreting data: This was a starting point of a meaningful analysis whereby the researcher read the data within and between categories and interpreted them to identify the themes. Sixth, theme identification: The researcher identified the themes within and between categories while showing the relationship between categories or a sub-category of existing code. The themes were then refined and finally the report was written.

In order to increase trustworthiness of the study findings, the author decreased threats of credibility by triangulation of data (Linneberg & Korsgaard, 2019; Patton, 2015; Theophilus, 2018). Again, to increase dependability, the researcher provided an audit trail by describing in detail how data were collected and categories delivered, and how decisions were made throughout the enquiry (Patton, 2015). The researcher further applied the good rich thick description (Farrugia, 2019) to enable other researchers to make decisions about transferability. Lastly, the author increased conformability by attempting to control biases through constantly comparing data, seeking for literatures of the phenomenon and obtaining multiple viewpoints during interviews and FGDs (Cresswell & Poth, 2018).

3.0. Findings and Discussion

This section covers the aspect of practice of CET in which the CIPP Model was used to evaluate the context, input, process and product of co-operative education and training.

3.1. Context Evaluation

With respect to context evaluation, as suggested in the CIPP models, study participants were probed to know whether aims of their education system were suitable or not, whether objectives were derived from the aims of co-operative needs, the courses provided and if those courses correspond with the aims of co-operatives, whether the process caters for the members' needs, whether there was a link between members and the works provided or not, its objectives /rationales, topics (context) and methods of teaching. As stated in the education and training programme for Mwanza Region (2017), the main objective was to improve operational efficiency, management and eliminate the challenges of co-operatives by building the capacity of members, leaders and the board on the operation and effective management of the co-operatives (p.2), and therefore, objectives of education and training have to be contextually specific from a particular AMCOS. Other aspects of the context of co-operative education that were evaluated include the presence of co-operative education, the type of such education and training from the perspectives of AMCOS members, and the nature of such trainings, methodology used to offer education, the presence of sustainable plan for education and training and how they are conducted, time frame for the trainings, number of trainings, the teaching aids and venues, the pre-set methods of making the programme known, the training environment, and the sponsorship strategies.

3.1.1 Objective Origin and Attainment Evaluation

Members were asked to state the aims of CET they were given and the origin of such training. From the findings, most of the study participants reported that they knew nothing on the essence of co-operative education and training, of which they could not answer the questions related to aims of co-operative education and training. Only few managed to respond to the question requiring them to state the aims of CET and where the objectives of co-operative education were derived. However, regardless of the AMCOS members' knowledge, all of them were against the idea that aims and objectives of co-operative education and training emanated from their specific co-operative societies, rather they were initiated by

the facilitators; hence AMCOS members were mere recipients. Facilitators and co-operative officers were reported to have been coming with what they want to teach. To represent the general responses, one of the study participants from Nyasenga AMCOS in Sengerema District had the following to say:

They could ask us or arrange together with us what to teach? These guys come with their books and notes; they have everything. Our responsibility is just to listen. P3S, 26 May, 2019.

On the other hand, the researcher cross checked with the key informants through interviews so as to validate what was reported by the AMCOS members. When asked, the key informants, one from Sengerema and the other from Ukerewe Districts had similar responses and their answers correlated to what was reported by the AMCOS members. According to the two key informants, one from each district, they were employed in their respective locations to help members, of which they reported that the training was relevant although they were prepared by the trainers themselves. On their side, two key informants from the Mwanza Region Co-operative Committee had the following to say:

With the nature of the members we have, it is very difficult to discuss and come up with an agreement on the kinds of training to give them. So, to avoid chaos, trainers prepare the package as per the requirements of the co-operatives. KI4, 13 June, 2019.

It is obvious that the trainer is the one who prepares the training after making a needs assessment of the area. You know, everything needs specialisation, so you cannot go and gather information haphazardly from the members who do not even know what they want. If you read our training plan, somewhere in the document you will see who is responsible for preparing the trainings and all education related matters. KI5, 13 June, 2019.

At the level of analysis, responses from both AMCOS members and the key informants correlate with what is stated in the Tanzania Mainland Co-operative Education and Training Programme (2020, p. 12) as it states “The regional Committees will administer and give training based on the needs of a particular place”. Regardless of the objectives (intentions) being good and following the

guidelines, the findings showed that needs assessment was not done. Recipients of CET were not involved. Therefore, providers of CET seemed not to consider the AMCOS members, and this is in contrast with the practice of Co-operative Education since the co-operatives are the ones that have priorities and/or needs. Again, the responses further contradict the theory underpinning this study namely CIPP Model of Education Evaluation. The CIPP Model on its first stage (context) mentions the philosophical view of any education system to originate its own respect that originates from its ideology. The findings further contradict those of Goldie (2009) and Hayes et al. (2016) who suggested the learners of an education system to be engaged right from the beginning. Therefore, the AMCOS need to have a mutual agreement with facilitators to harmonise the teaching and learning process and not give facilitators a freedom to choose what to teach since the facilitators are not the owners of the AMCOS.

3.1.2 Evaluation of the Reflection of Training to the Co-operatives Needs

Findings were further sought on the suitability of education and training programmes offered to the AMCOS members and whether the trainings manifest the AMCOS' needs or not. It was implied that CET suitability to the co-operative needs leads to sustainable co-operative societies. The responses show that the majority of the study participants felt that contents of co-operative education were not suitable since people were not involved right from the beginning. In Ukerewe District for example, two study participants, one from Bugorola, and the other from Murutunguru AMCOS, reported that they were taught bookkeeping only, neglecting that members were in need of the training related to what they do. Also, it was reported that facilitators were not suitable; hence they preferred to remain without training rather than being taken on board. One of the study participants described irrelevancies of what was being taught as she responded:

Look! What is the relationship between bookkeeping and rice or cotton farming? I do not know how leaders get misled when they get there? We always wonder all over how they are immediately given co-operative accounts' books while none of us is an accountant. P1U, 4 June, 2019.

On the other hand, another study participant from Murutunguru AMCOS acknowledged irrelevancies of the trainings as he commented:

If these training sessions were relevant, you could even see the results. What I can advise is that the government needs to send us trainers of the actual things we need such as good agricultural practices, how to access markets, how to transform from cotton to other crops and so forth. What we are doing now is business as usual. P2U, 6 June, 2019.

It was apparent from the analysis of data on this aspect that courses offered to AMCOS members do not correspond with the specific aims of co-operative societies, and that they do not consider the needs of AMCOS. No wonder that most of the participants reported that the training was irrelevant as they were not involved right from the beginning during the needs assessment stage. This outlook implies that what is being taught in AMCOS is not suitable for their survival and sustainability. These findings further contradict the CIPP Approach to Education Evaluation that calls for institutions to organise their work to accomplish its objectives and goals right from the beginning so as to avoid irrelevance.

According to the CIPP model, societies are reminded to identify problems that may interfere with their effectiveness and assess the underlying causes, just from the infant stage (Stufflebeam, 2000). They also contradict the findings by Depranoto et al. (2020) who calls for a needs assessment so as to validate the training. Linzalone and Schiuma (2015) report that without assessment of the needs, there is no possibility of touching the heart of any education programme. Therefore, what exists in the findings prolongs inadequacy that exists in AMCOS; namely inability of co-operatives to identify what they need. Also, the findings suggest lack of strategic interventions for addressing diagnosed problems, of which the model calls for societies such as AMCOS to plan how the trainers would promote the co-operatives priorities. On the aspect of teaching (training) context, study participants were asked to indicate whether what they were being taught reflects the reality of what takes place in their AMCOS. Specific area that was researched under context evaluation in this study is a reflection of the training to the needs of the co-operative society.

From the findings, the responses showed that the majority of the co-operative organisation members disagreed that what they are being taught currently reflects their needs. It was reported by the participants in a group discussion that what members are being taught does not speak of anything about good agronomic

practices. The dominant topics mentioned were co-operative laws and regulations, rights, and responsibilities of the members, leadership skills, to mention just a few. Contrary to the expectations that the training contexts would largely include good agricultural practises since the survival of AMCOS depends on agricultural products, the findings totally diverged from the practice of Stufflebeam CIPP model requirements that call for reflection of the training programme to the needs of a society; which under the context of this study refers to an AMCO. Only a few were not sure of whether the content suited their needs as AMCOS.

At the level of analysis, what is being conducted in the AMCOS as per the findings concur with what is stated in the Mwanza Region Co-operative Education and Training Programme (2018) as it mentions co-operative laws and regulations, procedures and laws of running a co-operative society, good leadership, meaning of co-operatives, rights and responsibilities of members, agribusiness and entrepreneurship, mathematical interpretations and auditing, budgeting, meeting preparations and running, quality assurance and value addition, capital increase, marketing as well as rules and regulations. However, members' responses in this study partly diverge from what Ahando et al. (2021) who found that in Nigeria, majority of the AMCOS members have accepted that the content (topics) reflected their needs as a society. Differences in the acceptance status between AMCOS members in Tanzania and those of Nigeria might have been caused by the contextual variations since the current study is in Tanzania (Sengerema and Ukerewe) while the study by Ahando et al. (2021) was in Nigeria.

Moreover, the responses from some study participants indicated that among the subjects taught and the training given, co-operative laws and regulations have never been taught by the facilitators. This situation is different from the Mwanza Region Education and Training Programme that requires co-operative laws and regulations to be provided so as to provide guidance and direction of running AMCOS. As seen from the findings, the contexts reflected absence of the teachings and training on laws and regulations, rendering most of the AMCOS members ignorant of their own societies. When study participants were asked if they needed education on laws and regulations, all of them agreed that they need knowledge regarding co-operative laws and regulations. The majority commented that knowledge regarding laws and regulations is important to AMCOS members as it can create awareness to members. It was further reported by the study

participants that what members knew about AMCOS was only jointly selling their products. However, AMCOS are more than just selling product together as supported by one AMCOS member from Musozi AMCOS in Ukerewe District:

We all need to know the laws, bylaws and regulations of our co-operative societies just like the way SACCOS do. However, currently this education is rare. At least Mr Isanzu and I had some experience in getting training at Ukiriguru in the 90's. P3U, 7 June, 2019.

From the argument by the study participant, it is evident that their AMCOS and others around do not get education on laws and regulations of AMCOS. This is unfortunate since there is no institution which is run without laws and regulations. Fici (2013) suggests that co-operative laws and regulations enable AMCOS members and officials to be accountable in their roles. Also, to the author, if members are aware of Co-operative laws and regulations, they are in a better position to ensure that AMCOS officials play their roles according to regulations. If AMCOS members are not conversant with laws and regulations officials and staff might easily abuse their positions since none will know how and when their legal lines work. Generally, these findings suggest a poor sustainability trend of the AMCOS in the study areas (Ukerewe and Sengerema) and it is suggested here that emphasis on laws and regulations should be placed on the AMCOS upon their launching so as to ensure their survival.

Study participants were further asked if their Education and training package included members' rights and responsibilities (liabilities). The question was important since all organisations, AMCOS inclusive, run smoothly when members enjoy certain rights while fulfilling their responsibilities. Information obtained through FGDs showed that most of the members have never received education and training on their rights and responsibilities, regardless of the fact that most of them needed knowledge regarding their rights. These findings correspond with Harte and Symes (2013) who found out that in Australia, members were not taught rights and responsibilities; of which the majority remained ignorant of what to do and what to be done to them.

From the responses, study participants were aware that members of AMCOS have to enjoy rights and responsibilities according to laws and regulations of co-

operative societies. Responses given by AMCOS members and officials showed that rights and responsibilities of members should be included in the co-operative training and education. By understanding their rights and responsibilities, members give positive contributions to their Co-operatives. One member from Nyamtelela AMCOS in Sengerema District had the following to say:

It is good that the education we are given should have elements of our rights and responsibilities because without knowing what we deserve and what we should do, we shall remain lethargic every day without knowing where we are coming from and where we are heading to. P4S, 27 May, 2019.

These findings correspond with the findings of Kiaritha (2015) who found out that in Kenya, members of the co-operative societies were not trained on their rights and responsibilities, of which most of the co-operative societies were not doing well. If members are aware of their rights and responsibilities, they will be able to participate in matters that need democratic decisions, and will be able to attend all meetings and seminars organised by their AMCOS since it is among their rights and responsibilities (Chambo, 2009; Cooper et al., 2006). Also, Anania and Rwekaza (2016) are of the view that lack of co-operative education and training affects member's commitment, loyalty and efforts to hold members and leaders accountable for their misconduct such as the misuse of the AMCOS resources. The findings further suggest sustainability of the co-operative societies as per the CIPP Model, which asserts that inputs such as content and curriculum are used to meet goals of the programme.

3.2. Input Evaluation

Having discussed the context evaluation in co-operative societies in Ukerewe and Sengerema Districts, the researcher examined the second aspect of the objective, namely input as an aspect of CIPP. According to Aziz et al. (2018), input refers to resources that are used to meet goals of the programme. Stufflebeam (2000) mentions human and physical resources as important inputs in any education system. In this study therefore, members of the co-operative societies were asked to indicate whether the available resources are enough to attain co-operative education and training objectives focusing on the competence of instructors and availability of physical resources.

Before probing the study participants on the competence of the instructors, it was deemed important to know where the instructors were coming from. Having asked this question, it was reported that they were getting the training from different sources and that most of them were the district co-operative officers and trainers from Nyanza Co-operative Union. This response raised a concern for the researcher to review the Mwanza Region Co-operative Education and Training Programme (2018, p. 6), of which it is stated that “the education committees will plan and run the trainings based on the needs of a specific area”. From this quotation therefore, the researcher searched for clarifications from one of the key informants.

On the aspect of instructors’ competence, study participants were asked to tell whether they were satisfied with the facilitator's style of training or not. When members were asked whether they were satisfied with the delivery style of the facilitators, the majority reported that they were not satisfied, while a few said that they were satisfied. Having noted that some respondents were not satisfied, the researcher sought the reasons for non-satisfaction of the delivery style and competence of the instructors. One study participant in a group discussion, representing the general consensus of the participants who reported to have been dissatisfied had the following to say when asked the reasons for non-satisfaction:

No! If we say they teach so well we will be just fooling ourselves.
First of all, some young teachers do not know how to go along with us. But the former teachers were teaching us slowly and lovely until we understood. The current ones do rush us, with insults on top.
P4U, 6 June, 2019.

From the above response, there are some signs showing how the trainers lack skills of delivering including body shaming to motivate (insulting clients), using only one training style that does not suit the needs of adults (AMCOS members), leading to failure to empower clients. These findings complement the findings by Anania and Rwekaza (2016) who reported on the incompetence of facilitators in promoting co-operative education. Daniel (2017) further reports that facilitators make tangible differences and any variations in the teaching behaviours of facilitators lead to variation in students’ achievements. Thus, in evaluating the facilitators (inputs), AMCO’s members were asked some questions since they are the primary beneficiaries of the training and teaching programme.

Physical resources are other aspects of inputs in any education and training project. When members of the AMCOS were asked whether their facilitators had the required materials and tools for training, only a few reported that materials were there while the majority said that facilitators did not have them. Those who reported that trainers had inadequate training materials were further asked how they understood what they were trained for while facilitators had no such tools and materials. Majority of them were of the view that facilitators never used materials, rather; they used the experience they had in teaching. Impliedly, co-operative societies cannot be sustainable since delivery of the instructions lacks materials which support learners' learning. Lack of concrete worksheet or manipulation will decelerate members' ability to gain and practise the knowledge acquired. Also, these findings imply that students cannot be supported well, lessons do not have a concrete structure there, there is no differentiation of instructions, and teachers will lose appetite due to dominance of one style of delivery materials of which sustainability of the AMCOS was endangered. It is therefore, necessary to focus on the resources, personal, procedures and decisions which specify the present objectives and aims (Stufflebeam, 2000).

3.3. Process Evaluation

Process evaluation is the other area that the researcher considered, when evaluating CET in the researched areas. In this context, process evaluation refers to all types of activities done in planning the teaching and learning process (phase). In this study therefore, different teaching and learning processes undertaken in co-operative societies were evaluated. Participants were asked to mention the ways used to sensitise people on co-operatives in their localities. The response showed that different ways were reported to have been used to facilitate teaching and learning in AMCOS such as lecture, learner centred and role playing.

On the methods used by facilitators to deliver co-operative education and training in AMCOS, the findings showed that the lecture method was widely used. Other methods used include participatory, a mixture of lecture and participatory, and role playing method. When learners were asked whether they were satisfied by the delivering style of the facilitators or not, most of those who mentioned lecture said that they were satisfied. This level of satisfaction might be attributed to the fact that most of the members preferred to hear from their facilitators, believing that facilitators know all, most of them are lazy (passive), they preferred logical arrangement of education content by facilitators and also the nature of the general

Tanzania education system where facilitators are regarded as knowledgeable personnel.

A few among study participants (how few is?) who mentioned participatory methods reported that they were satisfied while the majority said that they were not satisfied. These findings resemble an outlook with those who supported teacher centred teaching since most of them cannot relate the instances with real situations, they are not knowledge developers rather than knowledge consumers as suggested by Ahado et al. (2021) that there must be even sharing of learning between a facilitator and learners. The facilitator is supposed to be like a coach to the students as he is only supposed to explain new materials and encourage understanding of it. The reason for not using it widely might be absence of special teacher skills among facilitators, readiness and nature of learners.

Moreover, the findings revealed that there were no effective two-way communications between teachers and students and learners (members) and teachers and administrators (leaders of co-operative societies). One of the key informants proved this observation as she said:

It's very difficult to find time to ask them questions, unlike the way it is in schools; they have so many things, you cannot even ask because you will look like a nuisance to your colleagues. So, we just tolerate and work hard to keep each other informed after being taught. KI5, 10 June, 2019.

At the level of analysis, the teaching methods need to be a mixture including lecture, activity-based approach, and problem solving and demonstration method. The aim should always be seeking students' mental and physical growth. The major hindrance towards this is tightness of schedule since AMCOS members have other responsibilities at their homes.

Again, study participants were asked to tell the methods used to provide CET. The findings indicated that study participants mentioned seminars, friends who are members of other AMCOS and Guest speakers. Contrary to the researcher's expectations, the majority of AMCOS members mentioned guest speakers as a common means through which they acquire knowledge about co-operatives. Also, being important, the Guest Speaker method was supported by all district co-

operative officers (From Ukerewe and Sengerema) that they invited different experts to build capacity for their members. These data are supported by one co-operative representative from Nyamatongo AMCOS in Sengerema District who said:

Most of the time we receive people from other successful co-operatives and experts who come to talk to us but since the attendance is poor at these sessions, very few of us benefit. P6S, 29 May, 2019

From the above quotation, it can generally be accepted that the guest speaker method is important although it is not widely used. These findings contradict those of Hussain (2014) who reported that in Nigeria, the guest speaker method is the least preferred method in training members of co-operative societies. Umam and Saripah (2018) report that differences in responses between the two studied communities are attributed to geographical differences and the national policies, of which this study confirms the reported findings involving AMCOS from Nigeria and those of Tanzania.

The other method that co-operative members were asked to comment on was in-house seminars. The response shows that some of the study participants accepted that seminars were provided. This method was mentioned in both FGDs and key informants from both members and officials. Responses from the focus group discussions showed that some of the study participants accepted. On the other hand, eight officials from different AMCOS were interviewed and they mentioned in-door seminars as a powerful method that has been used for generations. Contrary to what the majority reported earlier when asked who plans what to teach/train, the AMCOS leaders and representatives reported that experts organise in-door seminars according to the demands and resources available. One of the study participants from Ishishang'olo AMCOS in Sengerema District, representing the opinions of normal AMCOS members reported:

Seminars are more effective than other ways of training here because people like to hear from experts and successful colleagues. This approach has helped revive some of the AMCOS. So, seminar attendees help their colleagues get up and appreciate another coops' success. P7S, 26 May, 2019.

From the preceding quote, variations in views between leaders and the normal members might be attributed to the fact that leaders are always pro-processors of the AMCOS as they are in charge of making sure they survive while due to ignorance and due to the need for pushing leaders to act excellently, members are always against any process being it good or bad.

Learning through interaction among members of the society was the other method that study participants were asked to comment on. The implication here was that since people live together as a community it is easy for some people to get co-operative education and knowledge from their fellow members who are also members of AMCOS. The findings from AMCOS members indicated that they normally benefit from their colleagues. However, this method was not mentioned by one AMCOS leader from Bugorola AMCOS in Ukerewe District; different from other eight leaders from Murutunguru, Busulwagili, Butonga, Buzilasoga, Chamabanda, Ibondo, Igulumuki and Irunda, AMCOS which gave information through interviews. Differences in views between leaders and members might be attributed to the fact that AMCOS leaders do not highly interact with normal members in every society, so they automatically miss what goes on in a community. On the other hand, members come from the community and since they live together, they influence each other and one of the outcomes is that of joining AMCOS.

Radio and televisions were also mentioned as the methods used in obtaining Co-operative education. However, it was reported that in most cases radios are the ones mostly accessed by co-operative experts to send information. From the findings, most of the study participants accepted that televisions (TVs) and radio are still used to inform about co-operatives. Some six officials also mentioned radios and TVs as the methods used by many people. This information is supported by the response from one representative from Ilekanilo AMCOS in Sengerema when he responded:

Radio and TV have been in use for a long time. Now, we say we are not very much on track but I have to watch every Friday the session of "Ujue Ushirika ". On the TV side, maybe there are people talking about development from the government but in the past, it was awareness. P8S, 21 May, 2019.

Based on the observation from the AMCOS representatives, it is evident that members get education although the means of organising them is still difficult. The methods used here seem to be appropriate because it is difficult to take all AMCOS members in the class. This is supported by Anania and Rwekaza (2016) when they suggested that Co-operative education could be accessed through self-guided training, through listening to radio programmes, reading available literature, accessing online resources, and learning from one another. Also, this could be done through peer networking where people can learn in groups. Again, through workshops, seminars and conferences people can learn widely. Also, Ubandoma et al. (2019) and Linzalone and Schiuma (2015) report that training is a product or services, and that it must be offered by co-operative societies. The findings on the rare use of televisions compared to radios in the study area correspond with the findings by Lebowski (2015) who found that TVs are minimally used as a source of information in rural areas in Nigeria by co-operative societies.

3.4. Product Evaluation

On the aspect of product evaluation, outcomes/outputs of the schooling process which in this context is referred to as education and training process in AMCOS were evaluated. Thus, members were asked some questions which could measure what they had acquired as findings of the education and training process in the selected AMCOS. After being asked, the researcher through observation had the following to examine in terms of member's skills, attitudes, knowledge learning and abilities they attain for the benefit of AMCOS and a society at large.

3.4.1. Knowledge Acquisition Evaluation

From the findings, it was observed that most of the AMCOS members were not well trained on the AMCOS related issues. The AMCOS members showed incompetence on the questions related to the basic traits of a trained member including concept of corporation, responsibility and rights, trade and entrepreneurship products, interpretation of financial and auditor views, budget and debt limit, preparation and operation of meetings, production and value adding of crops, capital and investment growth, marketing and products and rules, committees and terms of association. These findings concur with Okoli and Ezenwafor (2018) who stated that because of poor education provision; most of the AMCOS were not performing well in Nigeria.

The findings of the study further showed that effective environment, resources, relevant content, proper and effective teaching and learning and use of different strategies have a great impact on members' behaviour, skills, attitudes, performance, loyalty of members, attendance in meeting, declining incidence of awareness of members, good member relative, good management, good public image, high productivity, ability to change with time, sustenance of core purposes, informed community, democratic structures, good decisions by elected representatives and increased member enrolment. These findings concur with the suggestions of Woodin (2015) and Molope and Oduaran (2019) mention outputs/outcomes as important results of any education programme evaluation.

4.0. Conclusion and Recommendations

From the study findings, the context, input, process and outputs of co-operative education and training in AMCOS do not collectively suggest sustainability of such societies. Majority of the study participants disagreed on what they are being taught, how they are being taught, the environment in which they are being taught and the way their education and training is being evaluated. It was noted that the education and training programmes could never have impact on members' behaviour, skills, attitudes, performance, loyalty, attendance in meetings, awareness of members, relationships, good governance and public image, high productivity, ability to change with time, sustenance of core purposes, democratic structures, and increased member enrolment.

Therefore, co-operative education providing institutions in Tanzania are called upon to develop the curriculum which co-operative societies including AMCOS will use in order to have sound and sustainable co-operative societies. Again, quality of facilitators needs to be improved on the way they teach, interact with members, evaluate the programme and even in building rapport with AMCOS members. Moreover, since such retraining requires money which institutions may not necessarily have, the government is asked to help rescue the situation. The co-operative societies are called upon to adhere to the International Co-operative Alliance (ICA) requirements of setting aside fund for training. Lastly but not least, screening of the trainers needs to be done by regulatory authorities, co-operative officers and/or co-operative societies board to avoid education and training that are not relevant to AMCOS or create confusion to them.

The theoretical implication of the findings and conclusions dwelling on the CIPP Model of education evaluation lied onto the context, input, process and products of CET. The findings enormously contradicted the CIPP model since the missions, objectives and goals of an education system, with regards to AMCOS, were not adhered to. Again, the inputs both physical and human resources in-terms of infrastructures and trainers were found to miss and where available, insufficient. Moreover, on the process evaluation methodologies of training seemed to contradict the CIPP model which requires a careful utilisation of the available inputs so as to achieve the desired products. Lastly, the outputs of CET reflected the previous stages of evaluation, as a result today co-operative societies, particularly in the studied areas, are dominated by uneducated members, irresponsible leaders and untrained members or leaders of AMCOS.

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Mtazamo Mpya Kuhusu Lugha ya Kiswahili na Elimu ya Juu Nchini Tanzania

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Ikisiri

Makala haya yanahusu nafasi ya lugha ya Kiswahili katika mfumo wa elimu ya juu nchini. Msingi wake unatokana na ujumuishaji mno wa kimapokeo kwamba kila kinachofundishwa kwa ‘Kiswahili’ ni lugha ya Kiswahili. Uchambuzi wa sera na maandiko mengine yanayohusiana ama na lugha na elimu au lugha na utamaduni ulifanyika na kuwasilishwa kinathari. Vilevile, maudhui ya kozi za taaluma za Kiswahili zinazofundishwa Chuo Kikuu cha Dar es Salaam (CKD) hususani katika Taasisi ya Taaluma za Kiswahili (TATAKI) yalifanyika. Matokeo ya uchambuzi huo yamedhihirisha kwamba lugha ya Kiswahili imevuka mipaka ya kufundishwa kama somo na kuwa lugha ya kufundishia taaluma za Kiswahili katika ngazi za shahada ya awali, umahiri na uzamivu. Hii ina maana kuwa lugha ya Kiswahili inatumika katika uzalishaji wa maarifa yanayotokana na tafiti. Tafiti ni sehemu ya masharti ya kukamilisha shahada za umahiri na uzamivu katika vyuo vikuu duniani. Licha ya ombwe la sera ya lugha ambalo ni kikwazo kikubwa cha upanuzi wa matumizi ya Kiswahili katika elimu ya juu nchini, mtazamo wa makala haya ni kwamba Kiswahili kinatumika kufundishia. Wito wa makala haya ni kwamba wigo wa matumizi ya Kiswahili kufundishia elimu ya juu upanuliwe katika nyuga zingine za kitaaluma baada ya kuonesha ufanisi katika taaluma za Kiswahili. Wito huu unatolewa kutokana na urazini thabiti kwamba Kiswahili bado hakitumiki kufundishia elimu ya sekondari. Maoni ya makala haya ni kwamba kutokutumika kwa Kiswahili katika ngazi hiyo, ni tatizo la wafanya maamuzi kuhusu lugha na elimu. Hatua madhubuti inayopaswa kuchukuliwa kwa mahali pa kwanza ni kuipa lugha ya Kiswahili hadhi ya kuwa lugha ya kufundishia elimu ya juu na elimu ya sekondari. Hatua ya pili ni kuhakikisha kwamba katiba ya nchi inaitambua lugha ya Kiswahili kuwa ni lugha ya Taifa. Hii itasaidia kuhlalisha upangaji wa rasilimali za kuendeleza lugha hiyo na kuchochea wigo mpana wa kufundishia kwa maslahi ya taifa.

Dhana Muhimu: Lugha ya kufundishia, Elimu ya juu, Sera ya Elimu, Tanzania

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1.0 Utangulizi

Mjadala kuhusu lugha gani itumike kufundishia nchini Tanzania ni wa muda mrefu na unahusu ngazi ya elimu ya sekondari na elimu ya juu. Ngazi hizo za elimu, kimsingi, bado zinafundishwa kwa lugha ya Kiingereza pamoja na tafiti kuthibitisha kwamba lugha hiyo inawatatiza walimu na wanafunzi (Qorro, 2007; Rwantabagu, 2011; Vuzo, 2018). Licha ya ukweli kwamba hakujawa na mabadiliko ya lugha ya kufundishia, mjadala huo wa muda mrefu umesaidia kubainisha kwamba lugha ya kufundishia ni kigeu muhimu kinachoathiri ubora wa elimu nchini Tanzania. Awali lugha ya kufundishia elimu ya msingi, halikuwa suala la mjadala kwa sababu ilichukuliwa kwamba Kiswahili kinatumika kufundishia elimu ya msingi katika shule zote, suala ambalo linakinzana na hali halisi ya sasa. Sera ya Elimu na Mafunzo (SEM) (1995) ilitoa nafasi kwa sekta binafsi kuanzisha shule za msingi zinazofundisha kwa lugha ya Kiingereza ili kukidhi mahitahi ya wazazi ambao walikuwa wanapeleka watoto wao katika nchi jirani kama vile Uganda na Kenya ambako elimu yao hufundishwa kwa lugha ya Kiingereza (Rugemalira, 2005). Vilevile, serikali ilianzisha shule chache za msingi ambazo zinafundisha kwa lugha ya Kiingereza kama vile *Arusha Primary School* (Arusha) na *Mapinduzi Primary School* (Iringa). Licha ya suala la mabadiliko ya lugha ya kufundishia elimu ya msingi kutopewa mjadala mpana, kumeifanya Tanzania kuwa na mifumo miwili ya elimu. Kwanza ni mfumo unaofundisha kwa lugha ya kigeni (Kiingereza) katika ngazi zote za elimu. Pili, ni mfumo unaofundisha kwa lugha ya Kiswahili katika elimu ya msingi na Kiingereza katika ngazi ya sekondari na elimu ya juu. Kwa mujibu wa Senkoro (2005) jamii inapoadili lugha ya kufundishia, malengo ya elimu hubadilika pia hata kama haikuelezwa bayana. Hata hivyo, si lengo la makala haya kujihusisha na mjadala wa lugha ya kufundishia katika elimu ya msingi, hiyo ni kadhia inayojitegemea na inahitaji makala ya peke yake. Makala haya yamejielekeza katika kubainisha nafasi ya lugha ya Kiswahili katika mfumo wa elimu ya juu nchini Tanzania.

Tafiti mbalimbali (Brock-Utne, 2006; Mekacha, 1997; Qorro, 2013; Rubagumya, 1997; Senkoro, 2005) zinadhihirisha kuwa lugha ya Kiswahili ni muafaka kuwa lugha ya kufundishia katika ngazi zote za elimu nchini Tanzania. Msisitizo wa tafiti hizo ni kwamba kutumia lugha inayoeleweka kwa wengi ni kutekeleza utoaji wa elimu jumuishii inayokuza fikra tunduizi. Fikra tunduizi ni muhimu katika kumwezesha binadamu kukuza vipaji na kuibua suluhisho la matatizo yanayomsibu katika mazingira yake. Maoni ya Eleuthera (2007) ni kwamba serikali

ya Tanzania itumie rasilimali zake nyingi katika kuinua ubora wa elimu, kuboresha afya na miundombinu badala ya kuwatafutia Watanzania Kiingereza.

Ubora wa elimu utaongeza uwezo wa jamii kuyakabili mazingira na kuleta maendeleo ya aina mbalimbali ikiwa ni pamoja na mafanikio ya kiuchumi. Kwa mujibu wa Laitin na Ramachandran (2015) kuna uhusiano mkubwa baina ya lugha inayotumika katika mawasiliano mapana na kiwango cha kukua kwa uchumi katika jamii husika. Wanasisitiza kwamba lugha ya mawasiliano mapana inapokuwa ya wazawa, uchumi unakua na kinyume chake uchumi hudumaa kwa sababu lugha inayotumika haifahamiki kwa watu wengi hivyo hawawezi kushiriki kikamilifu katika kupanga na kutekeleza mipango ya uzalishaji mali. Taylor na Wright (2014) wana maoni kwamba kwa kuwa lugha na utamaduni ni kitovu cha mjadala kuhusu uchumi, siasa, elimu na maendeleo ya jamii, basi lugha inayotumika katika mjadala huo lazima iwe ya mawasiliano mapana. Elimu ni njia bora zaidi inayoweza kukuza lugha na utamaduni kwa haraka na kwa ufanisi mkubwa. Utamaduni katika fasili yake pana inafumbata shughuli za kila siku zinazofanyika katika jamii ikiwa ni pamoja na kukuza uchumi. Were-Mwaro (2000) anasisitiza kwamba elimu ya juu ni kichocheo kikuu cha uchumi na maendeleo ya jamii kwa hiyo lugha inayotumika lazima iwe ni nyenzo kuu ya utamaduni na haiwezi kutenganishwa na majukumu ya kila siku ya wanajamii wake.

Kwa hiyo, kwa kuwa elimu ina nafasi muhimu katika kukuza uchumi wa jamii ni mantiki kueleza kwamba elimu bora hutokana na lugha ya mawasiliano mapana ambayo watu wengi wanaimudu bila kutumia nguvu kubwa. Katika muktadha wa Tanzania, lugha inayofaa kufundishia ni Kiswahili licha ya maoni tofauti yanayotolewa kwa kiasi kikubwa na jamii ya wasomi ambao ni wachache waliobahatika kupata elimu ama katika nchi za kibeberu au lugha za utekelezaji wa mitaala ya elimu ni ya kibeberu (Phillipson, 1992). Kuna mawazo ya baadhi ya watu kwamba si Watanzania wote wanakifahamu Kiswahili, kwa hiyo, bado si muafaka kutumika kama lugha ya kufundishia. Licha ya ukweli huo, Nadharia za Kiisimujamii za ujifunzaji wa lugha ya pili zinasisitiza umuhimu wa kupata malighafi ya lugha anayojifunza mtu kutoka kwenye jamii inayomzunguka. Kwa hiyo, katika muktadha wa Tanzania, mtoto ambaye amezaliwa na kujifunza lugha yake ya jamii, anaweza kuamilia sawia lugha ya Kiswahili kwa urahisi kwa sababu inapatikana katika mazingira yake kuliko lugha yoyote ya kigeni kama ilivyo Kiingereza ambayo anaishia kuisikia darasani (Rubanza, 1996).

Mjadala wa lugha ya kufundishia nchini Tanzania umewagawanya wakongamanaji katika makundi mawili. Kundi la kwanza ni lile linalosisitiza matumizi ya Kiswahili kufundishia ngazi zote za elimu na mafunzo na kundi la pili ni lile linalopigia chapuo matumizi ya lugha ya Kiingereza kufundishia ngazi zote za elimu na mafunzo. Kila upande una sababu ambazo hata kama huwezi kukubaliana nazo lakini ni vigumu kuzipuuza. Hata hivyo, lengo la makala haya si kurudia mjadala huo wa miaka mingi ambao bila shaka unajulikana vizuri kwa wadau wa lugha na elimu. Maandiko mengi yanaonesha kuwa lugha ya Kiswahili inatumika kufundishia ngazi za chini za elimu na kwamba haina uwezo wa kufundishia elimu ya juu. Mtazamo huu wa kimapokeo umejaa ujumuishaji mno kiasi cha kudhani kwamba kila kinachofundishwa kwa Kiswahili ni lugha ya Kiswahili.

Makala haya yamekusudia kuonesha jinsi ambavyo lugha ya Kiswahili inatumika kufundishia elimu ya juu hususani katika Taaluma za Kiswahili hivyo inatoa fursa ya kusahili kasumba ya muda mrefu kwamba Kiswahili hakina uwezo wa kufundishia kiwango cha elimu ya juu suala ambalo kwa sasa limepitwa na wakati. Kupitia uhakiki wa miongozo ya kozi za shahada za awali na uzamili za Chuo Kikuu cha Dar es Salaam, hususani katika Taasisi ya Taaluma za Kiswahili, lengo la makala haya ni kudhihirisha kwamba lugha ya Kiswahili inatumika kufundishia taaluma zinazohusiana na isimu, fasihi na lugha katika elimu, kwa kiwango cha elimu ya juu. Rai inayotolewa hapa ni kupanuliwa kwa wigo wa lugha hiyo kufundishia Taaluma zingine kama vile ualimu, uhandisi, sayansi na teknolojia, sosholojia, falsafa kwa kuzitaja baadhi.

2.0 Muktaba wa Sera kuhusu Lugha ya Kiswahili na Elimu ya Juu Nchini Tanzania

Katika sehemu ya utangulizi imeelezwa kwamba lengo la makala haya ni kuonesha jinsi ambavyo lugha ya Kiswahili inatumika kufundishia elimu ya juu nchini Tanzania. Kabla ya kufikia lengo hilo ni suala la welekea kufafanua suala la lugha ya kufundishia elimu ya juu kulingana na muktaba wa sera zilizopo nchini Tanzania. Katika sehemu hii, yamehakikiwa maandiko rasmi ya serikali ambayo ama moja kwa moja au kwa tahaathira yake, yanaathiri mwenendo wa uamuzi kuhusu lugha gani itumike kufundishia katika ngazi mbalimbali ikiwa ni pamoja na elimu ya juu. Kuna nyaraka za Serikali ya Tanzania zinazooneshwa msimamo wake kuhusu lugha ya kufundishia katika ngazi mbalimbali ikiwa ni pamoja na elimu ya juu. Baadhi ya nyaraka hizo ni Sera ya Elimu na Mafunzo (1995), Sera ya

Utamaduni (1997), *National Higher Education Policy* (NHEP) (1999) na Sera ya Elimu na Mafunzo (2014).

Sera ya Elimu na Mafunzo (1995) iliifanya lugha ya Kiswahili kutumika katika ngazi za chini za elimu kama inavyoelezwa katika ibara zifuatazo:

5.2.3 Lugha ya kufundishia elimu ya awali itakuwa Kiswahili na Kiingereza litakuwa somo la lazima; na

5.3.7 Lugha ya kufundishia elimu ya msingi itakuwa Kiswahili na Kiingereza litakuwa somo la lazima (Tafsiri yangu).

Chanzo: SEM (1995).

Katika sera hiyo ya Elimu na Mafunzo (1995), lugha ya Kiswahili ilipangiwa kuwa ya kufundishia elimu ya awali na msingi. Sera hii haitoi fununu kuhusu lugha ya kufundishia elimu ya juu nchini Tanzania. Ukimya huo wa sera uliendelezwa pia katika Sera ya Taifa ya Elimu ya Juu (1999) ambayo haina mstari hata mmoja unaozungumzia lugha ya kufundishia. Kuliacha suala la lugha bila kutajwa katika sera ya elimu kunaweza kuwa na tafsiri mbalimbali: Kwanza kwa kuwa Kiingereza kimepangiwa kuwa lugha ya kufundishia elimu ya sekondari kila mtu anaweza kuelewa kwamba lugha hiyohiyo itatumika pia kufundishia elimu ya juu suala ambalo linafanyika kwa sasa.

Kwa upande mwingine, kwa kuzingatia umuhimu wa lugha katika utoaji wa elimu katika ngazi yoyote, kutozingatiwa kwa suala la lugha ni udhaifu mkubwa katika sera za elimu kwa kusahau nyenzo isiyo na mbadala katika kutekeleza majukumu yake. Ukimya wa NHEP kuhusu lugha gani itumike kufundishia ni sababu mojawapo ya kutokuwa na mpaka wa lini somo la lugha linabadili hadhi kutoka kuwa somo na kuwa lugha ya kufundishia taaluma zingine kama ilivyo kwa lugha ya Kiswahili. Uelewa ulivyo kwa watu wengi ni kwamba Taaluma za Kiswahili kwa kuwa zinafundishwa kwa Kiswahili inachukuliwa kuwa ni somo. Makala haya yamekusudia kubadilisha uelewa huo ambao umejumuishwa kupita kiasi. Makala haya yatadhihirisha jinsi ambavyo Kiswahili kilibadili hadhi yake kutoka kufundishwa kama somo tu na kuwa lugha ya kufundishia elimu ya juu. Mabadiliko hayo ya hadhi ya Kiswahili ni suala ambalo linapaswa kuelezwa kiuweledi, jukumu ambalo makala haya yamekusudia kuyatekeleza na kuibua mjadala mpya kuhusu upanuzi wa wigo wa lugha ya Kiswahili katika elimu ya juu nchini Tanzania kama lugha ya kufundishia.

Miaka miwili kabla ya kutungwa kwa *National Higher Education Policy* (NHEP) (1999), Sera ya Utamaduni (1997) ilitoa mwelekeo wa jinsi matumizi ya lugha nchini Tanzania yanavyopaswa kuwa ikiwa ni pamoja na matumizi yake katika mfumo wa elimu. Katika Ibara za 3.4.1 na 3.4.2 imewekwa bayana kuhusu lugha ya kufundishia kwamba:

3.4.1 Mpango maalumu wa kuiwezesha elimu na mafunzo katika ngazi zote kutolewa katika lugha ya Kiswahili utaandaliwa na kutekelezwa; na

3.4.2 Somo la Kiswahili litakuwa ni somo la lazima katika ngazi ya elimu ya awali, msingi na sekondari, na lithimizwa katika elimu ya juu. Aidha, ufundishaji wake utaboreshwa.

Tamko hilo la Sera ya Utamaduni halikubadilisha chochote na lugha ya kufundishia elimu ya sekondari na ya juu imeendelea kuwa Kiingereza. Pia, kama ilivyodokezwa pale awali kwamba kwa mujibu wa Sera ya Elimu na Mafunzo (1995), kuna shule za Serikali chache na za binafsi nyingi zinazofundisha elimu ya msingi kwa Kiingereza. Uamuzi kama huu unaweza kulifikisha Taifa katika hatua ya kuwa na watu wachache wanaoweza kuinua hali zao za maisha kwa sababu ya kujua kuzungumza Kiingereza. Kimsingi Taifa linapaswa kujielekeza katika kutoa elimu bora kuwa kipaumbele cha kwanza katika kufikia maendeleo yake. Hayo yanaweza kufikiwa kwa kutumia lugha ya Kiswahili katika elimu kwa sababu Tanzania itabakia kuwa nchi ya wazungumzaji wa Kiswahili wenye ujuzi wa nyongeza wa lugha ya Kiingereza (Eleuthera, 2007).

Kwa upande wa Sera ya Elimu na Mafunzo (2014), ina maneno yanayoonesha nafasi mpya kwa lugha ya Kiswahili katika mfumo wa elimu nchini hasa zinapozingatiwa ibara zifuatazo:

- 3.2.19. Lugha ya Taifa ya Kiswahili itatumika kufundishia na kujifunzia katika ngazi zote za elimu na mafunzo na Serikali itaweka utaratibu wa kuwezesha matumizi ya lugha hii kuwa endelevu na yenye ufanisi katika kuwapatia walengwa elimu na mafunzo yenye tija kitaifa na kimataifa.
Chanzo: SEM (2014).

Ibara hii ni mwangwi wa Sera ya Utamaduni (1997) ambayo haikutekeleza tamko lake lenye maudhui sawa na hayo. Kutokana na kupita muda mrefu bila utekelezaji wa tamko hilo, ni dhahiri kwamba tamko hilo halikuambatana na utashi thabiti wa kisiasa kuhusu mustakabali wa elimu nchini. Vilevile, ibara hii inaposomwa kwa pamoja na ibara ya 3.2.20 inaongeza sababu ya maoni ya makala haya kwamba hakukuwa na haja ya kusubiri matokeo yoyote ya maana ya Sera hiyo ya Elimu na Mafunzo (2014). Ibara ya 3.2.20 inabeba dhamira kinzani kuhusu nafasi ya lugha ya Kiswahili inapoeleza kwamba:

3.2.20 Serikali itaendelea na utaratibu wa kuimarisha matumizi ya lugha ya Kiingereza katika kufundishia na kujifunzia katika ngazi zote za elimu na mafunzo.

Chanzo: SEM (2014).

Sera ya Elimu na Mafunzo (2014) imeweka msingi wa uwililugha katika mfumo wa elimu Tanzania. Hata hivyo, hadi sasa hakuna waraka wa utekelezaji wake na Kiingereza bado kinatumika kufundishia elimu ya sekondari na elimu ya juu. Lugha ya Kiswahili kwa tafsiri ya kimapokeo inatumika kufundishia elimu ya msingi, ualimu ngazi ya cheti na baadhi ya vyuo vya mafunzo ya ufundi lakini katika makala haya kusudio lake ni kudhihirisha kwamba Kiswahili kinatumika kufundishia elimu ya juu bila idhini ya sera kuhusu matumizi hayo.

Matamko ya hapo juu yanakinzana katika kufasili lugha ipi inapewa kipaumbele kuwa lugha ya kufundishia licha ya misingi ya uwililugha iliyowekwa. Kuna tofauti kubwa baina ya kuanzisha utaratibu na kuimarisha kitu ambacho tayari kipo. Kiisimujamii, bado kuna hali ya kushindanisha Kiswahili na Kiingereza katika mfumo wa elimu. Katika ushindanishaji huo, Kiingereza kina nafasi kubwa zaidi ya kushinda kutokana na sababu za kiubeberu zinazowaaminisha watu kuwa elimu ni Kiingereza na Kiingereza ndiyo elimu yenyewe. Eleuthera (2007) ana maoni kwamba maudhui kama hayo (Sera ya Elimu na Mafunzo, 2014) yanakusudia kumpatia mtu mmoja mmoja ujuzi wa lugha ya Kiingereza ili aweze kunufaika na fursa zinazotokana na lugha hiyo, kwa kudhani kuwa hatimaye Taifa litapata maendeleo. Dhana hiyo inaweza kuwa na ukweli kiasi lakini kinachokosekana ni maslahi mapana ya Tanzania kama Taifa ambalo linahitaji elimu bora ambayo haijapatikana kwa kutumia Kiingereza kuwa lugha ya kufundishia kwa zaidi ya miaka hamsini.

Kuna mafanikio muhimu yaliyofikiwa katika kuendeleza madai ya kutaka lugha ya Kiswahili itumike kufundishia katika ngazi zote ikiwa ni pamoja na elimu ya juu. Mafanikio hayo yanadhihirika katika matokeo ya tafiti mbalimbali (Qorro, 2007; Rwantabagu, 2011; Vuzo, 2018) ambazo zimesaidia kuweka wazi changamoto iliyopo katika elimu. Suala linalobaki ni utashi wa kuamua utekelezaji wa mapendekezo yanayotokana na tafiti hizo. Kwa kuwa makala haya lengo lake ni kuonesha jinsi Kiswahili kinavyotumika kufundishia elimu ya juu, kabla ya kuendelea ni jambo la welekea kueleza kwa ufupi dhana ya elimu ya juu kwa jumla na katika muktadha wa Tanzania.

3.0 Dhana ya Elimu ya Juu

Fasili ya UNESCO (1998) kuhusu elimu ya juu inahusisha aina zote za taaluma, mafunzo au mafunzo ya utafiti yanayotolewa baada ya elimu ya sekondari kwenye vyuo vikuu au taasisi zingine za elimu ambazo zimethibitishwa na mamlaka husika kuwa ni taasisi za elimu ya juu. Kwa mujibu wa Bailey (2014) nchi mbalimbali zinaweza kuwa na fasili mahususi kuhusu dhana ya elimu ya juu. Katika lugha ya Kiingereza kwa mfano, kuna mstari mwembamba wa tofauti baina ya maneno *tertiary education na higher education*. Fasili ya neno la kwanza ni elimu au mafunzo yanayomwandaa mtu kuingia kwenye ulimwengu wa kazi baada ya elimu ya sekondari katika taasisi ambazo si vyuo vikuu. Wakati neno la pili lina maana ya elimu ya juu inayotolewa katika vyuo vikuu na vyuo vya ufundi katika kiwango cha shahada za awali na shahada za uzamili.

National Higher Education Policy (1999) inatoa fasili mahususi zaidi kwamba elimu ya juu ni mawanda ya maarifa na ujuzi unaotolewa kwa kiwango cha juu kupitia taasisi za elimu ya juu. Kwa mujibu wa sera hiyo, kuna aina mbili za taasisi za elimu ya juu: kwa upande mmoja kuna vyuo vikuu ambavyo vimepewa jukumu la kuandaa wabobezi na wanazuoni kwa kuzingatia kazi tatu za msingi ambazo ni kufundisha, utafiti na ushauri wa kitaalamu. Kwa upande mwingine kuna taasisi za kati za elimu ya juu zenye jukumu la kuandaa rasilimaliwatu kwa ajili ya mahitaji ya kada za ngazi mbalimbali. Taasisi ambazo sio vyuo vikuu msisitizo wake upo kwenye mbinu za kukuza stadi za kazi kwa ajili ya uzalishaji na huduma katika fani mahususi. Kutokana na fasili hiyo, na katika muktadha wa Tanzania, kwa kuzingatia mfumo wa elimu unaotumika sasa, kunaweza kuwa na mafunzo ya stahada za vyuo vikuu na kwa upande mwingine kunaweza kuwa na stahada za taasisi za elimu ya juu ambazo si vyuo vikuu. Kwa mfano, stahada ya ualimu

au ya utabibu kutoka chuo cha ualimu au chuo cha utabibu ambacho si chuo kikuu ni stahada ya elimu ya juu isiyo ya chuo kikuu.

Katika mifumo ya uthibiti ubora, nchini Tanzania kuna tume mbili zinazosimamia elimu ya juu. Tume ya Vyuo Vikuu Tanzania (TCU) ambayo ina jukumu la kutambua, kusajili na kuidhinisha vyuo vikuu pamoja na kuratibu utendaji wa vyuo hivyo kwa lengo la kuthibiti ubora wa elimu ya juu ambayo ni ya chuo kikuu. Kwa upande mwingine kuna Baraza la Taifa la Elimu ya Ufundi (NACTE) lenye jukumu la kuvitambua, kusajili, kuidhinisha na kusimamia mafunzo yote ya ufundi ambayo si ya vyuo vikuu. Katika lugha ya Kiswahili dhana hizo (*tertiary education* na *higher education*) zinawakilishwa na dhana ya elimu ya ufundi na elimu ya juu mtawalia. Shahada au stahada ya uzamili inayotolewa na chuo kikuu au chuo cha ufundi kinachojihusisha na kazi tatu za msingi: kufundisha, utafiti na ushauri wa kitaalamu ni mfano wa elimu ya juu. Usuli huu wa dhana ya elimu ya juu, unajenga mantiki muhimu kwamba mafunzo yanayotolewa katika Taasisi ya Taaluma za Kiswahili (TATAKI) ya Chuo Kikuu cha Dar es Salaam, yanatolewa kwa kiwango cha elimu ya juu katika shahada za awali, umahiri na uzamivu. Kwa hiyo, kupitia uchambuzi wa maudhui ya kozi za taaluma za Kiswahili zinazotolewa TATAKI, makala haya yanadhihirisha kwamba Kiswahili kimevuka mipaka ya kuwa somo na kuwa lugha ya kufundishia. Kabla ya uchambuzi wa maudhui ya kozi za Taaluma za Kiswahili, ni suala la welekea kuhakiki tafiti chache zinazohusu hadhi ya Kiswahili katika elimu ya juu nchini Tanzania.

4.0 Kiswahili katika Elimu ya Juu ni Somo au Lugha ya Kufundishia?

Kuna tafiti zinazotofautiana kuhusu nafasi ya Kiswahili elimu ya juu. Kwa upande mmoja kuna madai kwamba lugha ya Kiswahili inafundishwa kama somo tu kuanzia elimu ya awali mpaka elimu ya juu. Kwa upande mwingine kuna mtazamo kuwa pamoja na lugha ya Kiswahili kufundishwa kama somo katika vyuo vikuu lakini inatumika pia kama lugha ya kufundishia. Kwa mujibu wa Kihore (2000) na Kische (2014) Kiswahili hakitumiki kwa kiwango chochote kama lugha ya kufundishia elimu ya juu. Huu ni mtazamo ambao unasisitizwa pia na Chipila (2016) kwamba Kiswahili ni somo la kitaaluma katika elimu ya juu na lugha ya elimu katika ngazi za chini.

Maelezo hayo yanamaanisha kuwa Kiswahili si lugha ya elimu ya juu nchini Tanzania. Mtazamo huu unaungwa mkono na Mkude (2007) anapoeleza kwamba lugha ya Kiswahili ina dhima kubwa katika mambo yote isipokuwa elimu ya juu.

Maelezo hayo yana maana kwamba Kiswahili si lugha ya kufundishia elimu ya juu nchini Tanzania. Jukumu la makala haya ni kuweka mipaka ya Kiswahili kama somo na kama lugha ya kufundishia kwa kutumia uchambuzi wa maudhui ya kozi mbalimbali zinazofundishwa katika taaluma za Kiswahili.

Maelezo ya hapo juu yameonesha kwamba waandishi (Chipila, 2016; Kihore, 2000; Kishe, 2014; Mkude, 2007) wana madai kwamba Kiswahili hakitumiki kufundishia elimu ya juu. Madai yao yanatofautiana na mtazamo wa Senkoro (2005) ambaye anabainisha kwamba ingawa kwa mujibu wa sera ya lugha Kiswahili si lugha ya kufundishia elimu ya sekondari na elimu ya juu, lakini inatumika miongoni mwa walimu na wanafunzi licha ya utahini kufanyika kwa lugha ya Kiingereza. Maelezo haya yanaakisi kinachodhihirika katika taasisi za elimu ya juu ambako mijadala ya wanafunzi hufanyika kwa lugha ya Kiswahili. Hata hivyo, tofauti na Senkoro, makala haya yamekusudia kubainisha kwamba Kiswahili ni lugha ya elimu ukiondoa matumizi yake katika majadiliano ya wanafunzi katika masomo mbalimbali.

Mukuthuria (2010) anaeleza kwamba upeo wa juu wa utafiti katika Kiswahili ulifikia mwaka 1994 zilipoanza kuwasilishwa ripoti za utafiti kwa Kiswahili katika ngazi ya chuo kikuu. Maelezo haya yana maana kuwa tafiti zilizofanyika chuo kikuu, lugha iliyotumika kuvumbua au kuchangia maarifa ni lugha ya Kiswahili. Utafiti ni jukumu la msingi la Taasisi ya elimu ya juu hususani vyo vikiu katika kutimiza masharti ya utunukishaji wa shahada za ngazi mbalimbali. Hapa fasili ya maelezo hayo ni kwamba Kiswahili kimetumika kama nyenzo ya kuelezea masuala changamani yanayohusu utafiti katika kiwango cha elimu ya juu kwa shahada za umahiri na uzamivu. Makala haya yanakubaliana na msimamo wa Mukuthuria (Keshatajwa).

Nchini Tanzania tasnifu ya kwanza ya shahada ya uzamivu iliandikwa kwa Kiswahili mwaka 2014. Kabla ya hapo tasnifu za shahada ya umahiri zilikwishakuandikwa kutokana na tafiti zilizofikia upeo wa juu na kuzingatia misingi ya kisayansi. Idara ya Kiswahili ya Chuo Kikuu cha Dar es Salaam (ambayo sasa ni TATAKI) ina uzoefu wa zaidi ya miongo mitatu ikifundisha isimu ya lugha kwa Kiswahili tofauti na madai ya BAKITA (2007) kwamba ina uzoefu wa miongo miwili. Huu ni ukweli unaopaswa kujulikana kuhusu hadhi ya lugha ya Kiswahili katika elimu ya juu.

Maelezo haya yanazingatia hali halisi kwamba isimu ya lugha ni maarifa huru ambayo kama yalivyo maarifa mengine ya falsafa, saikolojia, teknolojia na sayansi menyu si mali ya lugha yoyote mahususi. Maarifa huru yanaweza kuelezwa kwa kutumia lugha ya jamii yoyote kama nyenzo isiyofungamana moja kwa moja na maarifa husika. Lugha ya Kiswahili katika muktadha huu inatumika kufundisha Taaluma za Kiswahili ambazo zinahusu isimu (uchunguzi wa lugha kisayansi), fasihi, lugha na elimu, leksikografia, fonolojia kwa kutaja baadhi. Maudhui ya kozi zinazofundishwa katika ngazi mbalimbali za shahada za elimu ya juu katika Chuo Kikuu cha Dar es Salaam hususani TATAKI zina nafasi kubwa ya kudhihirisha ukweli huu ambao kwa maoni ya makala haya, haujulikani vizuri kutokana na ujumuishaji kwamba kila kinachofundishwa kwa Kiswahili ni Kiswahili.

5.0 Uchambuzi wa Maudhui ya Kozi za Taaluma za Kiswahili CKD

Sehemu hii inafanya uchambuzi wa maudhui ya kozi za taaluma za Kiswahili zinazofundishwa katika viwango mbalimbali vya shahada za awali na shahada za juu katika Chuo Kikuu cha Dar es Salaam hususani kupitia Taasisi ya Taaluma za Kiswahili. Kwa kuwa kozi hizo ni data muhimu katika makala haya, majedwali yametumika kuonesha misimbo na majina ya kozi hizo. Baada ya kila jedwali, ufafanuzi umetolewa kuhusu maudhui ya kozi hizo na uhusiano wake na lugha ya Kiswahili katika muktadha wa elimu ya juu.

Jedwali Na. 1: Kozi za Taaluma za Kiswahili Kiwango cha Uzamivu

Msimbo	Jina la Kozi
KI 700	Mbinu za Utafiti na Uchambuzi wa Data za Lugha ya Kiswahili
KI 701	Uchambuzi wa Nadharia za Sintaksia ya Kiswahili
KI 702	Lugha na Siasa
KF 703	Semina za Masuala Changamani katika Isimujamii
KI 704	Semina na Uchambuzi wa Nadharia za Asili na Chimbuko la Kiswahili
KI 705	Nadharia na Tافiti za sasa za Ujifunzaji wa Kiswahili kama Lugha ya Pili
KF 706	Masuala Changamani katika Nadharia za Fonolojia
KI 707	Semina za Nadharia za Mofolojia ya Kiswahili
KI 708	Semina za Nadharia za Semantiki
KF 709	Semina za Upangaji Lugha
KI 710	Falsafa ya Lugha
KI 711	Lugha na Elimu

Chanzo: Programu ya Digrii ya Udaktari wa Falsafa, TATAKI (2018)

Katika mtazamo wa kimapokeo na ambao unaeleweka kwa walio wengi, kozi zilizoorodheshwa katika Jedwali Na. 1 ni kozi za somo la Kiswahili. Hilo ni tatizo kubwa la ujumuishaji mno kiasi cha kuchukulia kwamba kila kinachofundishwa kwa lugha ya ‘Kiswahili’ ni lugha ya Kiswahili, ujumuishaji ambao si sahihi. Kuna mambo mawili yanayojitokeza katika Jedwali Na 1: kwanza kuna kozi zenye neno Kiswahili katika majina yake kama ilivyo katika kozi zenye misimbo KI 700, KI 701, KI 704, KI 705 na KI 707. Kuwepo kwa neno Kiswahili kunaelekea kudokeza kwamba mawanda ya maudhui ya kozi hizo hayavuki mipaka ya lugha ya Kiswahili. Hii ina maana kwamba mtu anayesoma kozi hizo atapata ujuzi na maarifa yanayohusiana na lugha ya Kiswahili tu! Kuchukulia mambo kwa mtazamo huo, ni kinyume cha ukweli wa mambo yalivyo katika maudhui ya kozi hizo. Maudhui ya kozi hizo ni ya jumla yanayohusu masuala ya jumla bila kuweka mipaka ya lugha mahususi. Kwa mfano, KI 700: Mbinu za Utafiti, hii inahusu mbinu za utafiti wa kiisimu. Hii ina maana kwamba mbinu zitumikazo katika utafiti wa lugha ya Kiswahili hazitofautiani na mbinu za utafiti wa kiisimu katika lugha zingine katika masuala ya msingi.

Maelezo kuhusu data zitakavyokusanywa, zitakavyochambuliwa na kuwasilishwa hayafungwi kwenye wigo wa lugha ya Kiswahili wala lugha nyingine mahususi bali yanaakisi kaida za kimajumui. Vilevile, kuna kozi ya KI 701: Uchambuzi wa Nadharia za Sintaksia ya Kiswahili; kutokana na uzoefu wangu kama mwanafunzi niliyewahi kusoma kozi hiyo kwa ngazi ya uzamivu, maudhui yake yanahusu kanuni za sintaksia ambazo ni majumui. Kwa mfano, pamoja na masuala mengine maudhui ya kozi hiyo yanahusu kuinukia na maendeleo ya Sarufi Geuzi Zalishi (SGZ). Muasisi wa nadharia hiyo ni Noam Chomsky ambaye ni mmilisi wa lugha ya Kiingereza na huenda hana umilisi wa lugha ya Kiswahili hadi leo lakini nadharia yake inatumika kuchambua sintaksia za lugha mbalimbali za ulimwengu. Alibuni nadharia hiyo kwa kutumia msingi wa lugha ya Kiingereza kwa malengo ya kuunda Sarufi Majumui (SM) itakayoweza kutoa maelezo ya jumla kuhusu muundo wa lugha za binadamu na jinsi muundo huo unavyofanya kazi Chomsky (1965). Lugha ya Kiswahili inatumika kuelezea misingi ya nadharia hiyo inavyofanya kazi kwenye lugha ya Kiswahili na lugha zingine za ulimwengu kwa uhakikifu na utonafsi wa kiwango cha juu.

Jambo la pili ni kuwepo kwa kozi ambazo hazina neno Kiswahili katika majina yake kwa mfano KI 710: Upangaji Lugha na KI 711: Lugha katika Elimu. Hizi si kozi zinazohusu lugha ya Kiswahili kindakindaki bali zinahusu michakato ya

kupanga lugha na jinsi lugha inavyoathiri elimu mtawalia. Katika hali hii ni mantiki kuzungumzia kwamba Kiswahili kinatumika kufundishia shahada ya Digrii ya Udaktari wa Falsafa. Kwa maoni yangu majina ambayo hayana neno Kiswahili ndani yake, ndiyo ambayo hayaleti mkanganyiko baina ya jina la kozi na maudhui ya kozi husika. Hii inatokana na ukweli kwamba baadhi ya kozi zimebuniwa kukidhi masuala mtambuka yanavyoathiriana na lugha wakati baadhi zimejikita kuelezea masuala ya lugha peke yake. Hata hivyo, ifahamike kwamba maarifa ya lugha yanayofafanuliwa kwa Kiswahili yanavuka mipaka ya lugha ya Kiswahili na kujihusisha na masuala mtambuka ya ama isimu au fasihi. Katika program ya umahiri, mgawanyo wa Isimu na Fasihi kama maarifa huru yanayofundishwa kwa Kiswahili uko dhahiri kama unavyoonekana katika Jedwali Na. 2:

Jedwali Na. 2: Kozi za Taaluma za Kiswahili kiwango cha umahiri CKD

Msimbo	Jina la Kozi
KI 603	Sintaksia ya Kiswahili
KI 606	Tafsiri: Nadharia na Vitendo
KI 608	Masuala ya Kisiasa katika Isimujamii ya Kiswahili
KI 609	Historia na Lahaja za Kiswahili
KI 614	Lekskografia
KI 631	Semina za Uzamili
KF 615	Riwaya ya Kiswahili
KF 617	Ushairi wa Kiswahili
KF 620	Fanani Teule
KF 622	Wanawake katika Fasihi ya Kiswahili
KF 623	Tendi Simulizi na Andishi za Kiswahili
KF 624	Ngano za Kiswahili
KF 625	Fasihi ya Majaribio katika Kiswahili
KF 628	Elimu Mitindo katika Fasihi ya Kiswahili
KF 631	Semina ya Uzamili

Chanzo: Mwongozo wa Programu ya M.A (Kiswahili) TATAKI, 2010

Kama ilivyodokezwa awali, kozi za kiwango cha umahiri zinagawanyika kwa uwazi kabisa katika makundi mawili ya Isimu na Fasihi. Mwanafunzi anayetaka kuboea kwenye kiperi cha ngano anaweza kufanya utafiti kwenye ngano za lugha yake ya asili ambayo si Kiswahili. Muhimu zaidi ni kwamba misingi ya kiuchambuzi ya ngano inaathiriwa na kanuni za jumla za taaluma ya fasihi na kama kuna tofauti za msingi kukidhi sifa za ngano katika lugha mahususi basi maelezo yatahitajika ya kwa nini tofauti hizo zinajitokeza. Hili ni jambo la kawaida katika taaluma mbalimbali kwamba baadhi ya sifa za kitu zinaweza kutofautiana na ruwaza majumui za kanuni zilizopo. Kuyatazama masuala hayo kwa mwelekeo huu ni kusisitiza utenganishaji wa lugha kwa upande mmoja na maarifa kwa upande mwingine.

Vilevile, inatoa nafasi ya kuzingatia uhusiano muhimu uliopo baina ya lugha na maarifa. Hii inasaidia pia kuonesha jinsi ambavyo maarifa ni kitu huru na lugha ni nyenzo tu ya kupitishia maarifa hayo. Katika muktadha huo, lugha ya Kiswahili inapata sifa ya kuwa lugha ya kufundishia elimu ya juu katika shahada ya umahiri na uzamivu. Suala la kozi kuakisi maarifa ya jumla sio jambo linalojitokeza katika kiwango cha uzamivu na umahiri tu. Hali hiyo inajitokeza pia kwenye kiwango cha shahada za awali. Chunguza baadhi ya kozi za shahada ya awali katika Jedwali Na. 3:

Jedwali Na. 3: Kozi za Taaluma za Kiswahili Kiwango cha Shahada ya Awali, CKD

Msimbo	Jina la Kozi
KF 102	Utangulizi wa Fasihi
KI 107	Misingi ya Isimu
KI 109	Miundo ya Misingi ya Kiswahili
KF 103	Nadharia na Uhakiki wa Fasihi
KI 106	Stadi za Mawasiliano na Matumizi ya Kiswahili
KI 110	Utangulizi wa Isimujamii katika Kiswahili
KF 215	Riwaya na Hadithi Fupi za Kiswahili*
KI 208	Fonolojia ya Kiswahili
KI 212	Tafsiri: Nadharia na Vitendo
KF 205	Uandishi wa Kubuni
KI 209	Mofolojia ya Kiswahili
KI 211	Historia ya Kiswahili na Lahaja zake

KF 204	Falsafa ya Kiafrika na Nadharia ya Fasihi
KI 214	Mbinu za Ufundishaji wa Kiswahili kwa Wageni
KF 302	Fasihi Simulizi ya Kiswahili na Kiafrika
KI 310	Sintaksia ya Kiswahili
KF 304	Fasihi Linganishi
KI 311	Semantiki na Pragmatiki
KF 316	Tamthiliya ya Kiswahili*
KF 317	Ushairi wa Kiswahili*
KI 313	Leksikografia

Chanzo: Mwongozo wa Kozi za Shahada za Awali CKD 2016/2017

Kozi zote za hapo juu kimaudhui zinagawanyika katika maeneo makubwa mawili ya kitaaluma. Kozi zote zenye misimbo inayoanza na KI ni kozi za isimu wakati zile zinazoanza na KF ni kozi za fasihi. Isimu na Fasihi ni taaluma huru ambazo hazifungwi katika wigo wa lugha yoyote. Katika muktadha huo, lugha ya Kiswahili inatumika kufundishia isimu na fasihi kwa kiwango cha shahada ya kwanza ya chuo kikuu ambacho kwa fasili na sifa zake za kiutendaji ni taasisi ya elimu ya juu nchini Tanzania. Shahada za awali ni kiwango cha elimu cha kuweka misingi ya kitaaluma katika isimu, fasihi na utafiti ili kumwezesha mhitimu kumudu masomo ya shahada za juu kama zilivyooneshwa katika majedwali Na. 1 na Na. 2. Kama inavyoonekana katika maudhui ya kozi za viwango hivyo vitatu, hakuna shaka kwamba lugha ya Kiswahili ni lugha ya kufundishia elimu ya juu katika Chuo Kikuu cha Dar es Saalam ambacho kimetumika kama kifani katika kuonesha nafasi ya lugha ya Kiswahili katika elimu ya juu.

6.0 Hitimisho

Makala haya lengo lake ni kusahili uelewa ambao katika makala haya umeitwa wa kimapokeo kwamba lugha ya Kiswahili inafundishwa kama somo tu katika elimu ya sekondari na elimu ya juu. Maandiko yaliyopo yameonesha ufahamu na misimamo inayotofautiana kuhusu hadhi ya lugha ya Kiswahili katika elimu ya juu nchini Tanzania. Kwa upande mmoja lugha ya Kiswahili inachukuliwa kuwa ni somo tu katika elimu ya juu. Kwa upande mwingine lugha ya Kiswahili inachukuliwa kuwa imevuka mipaka ya kuwa somo na kutumika kufundishia taaluma za Kiswahili katika ngazi za shahada za awali, umahiri na uzamivu. Katika makala haya umefanyika uchambuzi wa maudhui ya kozi za taaluma za Kiswahili

zinazofundishwa Chuo Kikuu cha Dar es Salaam hususani katika Taasisi ya Taaluma za Kiswahili (TATAKI) katika kiwango cha shahada za awali, umahiri na uzamivu. Uchambuzi huo umedhihirisha kuwa Kiswahili ni lugha inayotumika kufundishia katika ngazi ya elimu ya juu nchini Tanzania. Mafanikio hayo yanaifanya lugha ya Kiswahili kuwa na hadhi mpya katika mfumo wa elimu nchini Tanzania.

Wito wa makala haya ni kwamba wigo wa lugha ya Kiswahili kutumika kufundishia elimu ya juu upanuliwe. Hii inatokana na ukweli kwamba shaka ambayo imekuwapo katika mijadala iliyodumu kwa muda mrefu kuhusu uwezo wa lugha ya Kiswahili imeondolewa kwa vitendo kupitia matumizi ya Kiswahili elimu ya juu katika Taaluma za Kiswahili. Hatua ambayo inafaa kuchukuliwa mara moja bila kusubiri ni kuziba ombwe la sera ya lugha na lugha ya elimu. Sanjari na hatua hiyo, juhudi za makusudi zifanyike ili kuhakikisha kwamba katiba inaitambua lugha ya Kiswahili na kutoa msukumo zaidi wa rasilimali zinazopangwa kwa ajili ya kuikuza na kuimarisha matumizi ya lugha hiyo kwa manufaa ya Watanzania na watumiaji wengine kitaifa, kikanda na kimataifa.

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Ombwe la Sera ya Lugha: Mtanziko kwa Matumizi ya Kiswahili katika Elimu Tanzania

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Ikisiri

Kwa miongo mingi, matamko ya kisiasa na maandiko mengi yameshuhudiwa yakitolewa kuhusu nafasi, maendeleo na matumizi ya lugha ya Kiswahili nchini Tanzania. Mpaka sasa matamko na maandiko hayo hayajaweza kujenga mazingira fanisi na wezeshi kwa maendeleo ya lugha ya Kiswahili; pamoja na matumizi yake kwa kiwango stahiki na tarajiwa kwenye sekta mbalimbali za kimaendeleo ikiwemo sekta ya elimu. Makala hii inaeleza kuwa pamoja na vidokezo vya utashi mwema wa kisiasa unaoakisiwa kwenye matamko ya viongozi waandamizi wa serikali pamoja na maandiko mbalimbali ya kutukiza lugha ya Kiswahili na matumizi yake katika elimu ya Tanzania, bado ni dhahiri kuwa ukuu wa uwepo wa sera ya lugha haukupiki. Makala hii inahoji kwamba bila kuwepo sera fanisi na wezeshi kuhusu lugha na lugha ya Kiswahili kimahsusi, maendeleo na matumizi yake katika elimu hayawezi kufikiwa kwa ufanisi na kiwango kinachotarajiwa, yaani kutumia Kiswahili kufundishia katika ngazi zote za elimu nchini. Data za makala hii zimetokana na usomaji wa maandiko mbalimbali na maoni ya watu kwenye makongamano yaliyofanyika nchini Tanzania kuhusu maendeleo ya lugha ya Kiswahili na matumizi yake. Makala hii inahitimisha kuwa kuwepo kwa sera mahsusi ya lugha katika taifa la Tanzania, kutaweka mifumo ya kisheria na kanuni lazimishi za kutoa haki na fursa za kisheria kwa Watanzania, vyombo vyenye mamlaka, kama vile wizara na bunge, kuweza kupanga, kuhoji na kufuatilia utekelezaji wa sera hiyo na shughuli za serikali na vyombo vyake. Kwa hivyo, wapenzi na wadau wa lugha ya Kiswahili hawapaswi tu kuishia kulalamika kuhusu nafasi finyu inayotolewa kwa lugha hiyo, bali wanapaswa kwanza, na kwanza kabisa, kupigania bila kuchoka uwepo wa sera ya kisheria mahsusi ya lugha katika nchi ya Tanzania.

Dhana Muhimu: Matamko ya kisiasa, ombwe la sera ya lugha, ukuu wa sera, mtanziko wa matumizi ya Kiswahili katika elimu Tanzania

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1.0 Utangulizi

Maandiko na matamko mbalimbali yanadhihirisha juhudi na hatua muhimu zilizochukuliwa kuiwezesha lugha ya Kiswahili kuendelezwa na kutumika katika nyanja rasmi nchini Tanzania. Juhudi za kuendeleza lugha ya Kiswahili na matumizi yake zinahusishwa na kuanzishwa kwa Kamati ya Lugha ya Afrika Mashariki mwaka 1930 (Sengo, 1995). Kamati hiyo baadaye ilijulikana kama Kamati ya Kiswahili ya Afrika Mashariki. Chombo kingine rasmi kilichotumiwa nchini Tanzania kuendeleza lugha ya Kiswahili na matumizi yake ni Taasisi ya Uchunguzi wa Kiswahili (TUKI) iliyoasisiwa mwaka 1970 na kuchukua majukumu ya chombo cha awali, yaani Kamati ya Kiswahili ya Afrika Mashariki (Khamis, 2005). Juhudi hizo zililenga kuwezesha matumizi fanisi ya Kiswahili katika nyanja mbalimbali.

Matumizi ya Kiswahili kwenye kampeni za kupigania uhuru yalikuwa mkakati wa makusudi wa kuwaelimisha watu kuhusu maana na umuhimu wa uhuru; na kuwawezesha kushiriki katika harakati hizo kwa wingi na ufanisi. Hali kadhalika, baada ya uhuru wa Tanganyika wa mwaka 1961, Serikali ilichukua hatua muhimu za kuendeleza Kiswahili na matumizi yake kwenye nyanja mbalimbali za maendeleo. Hatua hizo kabambe za kimkakati zilijumuisha ukuzaji wa msamiati wa lugha ya Kiswahili kwa kuunda istilahi za lazima za kukiwezesha Kiswahili kutumika kwenye maeneo yaliyohodhiwa na lugha ya Kiingereza. Kampeni za ‘Uhuru na Kazi’ na ‘Siasa ya Ujamaa na Kujitegemea’ zilichangia sana katika kuendeleza Kiswahili na matumizi yake nchini Tanzania. Hii ilitokana na ukweli kwamba serikali ya awamu ya kwanza ilitia juhudi za kuwashirikisha wananchi katika ujenzi wa taifa na kuboresha maisha ya wananchi hao kijamii na kiuchumi.

Mwalimu Julius Nyerere, Rais wa kwanza wa Tanzania (1961–1985), alikuwa mfano wa kuigwa wa kuwaelimisha na kuwahamasisha wananchi wote kutumia Kiswahili, lugha ambayo ilikuwa inaeleweka kwa kiwango kikubwa popote Tanzania. Mwalimu Julius Nyerere alitumia Kiswahili wakati wa kupigania uhuru, kujenga umoja wa kitaifa na kujenga Itikadi ya Ujamaa na Kujitegemea (Legere, 2005). Kuelekea mwishoni mwa miaka ya 1980, ulegevu ulianza kudhihirika kuhusu uzalendo wa baadhi ya watu kwa lugha ya Kiswahili. Wadau rasmi wenye mamlaka waliotakiwa kuwa wapangaji na watekelezaji wa mikakati ya maendeleo na matumizi ya Kiswahili walianza kurudi nyuma katika jukumu hilo. Ingawa waliendelea kutoa matamko ya hadharani ya kuitukuza lugha ya Kiswahili, kauli zao hazikutekelezwa kwa ufanisi stahiki. Matokeo ya hali hiyo yalikuwa wadau

kuachwa peke yao katika kupigania maendeleo na matumizi ya Kiswahili nchini Tanzania.

Kinyume na juhudi za Mwalimu Julius Nyerere, kuanzia miaka ya 1980 mwishoni, kumeshuhudiwa kuibuka kwa wapinga maendeleo ya Kiswahili waliojitahidi kushawishi jamii ya Watanzania kuamini kuwa lugha ya Kiingereza ni bora na fanisi zaidi kuliko Kiswahili (Legere, 2005). Njama za watu wanaopinga maendeleo ya lugha ya Kiswahili zimesababisha kwa miongo kadhaa, Kiingereza kupewa kipaumbele kisichostahili huku lugha ya Kiswahili ikipewa nafasi finyu kuhusiana na maendeleo na matumizi yake katika nyanja mbalimbali rasmi ikiwa ni pamoja na sekta ya elimu. Katika tahariri ya Jarida la *KISWAHILI* la mwaka 1985; 54 (1/2), inatamkwa wazi kuhusu kipaumbele kinachowekwa kwenye lugha ya Kiingereza na udunishaji unaoelekezwa kwenye lugha ya Kiswahili kama ifuatavyo:

Uongozi wa ‘awamu ya kwanza’ uliweka mwongozo na vyombo vya kukuza lugha ya Kiswahili kitaifa, “Awamu” hiyo ilikifanya Kiswahili kuwa lugha halisi ya taifa na kimataifa. Hata hivyo, mwishoni mwa “awamu” hiyo pamekuwa na kulegalega katika juhudi za kukuza Kiswahili. Sera mpya ya elimu ya juu haikukipa nafasi Kiswahili, bali imesisitiza zaidi matumizi ya lugha ya Kiingereza. Kiswahili kimelaumiwa kuwa kimesababisha kushuka kwa kiwango cha elimu nchini. Hakuna sera kamili ya lugha ya taifa. Wakuzaji wa Kiswahili hawajaelezwa sababu wala kupewa malengo ya kufikia katika shughuli zao kila siku wanaunda istilahi na kuandika vitabu vya kitaaluma lakini hawaelezwi istilahi na vitabu hivyo vitatumiwa lini na wapi? Ukosefu wa sera ya lugha nchini ndicho kikwazo kikubwa cha maendeleo ya lugha ya Kiswahili leo.

Chanzo: TUKI (1985, k. vi)

Tamko hili linaonesha dhahiri kuwa kwa miaka mingi Kiingereza kimepewa msisitizo mkubwa kuliko Kiswahili. Aidha, maandiko na ukuzaji wa lugha ya Kiswahili umeshindwa kuwa fanisi kwa sababu ya ukosefu wa sera kamili ya lugha. Ukosefu huo wa sera kamili ya lugha ni jambo mojawapo kubwa linalosababisha dharau ya watu dhidi ya lugha ya Kiswahili na matumizi yake katika sekta rasmi ikijumuishwa sekta ya elimu. Bugingo (2005) anabainisha dharau dhidi ya Kiswahili na matumizi yake kwa kusema:

Ulezi wa Kiswahili umekabiliwa na ukosefu wa ushirikiano.... Wizara ya Elimu na Utamaduni iliamua kuwatelekeza mtoto na mama yake. Kiswahili na BAKITA BAKITA imebakia kuishi maisha ya ombaomba kana kwamba si idara halali na muhimu serikalini... Serikali inaendelea kukiunga mkono Kiswahili kwa maneno matupu ...vyombo ... pamoja na wapenzi wengine wenye akili timamu na uelewa sahihi wa umuhimu wa Kiswahili wametukanwa na kudhalilishwa kwa sababu ya kukitetea Kiswahili.... Kiongozi yeyote ambaye hatambui umuhimu wa Kiswahili kama lugha ya taifa hastahili kuongoza wizara hiyo (m.y.n. ya Elimu na utamaduni) kwa hakika uzalendo wa kiongozi wa namna hiyo unapaswa kutiliwa shaka.

Chanzo: Bugingo (2005, k. 5 na 10)

Tamko hili linadhihirisha bayana kuwa tofauti na dhamira ya dhati ya Mwalimu Julius Nyerere ya kuendeleza na kutumia Kiswahili, baadhi ya taasisi za serikali na viongozi wenye dhamana hawajatoa ushirikiano wa kutosha katika jukumu la kuendeleza lugha ya Kiswahili na matumizi yake. Aidha, suala la ukosefu wa sera mahsusi ya lugha nchini Tanzania linachangia hali ya kutokuwepo kwa ushirikiano stahiki baina ya wadau mbalimbali katika jukumu la kutambua ukuu wa lugha ya Kiswahili nchini pamoja na maendeleo na matumizi yake kwenye sekta za kimaendeleo ikijumuishwa sekta ya elimu.

Kukosekana kwa sera mahsusi ya lugha kumesababisha changamoto katika kulitekeleza suala la kisiasa la kuifanya lugha ya Kiswahili kuwa chombo cha kuhimiza umoja wa kitaifa na kuhamasisha maendeleo katika nyanja mbalimbali. Aidha, vyombo rasmi vilivyoanzishwa kushughulikia maendeleo ya Kiswahili na matumizi yake haviwezi kufanya kazi fanisi pasipo kuwepo na sera rasmi ya lugha. Mchango wa taasisi kama Taasisi ya Taaluma za Kiswahili (TATAKI), Baraza la Kiswahili la Taifa (BAKITA), Chama cha Usanifu wa Kiswahili na Ushairi Tanzania (UKUTA), Taasisi ya Kiswahili na Lugha za Kigeni (TAKILUKI), Chama cha Lugha na Fasihi ya Kiswahili Tanzania (CHALUFAKITA), Baraza la Kiswahili la Zanzibar (BAKIZA) na kadhalika hauwezi kuwa fanisi bila kuwepo kwa sera rasmi ya lugha inayoweza kuelekeza, kufuatilia na kutathimini utekelezaji wa majukumu ya taasisi hizo na nyinginezo kama vile tume ya lugha ya Kiswahili na wizara yenye dhamana.

2.0 Mkabala wa Kinadharia

Makala haya yametumia mkabala wa kinadharia wa kisimu jamii ujulikanao kama Mgongano wa Daiglosia ulioasisiwa na Fasold mwaka 1990 kama nguzo ya kuegemeza hoja zake. Nadharia hii inajikita katika msingi kwamba jamii lugha yoyote imegawanyika katika matabaka yanayotofautiana kutokana na nguvu za kiuchumi, kijamii, kisiasa na kiutamaduni. Kawonga (2017) akimnukuu Mekacha (2002) anadai kuwa lugha inayofungamana na tabaka lenye nguvu huwa na uamilifu wa juu zaidi kuliko ile inayofungamana na tabaka duni. Hudson (2002) anasisitiza kuwa, katika jamii duni yenye lugha kadhaa, lugha yenye nguvu kutoka nje ya jamii hiyo huteuliwa ili kuepuka migongano ya kijamii. Kwa mujibu wa nadharia hii, lugha ya Kiingereza ilikuwa na hadhi ya juu zaidi kuliko Kiswahili katika nchi za Afrika Mashariki. Hudson anachukulia maendeleo ya kiutandawazi kuwa ni moja ya sababu zinazopelekea mgongano wa daiglosia kwa kuwa utandawazi unaweka watu pamoja na kuhamasisha demokrasia. Kwa upande wake, utandawazi umesababisha kusambaa zaidi kwa kisomo, mawasiliano baina ya jamii tofautitofauti pamoja na shauku ya watu kuwa na lugha moja inayowapa uhuru. Kwa minajili hiyo basi, nchi za Afrika Mashariki zilijikuta zikimakinikia zaidi lugha ya Kiingereza kama lugha ya kiulimwengu na kupuuza Kiswahili ambayo ndiyo lugha ya wazawa.

Ki-daiglosia, lugha duni hutumika katika familia, mitaani na katika shughuli za kijamii za kila siku. Lugha duni pia hutumika katika dini, kufundishia ngazi za chini na masuala ya kiserikali kwa kuwa hueleweka zaidi kwa wazawa. Lugha yenye hadhi ya juu hutumiwa na wasomi, kufundishia elimu ya juu na mawasiliano yote ya kimataifa. Hali hii inajidhihirisha katika nchi za Afrika Mashariki kwa kuwa lugha ya Kiswahili imepewa hadhi ya chini kuliko lugha ya Kiingereza. Kawonga (2017) anasisitiza kuwa, hata katika mfumo mzima wa elimu, lugha ya Kiingereza imepewa mashiko makubwa zaidi kuliko Kiswahili. Jamii imeshikilia dhana potofu kwamba kujua Kiingereza ndio kipimo cha usomi na kwamba usipojua Kiingereza unaonekana kuwa ni mshamba na elimu yako ni duni. Hivyo basi, makala hii imechagua nadharia ya mgongano wa daiglosia ili kutoa mwongozo kwamba lugha ya Kiswahili inayoeleweka na watumiaji wengi ipewe hadhi ya juu zaidi katika elimu ili kuleta uelewa fanisi, jumuishi na maendeleo endelevu kwa wadau wote.

3.0 Mbinu za Utafiti

Makala hii imetokana na utafiti wa maktabani. Utafiti huu ulitumia data za upili zilizotokana na mbinu ya upekuzi matini ambapo data zilipatikana kwa njia ya

kusoma maktabani, mtandaoni na tovuti mbalimbali. Uchambuzi umefanyika kitaamuli na kuwasilishwa kinathari katika kushajihisha mada ndogo mbalimbali katika sehemu ya nne na sehemu ya tano.

4.0 Maendeleo ya Matumizi ya Kiswahili katika Elimu Tanzania

Lugha ni chombo muhimu katika michakato ya utoaji wa elimu kama eneo mojawapo la huduma za jamii. Matumizi ya lugha ya Kiswahili katika elimu nchini Tanzania yanaweza kugawanywa katika vipindi mbalimbali. Katika makala hii, vipindi vikuu vya matumizi ya Kiswahili katika elimu nchini Tanzania vinajumuisha wakati wa ukoloni hadi wakati wa uhuru mwaka 1961-1966, mwaka 1967-1994, na mwaka 1995-2004 hadi sasa. Mgawanyo wa vipindi hivyo umeukiliwa na mabadiliko ya sera za kisiasa, kiuchumi na kijamii ambazo athari zake kuntu zinadhihirika kwenye maendeleo ya lugha na matumizi yake kwenye tasnia ya elimu na sekta nyingine.

4.1 Matumizi ya Kiswahili katika Elimu wakati wa Ukoloni hadi wakati wa Uhuru Mwaka 1966

Wakati wa ukoloni lugha ya Kiswahili ilitumika kufundishia elimu ya msingi katika shule za msingi za chini, yaani darasa I – IV. Katika ngazi hiyo lugha ya Kiingereza ilifundishwa kama somo katika darasa la III na darasa la IV. Lugha ya Kiingereza ilitumika kama lugha ya kufundishia kwenye shule za kati, yaani kuanzia darasa la V – VII. Hali kadhalika, katika shule za sekondari darasa la IX - XVI lugha ya Kiingereza ilitumika kufundishia kwenye ngazi zote za elimu ya shule za msingi, za kati na shule za sekondari, yaani darasa la IX hadi darasa la XVI. Kwenye ngazi hizo za elimu, lugha ya Kiswahili ilifundishwa kama somo tu (Kiango, 2007; 177). Utaratibu huo haukutumika Tanzania peke yake bali ulitumika pia katika nchi ya Kenya ambapo Kiingereza kilipewa nafasi kubwa zaidi kuliko lugha ya Kiswahili (Republic of Kenya, 1976; Muthwii, 2002).

4.2 Matumizi ya Kiswahili katika Elimu Miaka ya 1967–1994

Mwaka 1967 ni kipindi muhimu katika historia ya uhuru wa Tanganyika na maendeleo yake ya kisiasa, kiutamaduni, kijamii na kiuchumi kwa sababu ya kutangazwa kwa Azimio la Arusha. Maudhui ya itikadi ya kijamaa yaliyoandikwa kwenye andiko la Azimio la Arusha yalilenga kuwaimarisha na kuwashirikisha wananchi katika ujenzi wa sera ya ujamaa na kujitegemea. Ili kufikia azima hiyo, nafasi ya lugha ya Kiswahili iliimarishwa ili kuwaunganisha zaidi na kuwahamasisha wananchi katika kujenga taifa changa, kuboresha maisha ya

kijamii na kuleta maendeleo ya kisiasa na kiuchumi (Legere, 2005). Hatua ya kwanza iliyochukuliwa na serikali ya Tanzania katika kipindi hiki ni kukitangaza Kiswahili kuwa lugha ya Taifa. Sambamba na tangazo hilo la mwaka 1967, serikali ya Tanzania ilipitisha azimio la kutumia Kiswahili kama lugha ya kufundishia katika madarasa yote ya shule za msingi, yaani kuanzia darasa la I hadi darasa la VII. Ikumbukwe kwamba wakati huo darasa la VIII lilikuwa limekwishafutwa kwenye mfumo wa elimu ya Tanzania. Mchakato huo wa kuondoa darasa la VIII ulianza mapema mwaka 1965 na kukamilika mwaka 1967 (Mushi, 2009).

Katika kipindi cha kuanzia mwishoni mwa miaka ya 1970 mijadala mingi iliibuka kuhusu uhalali wa uwezekano wa kupanua mawanda ya matumizi ya Kiswahili kama lugha ya kufundishia elimu ya sekondari hadi elimu ya juu. Kulikuwa na madai kuwa matumizi ya Kiingereza kama lugha ya kufundishia yalikuwa kikwazo kwa maendeleo ya elimu nchini Tanzania. Watafiti walibaini kuwa wanafunzi walikuwa wanatatizwa katika kufahamu vizuri masomo yao kwa sababu ya kufundishwa kwa lugha ya Kiingereza (Kiango, 2007). Aidha, katika mijadala hiyo kulikuwa na kundi la watu waliodai kuwa Kiswahili hakijajitosheleza kuwa lugha ya kufundishia elimu ya sekondari na elimu ya juu. Hali kadhalika, madai mengine yalikuwa kwamba kuacha kufundisha na kujifunza kwa lugha ya Kiingereza kungeitenga Tanzania kutoka jamii pana ya kiulimwengu. Kutokana na mijadala hiyo iliyoendelea, serikali iliamua kuunda Tume ya Rais ya Elimu mwaka 1982. Kazi ya Tume hiyo ilikuwa kuchunguza mfumo wa elimu nchini na kutoa mapendekezo ya muundo bora wa elimu. Pamoja na jukumu hilo, Tume ya Rais ya Elimu mwaka 1982 ilikusanya maoni ya watu kuhusu ufaafu wa lugha ya Kiswahili kufundishia ngazi zote za elimu. Maoni ya watu wengi waliohojiwa yalionesha kuwa lugha ya Kiswahili inafaa zaidi kufundishi ngazi zote kwa sababu inafahamika zaidi na watu wengi nchini ikijumuisha wanafunzi kwenye ngazi mbalimbali za elimu. Kutokana na maoni hayo ya wananchi Tume ya Rais ya Elimu mwaka 1982 ilitoa mapendekezo yafuatayo kuhusu matumizi ya Kiswahili katika kufundishia ngazi zote za elimu:

Ili Taifa liweze kukuza na kuendeleza utamaduni wake na kurahisisha ufahamu wa wananchi wengi wa masomo katika ngazi za elimu baada ya elimu ya msingi bila kipingamizi cha lugha za kigeni, imependekwezwa kwamba wizara ya elimu, kwa kushirikiana na vyombo vyake: Taasisi ya Ukuzaji Mitaala, Vyuho Vikuu na kwa ushirikiano na Baraza la Kiswahili la Taifa ifanye mipango thabiti ya

kuziwezesha shule na vyuo vyote nchini kufundisha masomo yote kwa kutumia Kiswahili kuanzia kidato cha kwanza ifikapo Januari mwaka 1985 na Chuo Kikuu kuanzia mwaka 1992.

Chanzo: Tume ya Rais (1982, k. 209)

Inasikitisha kutamka kuwa mapendekezo hayo ya Tume ya Rais ya Elimu mwaka 1982 hayajatekelezwa hadi leo; hali inayoendeleza kipingamizi cha lugha ya kigeni (Kiingereza) kwa wananchi wengi kwenye ngazi mbalimbali za elimu nchini Tanzania. Kama mapendekezo hayo yangukuwa yamekwishatekelezwa kwa mujibu wa mpango mkakati uliopendekezwa, sasa hivi masomo na taaluma zote kwenye ngazi zote za elimu zingekuwa zinafundishwa kwa lugha ya Kiswahili.

Kutoruhusu Kiswahili kufundishia ngazi zote za elimu kumewafanya wanafunzi kuendelea kuwa na matatizo ya kuelewa na kujieleza katika Kiingereza na hivyo kushindwa kuelewa vizuri masomo yao (Brock-Utne, 2007a; Brock-Utne, 2007b; Mlama na Matteredu, 1977; Qorro, 1996; Qorro, 2013). Hali hii inatokana na mambo makuu mawili, kwanza, Kiingereza si lugha ambayo wanafunzi wengi wamezaliwa nayo, kukua nayo na kujifunza kwa ufanisi utotoni. Pili, ufundishaji wa lugha ya Kiingereza kwenye shule za msingi na hata sekondari bado ni duni; hauna ufanisi wa kutosha kuhalalisha lugha hiyo kuwa lugha ya kufundishia kwenye ngazi yoyote ya elimu. Ingawa hakuna msingi imara wa stadi za lugha ya Kiingereza, mpaka sasa bado lugha hiyo inapewa nafasi kubwa wakati Kiswahili kimepewa nafasi ndogo kama lugha ya kufundishia katika Elimu ya Tanzania.

4.3 Matumizi ya Kiswahili katika Elimu katika Kipindi cha 1995–2004

Elimu ni huduma ya kijamii inayohitaji kutolewa kwa kuzingatia mtaala unaotokana na mahitaji ya jamii husika. Matumizi ya lugha ni kipengele kimojawapo muhimu kuzingatiwa katika utoaji wa elimu. Mwaka 1995 Serikali ya Tanzania ilianzisha mtaala wa elimu unaotumia lugha ya Kiingereza kufundishia masomo yote isipokuwa somo la lugha ya Kiswahili katika shule za msingi za sekta binafsi. Hayo yalikuwa mabadiliko ya kisera yaliyofanywa na wizara yenye dhamana ya elimu. Ikumbukwe kuwa kabla ya mwaka 1995 watu wachache wenye kipato cha kati na juu nchini Tanzania walikuwa wanawapeleka watoto wao kusoma shule za nje ya nchi kama vile Uganda na Kenya kwa ajili ya kutafuta umahiri wa lugha katika Kiingereza ambao kwa fasili yao ni ‘elimu bora’. Watoto waliosoma katika shule hizo nje ya nchi baadhi yao walionekana kuwa na uwezo mkubwa wa kimawasiliano katika lugha ya Kiingereza na wazazi wao wakadhani

kuwa watoto wao wamepata elimu bora. Aidha, kwa upande mwingine, watoto hao walionekana kuonesha tabia zilizoenda kinyume na tunu njema za utamaduni wa Kitanzania kutokana na kuiga kila kitu cha kigeni na kudhani kuwa ni kwenda na wakati. Mahitaji ya wazazi ya kusomesha watoto wao kwenye shule za mtaala wa Kiingereza katika shule za msingi kuliifanya serikali iruhusu kuanzishwa kwa shule zinazotumia lugha hiyo kufundishia masomo yote isipokuwa somo la Kiswahili.

4.4 Tulipo Sasa ni Wapi?

Lugha ya Kiswahili inatumika kufundishia masomo yote kwenye shule nyingi za msingi isipokuwa somo la Kiingereza. Aidha, Kiswahili kinatumika kufundishia taaluma za lugha ya Kiswahili katika shule za sekondari, vyuo vya kati na vyuo vikuu. Mbali na taaluma hizo, masomo mengine yote yanafundishwa kwa Kiingereza kuanzia shule za sekondari, vyuo vya kati na vyuo vikuu. Kwa nini tumebaki hapo tulipo? Katika nchi ya Tanzania pamekosekana utashi wa dhati wa kisiasa kuhusu lugha ya Kiswahili hali inayosababishwa na ulevi mzito wa kasumba ya kutawaliwa. Baadhi ya watu waliopewa dhamana ya kuongoza uamuzi wa kuendeleza lugha ya Kiswahili na matumizi yake katika nyanja mbalimbali ikiwemo tasnia ya elimu hawana utashi wa dhati wa kisiasa. Kwa mujibu wa Phillipson (1992), hali hiyo ni athari za ubeberu wa kiisimu unaoziona baadhi ya lugha kuonekana bora kuliko lugha nyingine. Kwa muda mrefu tumechelewa kuamua na hadi sasa bado kuna kusitasita kutumia Kiswahili kama lugha ya kufundishia katika ngazi zote za elimu. Hii ni hujuma kubwa kupita zote kwa maendeleo ya Kiswahili na matumizi yake katika elimu na kwa wale wote ambao wangetarajiwa kunufaika na uamuzi huo kama ungechukuliwa mapema. Hali hii ya kuchelewa kuamua imeoneshwa pia katika Tumbo-Masabo na Chiduo kama ielezwavyo:

Tumechelewa kuchukua hatua thabiti, hali ambayo imesababisha tukawa tulipo katika utoaji na upatikanaji wa elimu, hasa Tanzania. Kinachosubiriwa kwa hamu ni upatikanaji wa elimu itakayoifaa jamii yetu katika kuleta maendeleo ya haraka yanayowanufaisha wengi kwa lugha ambayo wengi wanaielewa.

Chanzo: Tumbo-Masabo na Chiduo (1999, k. vii).

Kauli hii inadhihirisha wazi kuwa kuna hali ya kuchelewa kuamua kutumia Kiswahili kufundishia katika ngazi zote za elimu nchini Tanzania. Pia, kauli hii

inaonesha matumizi ya Kiswahili kama lugha ya kufundishia katika ngazi zote za elimu yatawezesha upatikanaji wa elimu inayofaa kwa jamii na watu wengi watanufaika kwa sababu elimu hiyo itakuwa ni jumuishi na yenye kuleta maendeleo ya haraka.

Aidha, mbali na kutokuwepo kwa utashi wa dhati wa kisiasa, Tanzania hakuna sera mahsusi ya lugha. Hilo ndilo tatizo kubwa zaidi kupita matatizo yote yanayoleta mtanziko na mkwamo katika kutumia Kiswahili kama lugha ya kufundishia kwenye ngazi zote za elimu nchini Tanzania. Kwa hiyo, maneno ya Shaaban Robert ‘Titi la mama li tamu; lingine haliishi hamu’ yanadhihirika zaidi katika changamoto ya lugha ya kufundishia kwa maana ya kwamba lugha za kigeni haziwezi kukidhi kwa ufanisi mahitaji ya ufundishaji na ujifunzaji katika elimu ya Watanzani na wengineo wote ambao Kiswahili ni lugha yao ya pili na wengine ni lugha yao ya kwanza. Aidha, Kiswahili ni lugha ya mawasiliano mapana nchini Tanzania. Kwa hivyo, katika Taifa la Tanzania hakuna lugha yoyote hasa ya kigeni, mbali na lugha ya Kiswahili, inayoweza kuwa fanisi, jumuishi na yenye kujenga maendeleo endelevu katika ujifunzaji na ufundishaji. Kauli hii inaungwa mkono na Halliday (1973) anayesema kuwa lugha ya mawasiliano katika jamii ndiyo ifaayo kuwa lugha ya kufundishia kwa sababu ndiyo lugha ambayo wanafunzi wanaifahamu na kuimudu vizuri. Sera ya matumizi ya Kiingereza kama lugha ya kufundishia elimu Tanzania ni hatarishi kwa ujifunzaji wenye maana. Sera hiyo inawatenga wanafunzi wengi katika mchakato wa ujifunzaji na ufundishaji (Malekela, 2003). Haina mwendelezo wa msingi wa lugha, mawazo, maarifa, stadi na kanuni walizozipata wanafunzi kwenye ngazi ya elimu ya msingi.

5.0 Kutokuwepo kwa Sera ya Lugha

Katika utekelezaji wa suala au jambo lolote la kiserikali, kitaasisi au kikampuni hapana budi kuwepo kwa sera ambayo ni chombo kinachoongoza uwekaji wa mipango mkakati, utendaji na utekelezaji wa mipango hiyo, pamoja na kutathmini mchakato huo mzima wa utendaji na matokeo yake.

5.1 Sera ni Nini?

Dhana ya sera imepata fasili na ufafanuzi wa aina mbalimbali kutoka kwa wanazuoni wa uongozi kulingana na aina ya taasisi lengwa na mahitaji yake. Kwa mujibu wa Nyerere (2016, k. 102), sera ni sheria zinazotungwa na serikali ili kutoa mwongozo wa kufikia baadhi ya malengo kwa manufaa ya watu. Sera ni maelezo na maelekezo ya kisheria kuhusu mpango mkakati wa utekelezaji wa masuala

mbalimbali ya kimaendeleo kama vile elimu, afya, utamaduni, uchumi na siasa. Sera ni chombo kinachoweza kuundwa na kutumika kwenye taasisi za kiserikali, mashirika yasiyo ya kiserikali na hata kwenye makampuni ya kibiashara na kijamii. Kwa maneno mengine ni kwamba sera ndicho chombo kinachoweza kuweka sheria, kanuni, miongozo na taratibu za utekelezaji na upimaji wa mipango mikakati.

5.2 Sera ya Lugha ni Nini?

Mekacha (2002) anafasili dhana ya sera ya lugha kuwa ni jumla ya mawazo, matamko, sheria, kanuni na taratibu zenye kuelezea taratibu za utekelezaji wa mabadiliko ya nafasi na matumizi ya lugha katika jamii. Kiambo ‘mabadiliko ya nafasi ya lugha’ kinadokeza dhana inayofanana na dhana ya sera ya lugha, yaani ‘mpango lugha’. Mpango lugha ni mchakato unaohusisha matukio, shughuli au hatua mbalimbali za wazi na zisizo za wazi za dola katika kufanya mabadiliko katika jamii husika kuhusiana na utaratibu wa matumizi ya lugha. Sera ya lugha huwezesha mchakato wa maamuzi ya mamlaka za utawala kuhusu uchaguzi na matumizi ya lugha kwenye nyanja mbalimbali za kimaendeleo. Mamlaka za kiutawala zinaweza kujumuisha taasisi mbalimbali kama vile wizara yenye dhamana, bunge na mahakama. Kwa kuwa masuala ya lugha yanahusu ustawi na mustakabali wa nchi, serikali inakuwa ndio mamlaka yenye dhamana ya kutengeneza sera inayokidhi mahitaji ya jamii bila kuathiri vipengele mbalimbali vya kiutamaduni katika nchi (Msanjila, 2009). Sera ya lugha inapaswa kutungwa kutokana na mahitaji ya watu walio wengi katika nchi tofauti na ilivyokuwa katika nchi za Afrika Mashariki ambapo mpango wa matumizi ya lugha ulirithi taratibu za lugha za kikoloni. Katika sera hizo, wazawa wa nchi za Afrika Mashariki walilazimika kujifunza Kiingereza kama njia kuu ya kupata kazi za ofisini zilizojulikana kwalugha ya Kiingereza kama ‘white color jobs’ (Kibui, 2014). Kwa ujumla, inaweza kusemwa kuwa sera ya lugha ni maelezo na maelekezo ya kisheria kuhusu mpango lugha na utekelezaji wake katika utangamano wake na nyanja nyingine za kitaaluma na kimaendeleo katika nchi.

5.3 Hali kuhusu Sera ya Lugha Tanzania

Kimsingi, kutokana na umuhimu wa pekee wa lugha katika maendeleo ya nchi katika nyanja mbalimbali, sera ya lugha katika nchi mbalimbali ni jambo linalotajwa kwenye katiba ya nchi husika. Katika nchi ya Tanzania, hakuna tamko lolote kuhusu lugha katika matoleo yote ya katiba ya nchi tangu ilipopata uhuru wake mwaka 1961 na marekebisho zaidi ya 14 ya katiba yaliyowahi kufanyika

baada ya uhuru. Kwa miaka na miongo mingi, lugha ya Kiswahili imekuwa ikiendelezwa nchini Tanzania pasipokuwa na sera mahsusi ya lugha. Masuala yote ya lugha na matumizi yake yamejumuishwa kwa muda mrefu kwenye sera ya utamaduni ya mwaka 1997. Ingawa haliwezi kuwa jambo la kichekesho, inashangaza kubaini kwamba suala la lugha ya Kiswahili inayotajwa kwenye andiko la katiba inayopendekezwa Sura 1, Ibara ya 5(a) kuwa tunu namba moja miongoni mwa tunu nyingine tatu – muungano, utu na udugu, amani na utulivu – bado lugha hiyo haitamkwi rasmi katika matoleo yote ya katiba ya Tanzania (Mpigachapa Mkuu wa Serikali, 2014, k. 4).

Katika nchi ya Tanzania kuna matamko na maandiko mengi yanayoashiria kuwepo kwa utashi wa kisiasa wa kutukuza lugha ya Kiswahili, maendeleo yake na matumizi yake katika nyanja mbalimbali ikijumuishwa tasnia ya elimu. Kuwepo kwa matamko mengi ya kisiasa ambayo kwa miaka mingi hadi sasa hayakutekelezwa kwa ukamilifu stahiki kunaweza kufananishwa na mtu aliyesimama ‘njia panda’ akisema: ‘Niende nisiende? Niende nisiende?’ Wakati wote anaposema maneno hayo na kuyarudiarudia mara chungu nzima anajikuta anachelewa kuamua na kutenda na matokeo yake ni kupata madhara ya methali ya Kiswahili isemayo: ‘Chelewa chelewa utamkuta mwana si wako’. Hali hii yote inatokana na kuwepo kwa ombwe la sera ya lugha Tanzania.

Mwaka 1962 Kiswahili kilitangazwa rasmi kuwa lugha ya taifa la Tanzania. Lugha ya taifa ni lugha inayozungumzwa na kutumiwa na watu wengi zaidi katika eneo fulani la kijiografia la kitaifa. Kufikia mwaka 1962 lugha ya Kiswahili ilikuwa imefahamika na kutumiwa na watu wengi kuliko lugha nyingine yoyote zikiwemo lugha za kikabila. Lugha ya Kiswahili ilikuwa imeenea na kufahamika kwa Watanzania hata kuwa chombo kilichowaunganisha Watanzania wote na kuwaweka pamoja. Hata hivyo, kutangazwa kwake kuwa lugha ya taifa hakukuandamana au kufuatiwa na uundaji wa sera ya kupanga na kutekeleza masuala ya maendeleo na matumizi yake.

Tamko lingine muhimu kuhusu nafasi ya lugha ya Kiswahili lilitolewa mwaka 1967 ilipofanywa kuwa lugha rasmi ya taifa la Tanzania. Lugha rasmi ni lugha inayotumika katika shughuli rasmi za kiserikali kama vile katika mikutano rasmi, vikao vya bunge, sherehe na dhifa mbalimbali za kitaifa na hali kadhalika katika utoaji wa elimu. Vilevile, mwaka 1970 kulitolewa tangazo la mpango wa cheti cha umahiri katika lugha ya Kiswahili. Mpango huo uliondoa utaratibu wa kutoa cheti

cha umahiri wa Kiingereza cha Cambridge kwa wanafunzi au watu waliotakiwa kupata kazi au wadhifa fulani kwenye taasisi na mashirika ya serikali. Vilevile, mwaka 1972 Kiswahili kilitangazwa kuwa lugha ya kufundishia elimu ya msingi na vyuo vya ualimu daraja la 3. Matamko hayo muhimu kuhusu nafasi na matumizi ya lugha ya Kiswahili yanashabihiana na maneno ya Mwalimu Julius Nyerere kama yalivyonukuliwa na Mkoyogo yasemayo:

Hivi sasa si tatizo tena kufanya Watanzania wawe mahiri wa lugha mbili...Kiingereza kama somo kiendeleo kutiliwa mkazo na kufundishwe vizuri zaidi... si haki kuendelea kukifanya Kiingereza kuwa lugha ya kufundishia.

Chanzo: Mkoyogo (1991, k. 107)

Maneno yaliyomo kwenye nukuu hiyo yanaonesha uwezo wa lugha ya Kiswahili kutumika kama lugha ya kufundishia nchini Tanzania. Hali kadhalika, maneno hayo yanaonesha jinsi ilivyo 'haki' kwa Watanzania kufundishwa kwa lugha ya Kiswahili. Kuendelea kutumia lugha ya kigeni kufundishia katika elimu ni kutengeneza janga la kudumu la kiakili na kisaikolojia bila sababu ya maana hasa wakati ambapo kuna lugha yetu wenyewe tunayoiielewa na kuimudu. MoEC (1995) inasisitiza kwamba wahitimu wa elimu ya msingi wanatarajiwa kumudu lugha ya Kiingereza ili kuweza kuitumia lugha hiyo kama lugha ya kufundishia wanaoingia shule za sekondari. Kwa bahati mbaya sana, hali ni kinyume chake kwamba wahitimu hao wa elimu ya msingi wana stadi hafifu sana za lugha ya kufundishia, yaani Kiingereza.

Hali kadhalika, katika miaka ya hivi karibuni, kuna matamko na maandiko yanayoeleza uwezo wa lugha ya Kiswahili kutumiwa kama lugha ya kufundishia kwenye ngazi zote za elimu nchini Tanzania. Makamu wa Rais wa Jamhuri ya Muungano wa Tanzania katika serikali ya awamu ya tatu, Hayati Dkt. Omari Ali Juma, mwaka 2000 katika ufunguzi wa Kongamano la Kimataifa la Kiswahili 2000, alisema:

Sisi hapa Tanzania tuna bahati ya kuwa na lugha ya Kiswahili ambayo inatuunganisha na inafahamika kwa wananchi walio wengi. Bahati hii ni tunu ambayo inabidi tuilinde na kuitetea. Sera yetu ya utamaduni ya 1997 inatamka wazi kwamba Kiswahili ndiyo lugha ya taifa, na ndiyo lugha rasmi ya shughuli za umma, na kwamba mpango maalumu wa kuwezesha elimu na mafunzo katika ngazi

zote kutolewa katika lugha ya Kiswahili utaandaliwa na kutekelezwa. Tamko hili linawakilisha mtazamo wa serikali ya Tanzania kuhusu maendeleo ya Kiswahili nchini. Tunachotakiwa kufanya sasa ni kwa wote wanaohusika kuyatekeleza yale yaliyoamuliwa katika sera hiyo. Matarajio yangu ni kwamba mtalitimiza jukumu hili kwa kutuandalia istilahi, vitabu na wataalamu ili azma ya kutumia Kiswahili kufundishia ngazi zote za elimu itimie.

Chanzo: Nchimbi (2005, k. 215)

Tamko hili linadhihirisha mambo muhimu kuhusu uwezo na nafasi ya Kiswahili katika nchi ya Tanzania. Kwanza, linaeleza bayana kuwa Kiswahili ni lugha inayofahamika kwa Watanzania wengi na kwamba kutokana na kufahamika kwake imetoa mchango mkubwa katika kuwaunganisha raia wa nchi hii. Aidha, tamko hili linaonesha kuwa katika sera ya utamaduni ya Tanzania ya mwaka 1997, kulikuwa na tamko la mpango maalumu wa kuwezesha elimu na mafunzo katika ngazi zote kutolewa katika lugha ya Kiswahili. Pamoja na kwamba wataalamu mbalimbali wa lugha ya Kiswahili wameweka juhudi kwenye kuanza kuandika na kutafsiri vitabu ili kusaidia utekelezaji wa mpango huo, juhudi hizo hazijafika mbali kwa sababu ya kukosekana kwa sera mahsusi ya lugha. Tanzania imeshuhudia katika kila awamu ya uongozi wa Urais matamko yakitolewa bila kutekelezwa kwa ufanisi na awamu inayotoa tamko au awamu inayofuata. Hali hii ya mkwamo inasababishwa na ombwe la sera mahsusi ya lugha.

Zaidi ya hayo, mwaka 2005 Jakaya Mrisho Kikwete, Rais wa Jamhuri ya Muungano wa Tanzania katika serikali ya awamu ya nne, kwenye sherehe ya kuadhimisha 'Siku ya Kiswahili' iliyoandaliwa na Baraza la Kiswahili la Tanzania (BAKITA) katika ukumbi wa Aunoutoglo, Dar es Salaam, alisema: *Hakuna anayeweza kukiizua Kiswahili.*

Ni dhahiri kuwa lugha ya Kiswahili imepiga maendeleo makubwa sana katika ukuaji, ueneaji na matumizi yake katika tasnia mbalimbali za kitaaluma na kimaendeleo. Makala hii inahoji kwamba kama tamko hili na matamko mengi mengine yangeambatana na sera mahsusi ya lugha, basi lugha ya Kiswahili ingekuwa imeendelea zaidi na kutumika katika tasnia zote ikiwa ni pamoja na kutumiwa kufundishia katika ngazi zote za elimu nchini. Hatua hiyo ingekidhi hitaji la kuwa na lugha moja ya kufundishia (Kiswahili) katika ngazi zote za elimu

jambo lililodhihirika wazi hata wakati wa ukoloni kwa nchi za Afrika Mashariki (Kiango, 2002).

Hali kadhalika, Kiswahili kilitangazwa kuwa lugha ya ufundishaji katika ngazi zote za elimu kuanzia shule za awali hadi vyuo vikuu katika sera ya elimu ya 2014 (MoEC, 2014). Bado tamko hilo halijaweza kuwezesha lugha ya Kiswahili kuwa lugha ya kufundishia kwenye ngazi zote za elimu nchini Tanzania hadi sasa kwa sababu tamko hilo halitokani na sera mahsusi ya lugha. Matamko yanayotokana na midomo ya viongozi waandamizi wa serikali au yanayotokana na sera nyingine nchini hayawezi kuwa na nguvu ya kisheria ya kuweka mipango mikakati ya kuendeleza Kiswahili na matumizi yake katika sekta mbalimbali ikiwemo sekta ya elimu. Matalan, MoEC (2014) inafafanua kuwa katika kipindi cha kuanzia mwaka 1995 hadi mwaka 2014 kulikuwa na matamko 149 ya Wizara ya Elimu na Mafunzo ya Ufundi. Kati ya matamko hayo kuhusu maendeleo na matumizi ya Kiswahili, matamko 59 hayakutekelezwa.

Suala lingine lililowasilishwa katika Sera ya Elimu ya mwaka 2014 ni fursa ya kutumia lugha mbili, Kiswahili na Kiingereza kufundishia katika ngazi zote za elimu. Tamko hilo la uwili-lugha katika elimu limeshindwa kutekelezeka kwa sababu baadhi ya wadau muhimu hawaamini kwamba lugha ya Kiswahili inaweza kutumiwa kwenye ufundishaji na kutoa elimu bora kwa wahitimu.

Hivi karibuni sana, mwaka 2021, John Pombe Joseph Magufuli, akiwa Rais wa Jamhuri ya Muungano wa Tanzania, awamu ya tano (2015-2021), alitoa tamko la kutaka idara ya mahakama kutumia Kiswahili na historia ya nchi ya Tanzania kuandikwa kwa Kiswahili. Kama ilivyo kwa matamko mengine yaliyotangulia na yaliyokwishakutajwa katika makala hii, tamko hili linaweza lisitekelezwe kwa sababu ya kukosekana kwa sera na sheria lazimishi za utakelezaji wake. Ombwe la sera ya lugha linasababisha mtanziko na mkwamo katika matumizi ya Kiswahili katika elimu nchini Tanzania.

Licha ya matamko ya kitaifa kuhusu matumizi ya lugha ya Kiswahili, kuna matamko na maazimio ya kimataifa yanayohanikiza matumizi ya Kiswahili kikanda na kimataifa. Mwaka 2019, Jumuiya ya Maendeleo Kusini mwa Afrika ilipitisha azimio la Kiswahili kuwa lugha mojawapo ya kazi ya jumuiya hiyo. Mwaka 2021, Shirika la Umoja wa Mataifa linaloshughulikia masuala ya Elimu, Sayansi na Utamaduni lilitangaza rasmi Kiswahili kuwa lugha mojawapo ya

kimataifa na kupewa siku yake maalumu ya kuadhimishwa na kusherehekewa kimataifa ambayo ni tarehe 7 Julai ya kila mwaka. Tangazo hilo la umoja wa mataifa kupitia shirika lake, ni kiashiria kimojawapo kwamba lugha ya Kiswahili inazungumzwa na watu wengi duniani hivi hata kustahili kupewa siku yake rasmi kimataifa na msimamizi wa uwanja wa kimataifa wa lugha na utamaduni duniani. Wakati wa kufunga Kongamano la Pili la Kimataifa la Idhaa za Kiswahili Duniani, jijini Arusha, Machi 18 2022, Rais wa Awamu ya Nane ya Serikali ya Mapinduzi Zanzibar na Mwenyekiti wa Baraza la Wawakilishi, Dkt. Hussein Ali Mwinyi alisema kuwa kuongezeka kwa matumizi ya lugha ya Kiswahili duniani ni sababu mojawapo ya kutangazwa kwa Siku ya Kiswahili Duniani. Kiswahili ni lugha ya kwanza ya Kiafrika kutangazwa kuwa lugha ya kimataifa na kupewa siku yake rasmi ya kuadhimishwa. Shirika la Umoja wa Mataifa linaloshughulikia masuala ya Elimu, Sayansi na Utamaduni ni kama mwamuzi kwenye mechi ya mpira. Kazi yake ni kutoa fursa sawa kwa kila lugha kupewa nafasi yake kulingana na hadhi yake kiulimwengu. Ni jukumu la Tanzania kutumia fursa hiyo kuweka utaratibu wa ndani wa kiseru ya kuendeleza lugha ya Kiswahili na matumizi yake kwenye sekta ya elimu na sekta nyingine. Kutajwa tu kwa Kiswahili kwenye sera nyingine kama vile katika Sera ya Utamaduni (1997) na Sera ya Elimu (2014) hakuwezi kuleta maendeleo ya kimkakati na ya haraka katika matumizi ya Kiswahili kwenye sekta ya elimu na sekta nyingine.

Tamko lingine linalotaja lugha ya Kiswahili ni lile lililotolewa na Profesa Adolf Mkenda, Waziri wa Elimu, Sayansi na Teknolojia katika serikali ya awamu ya sita ya Jamhuri ya Muungano wa Tanzania, alipohojiwa na Gazeti la Mwananchi la Februari 28, 2022. Katika tamko lake, alisema maneno yafuatayo kuhusu matumizi ya lugha ya Kiswahili katika kufundishia elimu nchini Tanzania:

Nimeongea na taasisi yetu ya elimu wakaniambia hata vitabu wameviandaa kwa wale ambao wanataka kufundisha tu kwa Kiswahili wanaweza wakafundisha. Lakini tatizo letu si la lugha, bali ni ufundishaji... Unaletewa kitu hata ndani ya wizara zetu, unakuta hata matumizi ya herufi kubwa na ndogo ni changamoto, sentensi inaanza haijakamilika unaweka nukta, na hata barua nyingi zina changamoto hiyo, hivyo tuna haja ya kuongeza ubora wa ufundishaji, tukifundisha vizuri na mitalaa na vitabu tutavipitia... Kiingereza kifundishwe mtoto akimaliza darasa la saba aweze kuongea na kama hawezi kuna tatizo, maana yake akienda sekondari

akikuta ni Kiingereza tu tatizo linazidi kuwa kubwa... Lakini Kiswahili pia nacho ni changamoto, hivyo hata kama kikifundishwa Kiswahili tu bado ni changamoto. Ubora wa elimu ni jambo la msingi, lakini ni suala tu la lugha lakini kwa kuwa Kiswahili ni lugha ya Taifa, ... mjadala huo ulishaamuliwa kwenye sera ya elimu ya mwaka 2014, kwamba ni ruhusa kufundisha Kiswahili mpaka kidato cha nne, lakini ikaonekana kuwa wazazi wengi wanapeleka watoto wao shule za michepuo ya Kiingereza ambazo nyingi zinachukua walimu kutoka nje ya nchi.

Chanzo: Gazeti la Mwananchi (Februari 28, 2022).

Maudhui ya tamko hilo yanaonesha kuwa waziri mwenye dhamana ya wizara ya elimu anaona kwamba majadiliano yanayoendelea nchini Tanzania kuhusu kushuka kwa kiwango cha ubora wa elimu hautokani na suala la lugha ya kufundishia. Maoni yake ni kwamba tatizo la kushuka kwa kiwango cha ubora nchini Tanzania linatokana na ufundishaji hafifu wa lugha ya Kiingereza na lugha ya Kiswahili. Hali kadhalika, matumizi ya uwili-lugha katika kufundishia ngazi zote za elimu nchini Tanzania kama inavyoelekezwa kwenye sera ya elimu ya 2014, hayajaweza kutekelezwa. Hakuna mkakati wowote uliowekwa na serikali kutekeleza tamko hilo la kisera.

Aidha, matamko ya watu binafsi ikiwa ni pamoja na viongozi waandamizi wa serikali na siasa, ya kutukuza Kiswahili hayawezi kuwa sheria na kanuni lazimishi za kuendeleza lugha hiyo na matumizi yake kwenye sekta za kimaendeleo. Hii inatokana na ukweli kwamba matamko hayo si sera na wala si taratibu na kanuni zilizowekwa kisheria ambazo kila kiongozi na taasisi yenye dhamana inapaswa kufuata na kutekeleza.

Matokeo ya kutokuwa na sera ya lugha pamoja na kusitasita kuamua kutumia lugha ya Kiswahili kufundishia ngazi zote za elimu ni kutokuwa na ufanisi stahiki kwenye juhudi za kutoa elimu jumuishi ambayo ni muhimu kwa maendeleo endelevu ya taifa na watu wake. Elimu ya Tanzania haiwezi kuleta maendeleo endelevu kama inatolewa kwa lugha ambayo watu wengi hawaifahamu vizuri. Wadau wa elimu wanalazimika kupambana na dhana za kitaaluma kwenye maudhui ya masomo yao kwa upande mmoja; na kwa upande mwingine wanapambana na changamoto ya kumudu Kiingereza lugha ambayo haijafundishwa vizuri kwao na hawaifahamu vizuri. Kama methali ya Kiswahili

isemayo: 'Nguo ya kuazima haiwezi kusitiri matak'o', matokeo yake ni kukosekana kwa ufanisi, ujumuishi na uendelevu katika elimu na maendeleo yanayotarajiwa kuchangiwa na elimu. Ingawa Tanzania inasisitiza matumizi ya Kiingereza kufundishia shule za sekondari, hali halisi inaonesha kwamba walimu na wanafunzi wanalazimika kubadili msimbo kwa kutumia lugha ya Kiswahili ili waweze kuelewana baina yao. Kwa mfano, inawezekanaje wanafunzi wanaofundishwa kwa Kiingereza kwenye shule za sekondari, vyuo vya kati na hata vyuo vikuu kumudu masomo yao wakati katika miaka saba ya elimu ya msingi wamefundishwa kwa lugha ya Kiswahili? Ni dhahiri kuwa hapawezi kuwa na ufanisi, ujumuishi na uendelevu wa kielimu na kimaendeleo kama watu wengi wanatengwa kwa kutumia Kiingereza lugha ambayo hawaifahamu na kuimudu vizuri. Utafiti uliofanywa na wataalamu wengi wa lugha za kufundishia unaonesha kuwa matumizi ya lugha za kigeni katika kufundishia yanakuwa ni kikwazo kwa wanafunzi katika ujifunzaji darasani na upataji na utumiaji wa maarifa na stadi wanatakiwa kuwa nazo (Vuzo, 2007). Utokezi wa matumizi ya Kiingereza kama lugha ya kufundishia katika elimu ya sekondari Tanzania, unatatiza upataji maarifa na stadi kwa wanafunzi kwa sababu ya kuwasilishwa kwa lugha isiyofahamika vizuri kwa wote; walimu na wanafunzi wao. Kwa hiyo, matokeo ya tafiti nyingi yanapendekeza kuwa ili kujenga ufanisi na ujumuishaji katika elimu wanafunzi wafundishwe kwa lugha wanayoifahamu zaidi (Mlama & Materu, 1978; Msanjila, 2009; Rubagumya, 1991; Qorro, 1996 Mlacha, 2007; Vuzo, 2007) Kiswahili ni lugha inayofahamika nchini Tanzania kwa asilimia 99 ya Watanzania wote ama kama lugha yao ya kwanza au kama lugha yao ya pili (Masato, 2004).

5.4 Umuhimu wa Kuwepo kwa Sera ya Lugha

Kimsingi, hakuna jambo la kimaendeleo linaloweza kupangwa na kutekelezwa kwa ufanisi pasipo kuwepo na sera. Kama nchi ya Tanzania inataka kupanga maendeleo na matumizi endelevu ya lugha ya Kiswahili katika elimu hapana budi kwanza, na kwanza kabisa kutungwa kwa sera mahsusii ya lugha. Kazi ya sera ya lugha ni kutambua aina za lugha zilizopo katika taifa na kuonesha hadhi zake. Sera ya lugha inatamka lugha gani katika nchi ni lugha ya taifa. Lugha gani ni lugha rasmi? Sera ya lugha inatambua lugha za asili na lugha za kigeni zilizopo katika taifa pamoja na matumizi yake.

Baada ya kutambua lugha zilizopo katika taifa pamoja na maendeleo na hadhi zake, kazi ya sera ya lugha ni kupanga matumizi ya lugha kwenye sekta mbalimbali ikiwa ni pamoja na sekta ya elimu. Mpango wa matumizi ya lugha katika sekta

mbalimbali unazingatia maendeleo na uwezo wa lugha kutumika kwenye sekta husika. Hayo yote hayawezi kufanywa pasipokuwa na sera ya lugha kwa sababu sera ndiyo inayotambua mchango wa kila lugha kwenye maendeleo ya taifa. Kazi ya sera ya lugha ni kutambua lugha zote kubwa na ndogo katika nchi na kupanga hadhi na matumizi ya kila lugha kwa ajili ya kuziendeleza na kuzitumia katika kuchangia maendeleo ya nchi kwenye sekta zote za kimaendeleo (MoEC, 1997). Uendelezaji na matumizi ya lugha unahitaji ubainishaji na uwekaji rasilimali fanisi na wezeshi kama vile watu miundombinu laini (watu wenye elimu na utaalumu stahiki), miundombinu ngumu, fedha, muda na kadhalika.

Kuwepo wa sera ya lugha Tanzania kutaweka mifumo ya sheria na kanuni lazimishi za kutoa haki kwa Watanzania na vyombo vyenye mamlaka kama vile mahakama, tume, kamisheni, wizara, bunge na kadhalika. Vyombo ya kimamlaka vilivyowekwa kisheria vinaweza kupanga, kuhoji, kufuatilia na kutathimini utekelezaji wa sera ya lugha, jukumu la uendelezaji Kiswahili na matumizi yake kwenye nyanja za kimaendeleo ikiwemo sekta ya elimu. Matumizi ya Kiswahili katika elimu yatafanya elimu kuwa fanisi, jumuisi, bora na yenye uendelevu na usawa zaidi. Matumizi ya lugha ya Kiswahili katika elimu hayataleta tu ufanisi katika elimu bali pia lugha yenyewe ya Kiswahili itakua zaidi. Lugha yoyote duniani hukua zaidi inapopewa majukumu ya kutekeleza katika sekta mbalimbali za kimaendeleo.

6.0 Hitimisho

Makala hii inapendekeza kwamba, ili Kiswahili kiweze kuendelezwa na kutumiwa ipasavyo, katiba ya nchi ya Tanzania sharti itamke bayana kwamba Kiswahili ni lugha ya taifa na rasmi katika taifa hili. Pia, makala hii inapendekeza kuwa, lazima pawepo na sera mahsusi ya lugha kwa nchi ya Tanzania, yaani sera ya kisheria ya lugha inayojitegemea isiyotamkwa ndani ya sera ya masuala mengine kama vile katika sera ya utamaduni ya mwaka 1997 na sera ya elimu ya mwaka 2014 nchini Tanzania. Hii itaiwezesha sera mahsusi ya lugha kutamka na kubainisha masuala mbalimbali yanayohusu lugha kwa ujumla na namna yatakavyotekelezwa.

Kwa upande mwingine, wataalamu wa lugha ya Kiswahili na masomo mbalimbali waandike vitabu vya kiada na ziada vya masomo yote kwa lugha ya Kiswahili. Aidha, vitabu vya kiada vilivyoandikwa kwa lugha ya Kiingereza vitafsiwiwe katika lugha ya Kiswahili ili wajifunzaji waweze kuelewa maarifa yaliyomo katika vitabu hivyo. Hoja hii inatokana na ukweli kwamba, mafanikio ya jambo lolote katika

jamii yoyote hutegemea sana mfumo mzima wa elimu. Hata hivyo, lugha za kigeni kama vile Kiingereza, Kifaransa, Kichina na kadhalika zifundishwe vizuri ili ziwawezeshe wanajamii wa lugha ya Kiswahili kupata maarifa kuhusu lugha na maarifa mbalimbali yaliyohifadhiwa katika lugha hizo za kigeni. Mbali na hayo, makala hii inapendekeza kuwa, katika mchakato wa kutengeneza sera ya lugha ambayo ni madhubuti, lugha za makabila au lugha za asili zipewe kipaumbele kikubwa kwani zina mchango mkubwa katika maendeleo ya lugha ya Kiswahili na utamaduni wake.

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THEME II: TEACHER EDUCATION AND PROFESSIONAL DEVELOPMENT

The Sense of Vocation in the Practice of Teaching

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Abstract

Scholarship in teaching has long maintained that teaching is a vocation. Yet, there is a misconception about the concept of vocation that can, wittingly or unwittingly, allow the denial of one's rightful place and increase misconduct in the teaching profession. Using a work orientation framework, this paper attempts to revive a sense of vocation in teaching. The intrinsic enjoyment of teaching and the fulfilment that comes from serving others are key dimensions that are framed to conceptualise and determine the behaviours of individual teachers with a sense of vocation. Teachers with a sense of vocation see a match between what they offer through their teaching practice and what they receive from teaching. In order to achieve a sense of vocation, it is crucial for teachers to find purpose and meaning in their work, to be committed to achieving their professional goals and to recognise their own contribution to the lives of others. Indeed, both pre-service and in-service teachers can best serve teaching and would be best served by teaching if they hold at least a glimmer of a sense of vocation.

Keywords: Vocation, calling, ethical practice, teaching, teacher education

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1.0 Introduction

Whether we think of teaching as a profession or think of it as a vocation does make a difference in how we deal with students, what we do in the classroom and beyond, how we interact with colleagues, what commitments we are willing to make, what expectations can be reasonably imposed, what career goals we might set, by what standards we should measure success, and how we view our relationship with the institution in which we work. (Buijs, 2005, pp. 326-327)

Scholarship in teaching has long maintained that teaching is a vocation. Similar to Buijs' (2005) foregoing excerpt, the central tenet in the vocation's argument is that the sense of vocation goes beyond that of a profession. In the practice of teaching, the concept of profession emphasises the importance of technical aspects for someone to become and be a teacher. The technical components in this sense refer to the possession of a relevant educational qualification, the mastery of the subject matter based on one's specialised field and the performance of a range of activities related to teaching based on the prescribed rules and regulations (Buijs, 2005; Hansen, 1994; Madero, 2020). Although both technical preparation and the fulfilment of professional duties play an important role in the teaching profession, the concept of vocation takes this equation one step further by recognising the social commitments, moral framework and service orientation of teachers (Hansen, 1994; Madero, 2020; Schwarz, 1999). In other words, understanding teaching as a vocation includes the humanistic aspects, such as what attracts teachers to the classroom and keeps them there. As Westerhoff (1987, p. 193) noted, "To be a teacher means more than to be a professional who possesses knowledge and skills. Teaching is a human relationship."

This paper attempts to revive the idea of vocation in teaching. There are two main reasons for this attempt. The first is the misconception of a vocation as held by different educational actors at different levels of education, which can advertently or inadvertently allow one's justifiable justice to be denied (Buijs, 2005; Madero, 2020). In the same vein, Hansen (1994, p. 7) urges that "An individual's sense of vocation can be taken advantage of or even manipulated by others." For example, the concept of vocation is sometimes used by authorities to victimise teachers when they ask for or need their rights, such as better salaries and working conditions. The thinking of these authorities could be that if teaching is seen as a

calling or a vocation, then better salaries or comfortable working conditions are not the primary goals that attract someone to teaching.

Second, the prevalence of teacher's misconduct at local and global levels (Anangisye, 2011; Bold et al., 2017; Fussy, 2018) raises important questions about why someone decides to enter teaching in the first place. For example, a large-scale study by Bold et al. (2017) was conducted in seven sub-Saharan African countries – Kenya, Nigeria, Mozambique, Senegal, Tanzania, Togo and Uganda – which together account for nearly 40% of the region's total population. The study generated data from direct observations, unannounced visits and tests, to find answers to the question: How much time do primary school teachers actually spend teaching? Averaging across countries, the study found that pupils received only one-third of the total instructional time per day. Also on average across countries, at least 44% of teachers were absent from class, even though some of these teachers were present at school. Infact, when a large number of teachers is not teaching, there are only pupils in the classrooms. Consistent with reported teacher absenteeism findings, Bold et al. (2017, p. 9) found that “one-third of the classrooms were ‘orphaned’ classrooms, where students are present but there is no teacher.”

Against this background, this paper sought to answer the question: What is the place of vocation in the practice of teaching? In doing so, this paper aims to clarify the misconception about the idea of vocation in teaching and to educate teachers about the humanistic aspect of teaching. Reframing teaching as a vocation requires changes and approaches to the practice of teaching by enabling teachers to envision and enact ethical practice and to rethink the provision of teacher education that goes above and beyond academic entry and exit standards. The paper is therefore divided into five sections. Section 1 introduces the paper; section 2 contains the nature of vocation; section 3 describes different work orientations associated with the idea of vocation; section 4 presents a discussion of teaching as a vocation; and, section 5 concludes the paper.

2.0 Nature of Vocation

The concept of vocation comes from the Latin word ‘vocare’ meaning ‘to call’ or ‘to summon’. The term has been used to describe both religious and secular commitments (Hansen, 1994). In Biblical instances, vocation refers to the way one lives in response to God's call (Estola et al., 2003; Scholes, 2010). In the

secular sense, vocation refers to call to a particular form of service (Hansen, 1994). Today, although the idea of vocation has become predominantly secular in its meanings and uses (Madero, 2020; Wrzesniewski, 2003), the concept still retains a moral connotation, as it is generally used to describe an undertaking that is thought to benefit the common good (Berg et al., 2010; Thompson & Bunderson, 2003).

Parker Palmer and David Hansen are prominent scholars of the concept of vocation. However, the two scholars have approached the concept in two different ways. Hansen's vocation has been specific to teachers, while Palmer's has been broader (Estola et al., 2003; Wilke, 2004). Despite their different approaches to the concept of vocation, Hansen and Palmer share a common point of convergence. For both scholars, vocation refers to an enterprise, activity or work that provides personal satisfaction and service to others. Palmer, for example, states that "True vocation joins self and service" (Palmer, 2000, p. 16). Hansen (1995) asserts that a vocation "describes work that results in service to others and personal satisfaction in the rendering of that service" (p. 3). For both Palmer and Hansen, living one's vocation brings personal fulfilment and helps others. This can be further substantiated by the theologian Frederick Buechner's (1973) who describes the sense of vocation as "the place where your deep gladness and the world's deep hunger meet" (p. 119).

Learning from Palmer and Hansen, the sense of vocation finds its meaning at the intersection of public commitment and personal fulfilment. For an activity to be a vocation, it must, in addition to providing personal fulfilment, it must be edifying, educational and helpful to others in some significant way. This means that the concept of vocation is about an alignment between doing things that bring joy or satisfaction to the self and the world at the same time (Kung, 2013). This service-oriented dimension of a vocation is in line with the findings of Court et al. (2009) and Wilke (2004), whose participants saw the role of the teacher as helping students to fulfil their unique personal potential, which in turn would lead to the creation of a better society.

The major line of enquiry related to the understanding of vocation is: How does a vocation come about and develop into a teacher? / Can a vocation be chosen or willed? Palmer and Hansen give different but complementary answers to this question. Palmer (2000) states that "Vocation does not come from a voice 'out

there' calling me to become something I am not. It comes from a voice 'in here' calling me to be the person I was born to be." (p. 10). While Palmer acknowledges the role of external factors, such as mentors, colleagues and subjects that can contribute to the personal journey of discovering vocation, he emphasises that vocation is an internal state:

But the call to teach does not come from external encounters alone –no outward teacher or teaching will have much effect until my soul assents. Any authentic call ultimately comes from the voice of the teacher within, the voice that invites me to honour the nature of my true self (Palmer, 1998, p. 29).

On the other hand, Hansen argues that vocation is not only about the inner state, but also it has social and psychological origins (Wilke, 2004). Vocation is a "Social practice" within which an individual acts and contributes to the world (Hansen, 1995, p. 5). For Hansen, vocation does not focus primarily on inwardness and self-discovery. There is a social context within which teachers work and from which they learn what it means to work as a vocation (Wilke, 2004). Hansen further argues that "The sense of being impelled to act from within is coterminous with a sense of being called by something without" (Hansen, 1995, p. 6). The implication is that one's vocation can be initiated by an inner call and shaped by daily professional practise and socialisation. Estola et al.'s (2003) examination of teachers' biographies showed that a sense of vocation in teaching does not imply an innate ability to undertake a particular task and is not self-manifested. Rather, an individual grows into and develops a sense of vocation, often through arduous and contradictory life experiences.

3.0 Work Orientations

Researchers have identified three orientations that individuals have towards their work: as a job, as a career and as a calling or vocation (Bellah et al., 2008; Wrzesniewski et al., 1997). A job orientation is primarily associated with viewing work as a means to an end. The focus of individuals in this job orientation is predominantly on the financial rewards. Work represents a source of income and material benefits that enable them to meet basic needs, support their families and maximise their leisure time (Berg et al., 2010; Gradišek et al., 2020). As such, for individuals in this group, work is not a central part of their professional identity, nor is it the fulfilment of professional goals or aspirations (Wrzesniewski et al.,

1997). Individuals in this job orientation often wish that working hours would pass more quickly so that they could have weekends and vacations.

Career orientation is mainly associated with viewing the current job as a stepping stone to the better and higher-level jobs. Individuals in this group focus on advancing their professional goals, which would enable them to satisfy their needs for achievement, status and power (Gradišek et al., 2020; Wrzesniewski et al., 1997). Individuals with a career orientation invest more in their professional identity than those with a job orientation. They tend to find their work rewarding and represents an important part of their lives (Gradišek et al., 2020). They pay less attention to material benefits than to their contribution to society.

People with a calling orientation give personal and social meaning to their work with; they perceive a work as intrinsically enjoyable and as a way of making a valuable contribution to society (Berg et al., 2010). They tend to take their work with them wherever they go; at home and even on holiday. They belong to several organisations and clubs related to their work. They feel good about their work because they love it, and believe it makes the world a better place (Wrzesniewski et al., 1997). They would even encourage their children and friends to join their profession. They would be upset if they were forced to stop working, and they do not think about retirement (Wrzesniewski et al., 1997). In other words, the identities of individuals with a job and career orientation tend not to fully correspond to their occupations, while the identities and occupations of individuals with a calling orientation are inextricably linked to the rest of their lives (Berg et al., 2010; Gradišek et al., 2020).

Work orientations of Bellah et al. (1985) have been empirically documented by psychologists who developed measures of job, career and calling orientations and surveyed different employees in different occupations to examine the correlates of having each orientation (Berg et al., 2010; Wrzesniewski et al., 1997). They found that all three orientations could exist within a single occupation. Participants in multiple occupations were evenly distributed across the three categories of work orientations. In contrast to job and career-oriented participants, calling-oriented participants associated having a calling orientation with several self-reported benefits, including higher life, health, and job satisfaction and lower absenteeism (Berg et al., 2010). The perceived list of benefits associated with viewing work as a calling suggests that following a calling is a positive experience for individuals.

Organisational scholars have extolled the virtues of having a calling and stressed the critical importance of finding and cultivating one's true calling (Brennfleck & Marie 2005). As Leider and Shapiro (2001, p. 25) urge, "Until we heed our calling, we're not living authentically; we're adopting someone else's model for who we should be." The implication is that calling stems from individuals' inner motivation, which leads them to seek meaning and purpose in their professional lives (Gradišek et al., 2020). One's calling can be discovered through self-observations and deep self-reflection, and its meaning lies in the realisation of one's life purpose and personal fulfilment (Gradišek et al., 2020; Wrzesniewski et al., 1997). On the whole, there is general agreement in the literature that people with a sense of a vocation feel that their work makes a significant contribution not only to their personal fulfilment and sense of purpose, but also to other people and to society.

4.0 Teaching as a Vocation

In explaining the concept of vocation in educational practice, researchers have identified two major dimensions that are also commonly used to describe the perceptions and behaviours of vocationally engaged individuals in other fields (Duffy & Sedlacek, 2007; Gradišek et al., 2020). The two dimensions are the fulfilment of one's life purpose and the orientation towards serving others.

4.1. Fulfilment of One's Life Purpose

Normally, teachers with a sense of vocation, find themselves with an inner force that motivates them to fulfil a specific purpose in their teaching career – a sense of personal fulfilment. One undertakes teaching for the intrinsic enjoyment and fulfilment that comes from doing it (Bellah et al., 1985, p. 66), not for financial gain or career advancement (Wrzesniewski et al., 1997, p. 22), but sees it as a central part of one's identity (Berg et al., 2010, p. 974). This suggests that one is determined and feels called to fulfil a particular life role, regardless of the sacrifices or investments that would be made along the way. Empirical evidence suggests that employees, especially teachers, with a sense of vocation are less likely to have disengagement attitudes, including feelings of stress, burnout (cf., Yoon et al., 2017) and thoughts of quitting (cf., Cardador et al., 2011; Chen et al., 2018). The implication is that unless one has realised his or her life purpose in the teaching career, the feeling of fatigue, stress, burnout, resignation or career change does not reside with an individual. The focus is always on how to make the practice of teaching a platform for realising one's life purpose.

In Tanzania, a good example of teacher with a high sense of vocation is Mwalimu Julius Kambarage Nyerere (April 13, 1922 - October 14, 1999), who was the President of Tanzania (formerly Tanganyika) from the country's founding in 1964, until his retirement in 1985. He was born in Tanganyika to a local Zanaki chief named Nyerere Burito. Julius Nyerere was known by the Swahili name Mwalimu, in English 'teacher' because of his profession before entering in politics. He obtained a Diploma in Teacher Education at Makerere in 1945 and returned to Tanganyika and worked for three years at St. Mary's Secondary School in Tabora where he taught Biology and English. In 1949, he won a scholarship to attend the University of Edinburgh (he was the first Tanzanian to study at a British university), where he obtained a Master of Arts in Economics and History in 1952. On his return, Nyerere resumed his teaching position in History, English, and Kiswahili at St. Francis' College - which is now currently known as Pugu High School, near Dar es Salaam City. It was at this college that he founded the political party, TANU was founded on 5th July, 1954. Nyerere's political activities attracted the attention of the colonial authorities, and he was forced to choose between his political activities and teaching. He was reported to have said that he 'was a teacher by choice and a politician by accident.' He resigned from teaching and continued with his political activities because of his commitment to the emancipation of Tanzanians. Even when he was involved in politics, Mwalimu Nyerere continued to write and, at one point, to give sermons. He developed an influential educational philosophy, Education for Self-Reliance, which aimed to change the education system in Tanzania. It could be argued that Nyerere's purpose of life in teaching was to transform the lives of Tanzanians through education – to make them self-reliant, free from the ramshackle state of poverty, disease and ignorance.

Drawing on Nyerere's example above, there is evidence to suggest that individuals with a sense of vocation in teaching are more likely to pursue studies in the same field as their vocation (Dobrow & Tosti-Kharas 2011). In the same vein, Lysova et al. (2018) argue that a sense of calling or vocation reduces the flexibility with which teachers consider potential changes to their career path, as the self-defined and accepted nature of a vocation leads individuals to exclude consideration of other options. For example, studies have found that feeling called to teach is related to teachers' career commitment and job involvement among teachers (Bullough & Hall-Kenyon, 2012; Duffy & Sedlacek, 2007). Teachers who perceived their work as a vocation had a desire to teach longer, expressed fewer intentions to retire early, had less or no absenteeism, and had a greater

appreciation of the positive social components of the teaching career than those teachers who did not feel called (Bullough & Hall-Kenyon, 2012; Duffy & Sedlacek, 2007; Peterson et al., 2009; Serow, 1994; Serow et al., 1992). Similarly, teachers who felt called to teaching were more likely to make personal sacrifices and devote extra time to their work.

4.2. Orientation towards Serving Others

According to Hansen (1994), the desire to serve others is the key dimension of vocation. As Westerhoff (1987, p. 193) succinctly stated, “We are at our best when we make our lives and our search for meaning available as a resource for another’s learning.” Estola et al. (2003) studied the biographies of three teachers and found that the three teachers expressed their desire to help others in different ways. The first teacher expressed that she had always wanted to use her knowledge to help children to be able to do something, rather than being idle, because this teacher believes that educating young children is a way of shaping the future of the nation. The second teacher, in turn, described her efforts to defend the defenceless. She believes that all children in the world, not just those with whom she is personally acquainted or interested, need adult support and protection. The third teacher expressed her desire to make a difference to children, especially those at risk of exclusion. The teacher confessed that teaching is a service job that allows someone to contribute to society; if a teacher offers a poor service, he/she is likely to be a poor teacher with no sense of vocation.

In the three teachers’ stories, the desire to serve others, particularly children, culminated in a desire to build a better world. This suggests that “teachers [with the sense of vocation] must envision the future far and wide while still accomplishing their tasks ‘here and now’, intimately and locally” (Estola et al., p. 248). Noddings (1992) also insists that there is no universal model of service in teaching that could be implemented objectively or publicly, because teaching is usually based on interaction between the teacher and the young children or adolescents. It goes without saying that teachers who care about children or students care about what they learn and how and they learn it. A caring teacher brings the subject matter to life and challenges learners to experience broadly and think deeply about important issues (Schwarz, 1999). Fried (1995, p. 17) claimed that “This quality of caring about ideas and values comes closest to what I mean in describing a ‘passionate teacher’.” Schwarz (1999) argues that the ethic of caring is a more demanding and less predictable task because it involves

uncertainty, ambivalence and complexity. A blurb on Mwalimu Julius Kambarage Nyerere above provides a good example of how he was a caring teacher dedicated to serving others. Although he moved into politics, he still had an inner sense of wanting to build a better future and defend Tanzania's children and adults through education and political activism.

Hansen (1994) further emphasises that although much of the work of teachers takes place within the four walls of the classroom, what happens within those four walls is rarely left at the door. It becomes part of the lives of individual students, the life of the school, and often a central part of the life of the individual teacher. The implication is that teachers can play a significant role in what students learn, and in how those students learn to learn, and in how they come to view learning itself (Hansen, 1994). Teachers can influence students' personal dispositions towards others and towards their own future, for better or for worse. This influence can extend beyond the school years. This can be readily attested to by anyone who remembers the teachers whom they had at a particular level of education. Speaking of teachers' influence, it is argued that no two teachers can have the same personal and moral influence on students, regardless of the common set of obligations and practices (Hansen, 1994). Each teacher has a different and unique influence on students' orientations and styles towards learning, towards knowledge and towards other people. These individual teacher differences are by and large not related to obvious differences in personality and teaching style. They generally have to do with the teacher's ethos, his or her behaviour when in the presence of students, his or her reputation, hopes, expectations, fears and worries (Hansen, 1994).

5.0 Conclusion

The revival of a sense of vocation in this paper aims to dispel misconceptions about the concept of vocation in teaching and to educate teachers about the humanistic aspect of teaching. Teachers with a sense of vocation see a connection between what they are giving through their teaching practice and what they receive from teaching (Wilke, 2004). Indeed, individual teachers with a sense of vocation have a creative and active relationship to their work (Hansen, 1994). They see their work as involving initiative rather than passively carrying out a set of discrete tasks. A teacher with a sense of vocation will not simply carry out routine tasks according to the established norms, but will look for new possibilities and opportunities in ways of thinking and working (Hansen, 1994;

Wilke, 2004). To achieve a sense of vocation, it is crucial for individual teachers to find meaning and purpose in their work, to set, commit to and achieve their professional goals, and to recognise their own contribution to the lives of others (Gradišek et al., 2020).

Reframing teaching as a vocation requires for different kinds of changes in teacher education that go above and beyond academic entry and exit standards, by enabling teachers to envision and enact ethical practice (Schwarz, 1999). Over the years, research has shown that more spending, more oversight and more accountability have little or no impact on improving student achievement because the most important agent of change is the teacher (Darling-Hammond et al., 2017). Therefore, revitalising teacher recruitment and better instilling with a sense of vocation in teacher education programmes is the best way to improve teacher disposition, raise student achievement and strengthen public perceptions of teaching (Bigham & Smith, 2008). The implication for student teachers – those studying to become teachers – is that vocation occurs when happiness and service go hand in hand (Wilke, 2004). One can say that one has a vocation to teach if teaching and helping students is what makes one's happy. To serve others or to work in a profession where there is no joy or happiness can lead to despair and burnout (Wilke, 2004). In other words, working for the sake of personal achievement rather than finding a connection between what one loves to do and what enriches the world leaves one unhappy and dissatisfied. Thus, both the pre-service and in-service teachers can best serve teaching, and would be best served by teaching, if they hold at least a glimmer of a sense of vocation.

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Implementation of Competence-Based Language Teaching Approach in Tanzania Lower Secondary Education English Classrooms

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Abstract

This is a qualitative study which explored how potentials of the Competence-based language teaching (CBLT) approach were utilised by the English language subject teachers in Tanzania lower secondary schools. It employed a single case study design in which 67 participants consisted of 36 students; 24 English language teachers; six (6) heads of schools; and one (1) Municipal Secondary Education Officer (MSEO) were involved. Sumbawanga Municipality is situated in Rukwa region was selected for data collection. Data were collected through interviews, classroom observations, focused group discussions (FGDs) and documentary review; and the data were analysed using both content and thematic analysis methods. The study showed that English language teachers had inadequate understanding of CBLT; most teachers applied teaching methods which did not promote the language competence among learners; teachers who taught English subject relied on the traditional language teaching methods including lecturing, audio-lingua and grammar translation. With exception of discussion which was used, the CBLT techniques such as drama, debate, role-play, cooperative learning, simulations, and inquiry-techniques like critical questioning recommended in the competence-based curriculum were not employed. It was also observed that the use of the traditional teaching methods was not enabling learners to acquire the intended language skills as expected of the curriculum. The study, recommends that teacher education curriculum at both universities and colleges should be improved to offer the prospective English language teachers with relevant skills in tandem with the competence-based language curriculum. There should also be a regular in-service training on CBLT to build capacity of the subject teachers who can implement the curriculum effectively.

Keywords: competence-based curriculum, language teaching, lower secondary schools, curriculum reforms in Tanzania

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1.0 Introduction

The existing relationship between education and development is the key factor which obliges every country or society to assess on how quality education can be realised for spearheading social, economic, political and cultural development (Tanzania Institute of Education [TIE], 2005a). In any education system, curriculum is the heart of education since it carries knowledge, skills and attitudes required for preparing an individual to become a prolific and worthwhile member of the society that they belong to. Presently, the curriculum implemented in Tanzania is competence-based Curriculum (CBC) that strengthens the students' competitiveness while enhancing the flexibility in the changing work situations. Indeed, with CBC students are anticipated to acquire appropriate competences such as creativity, problem-solving, higher-order thinking, team work, advanced technology and communication skills which are critical in the ever-changing labour market. Thus, the present study explored whether the use of teaching techniques used by English language teachers in lower secondary schools had any potential to achieve competences anticipated in the Competence-based English language syllabus introduced in 2015 (Ministry of Education and Vocational Training [MoEVT], 2010; Mosha, 2012; Vavrus & Bartlett, 2013).

The history of English language teaching, worldwide, can be traced back from 18th Century which was attached to behaviourism theory. Indeed, from 18th through 19th Century, because of the British colonial regime dominance, English language gained its hegemony and, so, it became the global language (Crystal, 2012; Richards & Rodgers, 2014). It was acquainted with European school curriculum using traditional approaches that were used for teaching Latin; text books entailed statements of grammatical rules, lists of vocabularies and sentences for translation. Language speaking skill was not the goal of learning as the English language teaching patterns were principally textbook-based, teacher-dominated and test oriented which, in turn, prevented students to improve their communicative language competences. Teaching and learning methods were mainly grammar translation, audio-lingual and direct method which emphasised rote learning. Thus, it was difficult for students to acquire language skills such as listening, speaking, reading and writing in an integrated manner. In the 19th Century, Task-Based Language Teaching (TBL), Communicative Language Teaching and Competence-Based Language Teaching (CBLT) were adopted in the developed countries as based on the English language functions. At the first time in 1960s, the CBLT was introduced in the education system of the United States of America following various publications on its significance in teacher

education. In Australia, CBLT was introduced in the mid-1980s where the government suggested this kind of teaching approach to be included in vocational and education training with the purpose of improving Australia's education system (Richards & Rodgers, 2014). Subsequently, by the end of 1999s the method had been accepted in various countries because of its worthiness in education. Textbooks and other teaching materials informed the cognitive, constructivism and social interaction learning theories in Tanzania (Nzima, 2018).

Before the adoption of the CBC in Tanzania education system in 2005, the curricula implemented were largely content-based or with traditionally-oriented teaching instructions. Undoubtedly, traditional teaching methods such as lecturing were applied by English language teachers as informed by audio-lingual, grammar translation, direct method and the structuralist theories of language. English language learning was realised through memorisation of grammatical rules and facts in order to understand and manipulate morphology and syntax of the intended target foreign language (cf. Rubagumya, 1991). Reading comprehension and writing were more emphasised, while little or no attention was paid to speaking and listening skills (cf. Skinner, 1957). As a result, vocabulary acquisition formed a basis for the reading comprehension activities for the learner and, in many situations, vocabularies were taught in isolation through bilingual word-lists, dictionary reading, drills and memorisation. The teacher remained a knower and authoritative in transmitting knowledge to the learner during the teaching and learning process. The teachers' role was central since the learning was primarily teacher-dominated. Consequently, learners were considered as blank cartridges who just received knowledge from their teachers. Certainly, chalk and talk and lecturing were the main methods employed by the teacher in teaching English language. Another role of the teacher was to keep learners attentive by varying drills and choosing relevant situations to practice structures (cf. Richards & Rodgers, 2014).

Since the use of traditional methods in language teaching as informed by behaviourist learning theories could not give the desired results, Tanzania reviewed the school curricula to adopt the competence-based curricula in 2005 (Domician, 2008; Nzima, 2018). The reform in curriculum affected all levels of education, from pre-primary, primary, secondary to tertiary levels. Accordingly, the changes in curriculum were reflected in all subjects, including English language. The curriculum change necessitated the change in teaching approaches. On languages, the demand on introducing the learner-centred approaches which

would realise the language curriculum expected learning outcomes. The goal was to employ approaches which would promote the learner's ability to learn the target language by using it through relevant activities and the successfully learning of the English language was expected to help learners cope with the hastily developing social, economic, scientific and technological developments emerging daily in the world (MoEVT, 2010).

Education and Training Policies of 1995 and 2014 which are being implemented, both acknowledge the use of English language as the medium of instruction in the Tanzania's education system from secondary education to tertiary education. Thus, English is a key subject taught at secondary education, and it is an important subject in comprehending other subjects in higher levels of education (Cohen & Power, 2005; MoEC, 1995).

To heighten the anticipated English language skills, the existing secondary education curriculum assumes that teaching and learning process should follow constructivist approaches. The design of lessons has to be learner-centred. The activities are supposed to be tailored in such a way that learners construct their knowledge as a result of learning experiences. Interaction is considered as a driving force in English language learning. The classroom is viewed as a mini-society where a community of learners engage in activities, discourse and reflections. Competence-based language teaching approaches promote the learning process which develops higher order of intellectual functioning rather than rote learning (Vavrus & Bartlett, 2013).

Since the adoption of the CBLT at secondary education in Tanzania on the teaching of the English subject, it was not clear on whether or not there were any evidence for an appropriate teaching of the English subject in the lower secondary schools using the CBLT methods and techniques. Furthermore, the government of Tanzania through Tanzania Institute of Education (TIE) and the Ministry of Education, Science and Technology made some efforts to ensure the successful use of acclaimed English language teaching approaches in the lower secondary schools including development of instructional materials, distribution of syllabi and support materials, teacher orientations to the reviewed curriculum; the desired CBLT potential remained untapped (John, 2018; Mosha, 2012; TIE, 2005b).

Although the CBC has been implemented, the use of its relevant teaching approaches especially by English language teachers in lower-level secondary

schools in Tanzania has remained unrewarding. Majority of secondary school leavers are still incompetent in demonstrating the English language skills such as listening, speaking, reading and writing in their daily communication (Fentiman et al., 2014; John, 2018; John et al., 2020; Mosha, 2012; Rwezaura, 2016; Rugemalira, 2017; Nzima, 2018; Vavrus & Bartlett, 2013). Arguably, the study addressed two research questions.

- i. How do the teachers understand the English language competence-based teaching?
- ii. How do English language teachers use the relevant teaching techniques in the English language classroom?

2.0 Literature Review

Competency is defined as any attribute of an individual that contributes to the successful performance of a task, job, function, or activity in an academic setting and/or a work setting; and, it includes specific knowledge, thinking processes, attitudes, and perceptual and physical skills (Richards & Rodgers, 2002). It addresses what the learners are expected to do rather than what they are expected to describe. In this regard, the English Language Competency-based teaching means the application of principles and techniques relevant to achieving the target language skills among learners with the purpose of enabling learners to learn the language while using it through authentic tasks. Despite the adoption of CBLT approach in lower secondary schools in Tanzania since 2005, yet studies report that the CBLT implementation is still facing numerous challenges (John et al., 2020; Rwezaura, 2016). The current English language syllabus (MoEST, 2016) requires the teaching and learning of English subject to be conducted through authentic tasks to enable the English language learners acquire language skills and competences useful in day to day communication.

The teaching techniques recommended in the syllabus for realisation of target competences include debate, problem solving and inquiring method, project, simulation games, conducting searches for relevant materials, drama, group discussion and role play (John, 2017; Lin & Chien, 2010; MoEST, 2016; MoEST, 2010). The ordinary secondary school curriculum in Tanzania emphasises on the learner-centred teaching methods. It emphasises that:

The implementation of ordinary secondary education shall emphasise learner-centred approach. This approach shall promote learning-through doing where both the teacher and students are

active participants in the process. This is the learning that makes sense in the life of a student. (TIE, 2005, p. 29).

The role of English language teacher is to place the learner at the centre of the learning process in order to enhance an active classroom interaction. Thus, English language teaching methods and techniques employed should translate constructivism and social interaction theories which promote the students sharing of knowledge during the learning process. In so doing, the learner becomes more interactive, active and motivated to raise interests, challenge his/her fellow students and the teacher as well in sharing skills, knowledge and attitudes (Lin & Chien, 2010).

Similarly, the language teacher turns out to be the facilitator while assisting learners to construct their own knowledge and develop their higher-order thinking due to the active involvement in the learning process. Another advantage is that students may get opportunities to interact with the environment and the fellow students through dialogue. Hence, a teacher has to be responsive to the students by employing different approaches to learning to attend to the learners' needs (Hartfield, 2013; Nzima, 2018).

Yazdanpanah (2014) found out that teachers in Australia were still using traditional methods of teaching which did not enable learners to effectively communicate in English language. Jung (2021) reports that teachers in Korea still practiced traditional teaching including audio-lingual method and grammar translation which are teacher-centered learning in terms of teaching methods and assessments. Nkwetisama (2012) shows that in Cameroon secondary school leavers were unable to use English language for the communication purposes although the syllabus had spelt out that teaching and learning of English language should reflect competence-based curriculum in order to enable learners to acquire useful competences. Tubaundule (2014) found out that teachers at secondary schools in Namibia had a negative attitude towards the intended curriculum because they did not have the understanding of competence-based language teaching. Kideli (2015) reported that teachers have had low understanding of competence-based curriculum which led to insufficient implementation of English language competence-based curriculum in advanced secondary schools. In Tanzania, Mataka (2015) conducted a study on the implementation of English subject competence-based curriculum in community based secondary schools in Dar es Salaam. The findings revealed that most of the English language teachers

were aware of the competence-based curriculum although their instructional process did not match the methods of teaching and failed to integrate competence-based strategies in their teaching and learning. A study by Nzima (2018) on the interpretations of competence-based curriculum in Tanzania revealed that tutors are less sensitive to applying what is learnt beyond the classroom and subject context. The present study, therefore, explored the teachers' understanding of the CBLT approach as recommended in the subject Syllabus and how the CBLT techniques are being employed by the subject teachers in classroom contexts using the Sumbawanga Municipality as a case study.

3.0 Methodology

This study employed qualitative research approach which enabled the researcher to generate data in the natural settings where participants acquired the experience in order to gain a deeper understanding of the problem under investigation (Creswell, 2007). The study used a single case study design because it offers a unique example of real people in their real circumstances since contexts are unique and dynamic (Yin, 2003). Sumbawanga municipality was selected as the area of study due to unsatisfactory results of English language subject consecutively in three years (2017-2019) in the national form four examinations reviewed as compared with other Municipal Councils in Tanzania. The sampling of schools was done using purposive sampling technique. The six best performing lower secondary schools in Sumbawanga Municipality were selected. It was anticipated that schools with such performance might be a result of broad awareness, knowledge and appropriate use of competence-based English language techniques.

Six heads of school and 24 English language teachers from six schools were involved in the study. The study also included one Municipal Secondary Education Officer (MSEO) and 36 form four students. The MSEO was involved in the study because of the administrative roles in planning, coordinating, organising, supervising, monitoring and evaluating matters related to quality control and implementation of the curriculum in the Municipality. Form four students were involved because they are directly involved in the implementation of competence-based language teaching in their schools as recipients of knowledge through interaction with teachers and engagement in the learning activities.

Observations, interviews, documentary reviews and the focused group discussions (FGDs) were used as methods of data collection (cf. Cohen et al., 2002). In this study, in-depth interviews were used to obtain information for the study from English language teachers, heads of schools and MSEO. The focus group discussions (FGDs) were administered to 36 form four students in six different groups from the sampled schools. FGDs were used as an effective means for generating data as they enable participants to share and discuss issues from their own experiences in the natural settings. Non-participant observation was used to gather necessary information pertaining to teachers' delivery of the lesson in the classroom setting as it helps to get the first-hand information of what is taking place in a natural setting (Patton, 2002). Furthermore, a documentary review guide was used to acquire data from English language teachers' schemes of work, lesson plans and students' exercise books. The analyzed documents showed students' activities and the teaching techniques employed by teachers.

In this study, content analysis was used to analyze data obtained. The data were analyzed in response to the research questions. This process also involved the interpretation of data according to the research questions. The themes were patterned and evidence was presented in terms of quotes. Issues related to credibility, transferability, dependability and conformability of the findings were also observed (Shenton, 2004). Ethical issues such as informed consent for one to participate in the study, privacy, anonymity and confidentiality were adhered to (Cohen et al., 2007).

4.0 Findings and Discussion

This study sought to explore the Competence-based language teaching (CBLT) techniques in Tanzania lower secondary schools. Specifically, the study explored the teachers' understanding of the CBLT approach as directed in the subject Syllabus and how the CBLT techniques were employed by the subject teachers in classroom contexts. The findings were obtained through interviews, focused group discussions (FGDs), observations, and documentary review and the key themes in response to the research questions were presented as follows.

Teachers' Understanding and Use of CBLT Approach

The aim was to determine how teachers were able to conceptually explain the approach, select and employ the CBLT techniques appropriately in classroom context. On this area, subject teachers were assessed based on two scales, namely: the way teachers were aware about teaching English language by integrating

language skills through activities, and the way the English language classroom assessment activities were given and handled. Observation and documentary review of the lessons were used to obtain relevant information. To triangulate data, interviews were conducted with English language subject teachers in order to explore the perceived meaning and their understanding about the CBLT. The interviews with teachers also showed that teachers were not conversant with the techniques required by the CBLT approach in the teaching of English subject. Indeed, techniques needed by this approach are such as use of games and drama, problem solving and inquiry, puzzles, simulations, dialogue, collaboration, debate and role play, to mention a few. One teacher from school E, expressed:

The teaching method which can integrate multiple language skills during the teaching and learning process is group discussion which we emphasise on during teaching the English subject. I am not aware about other English language teaching techniques required by CBLT. T2, FIV, SE.

Indeed, the teacher's perception in the quotation above indicates that there appeared to be a limited understanding of the methods required for CBLT that promotes the learner-centered education approach. The teacher seemed to be familiar with discussion method only, leaving other techniques untapped. This implies that other CBLT suggested in the syllabus were still not known to teachers and not used.

The interviews also showed that most subject teachers used a few minutes than time indicated in their lesson plans for discussion and the remaining time was used by teachers for lecturing and writing notes on the board. The following quotation represents the common practice that English language subject teachers adopted had on use of group discussions during teaching and learning process:

During the lesson when teaching English language, I tend to use like 20 of 40 minutes explaining some difficult concepts related with the topic; then students make discussions in their groups for almost five (5) minutes and then present their findings. After presentations, I write some notes on the board for them to copy (T3, FIV, SA).

This communicates more than just knowledge on the CBLT. It may also touch on lack of in-service training on the new approaches introduced. This is because

this experience reveals how teachers were still applying lecturing, instead of engaging learners into relevant activities for meaningful learning. Lin & Chien (2010) asserted that discussion is among learner-centred methods of teaching where the teacher guides students in their groups to make conversations and discuss the topic at hand. Moreover, a group discussion technique can be used by learners by responding to an issue and thinking the most important issues to address or present. Through discussion, communicative competences are developed by students as well as self-confidence in speaking in front of the people is enhanced. TIE (2005b) identifies discussion method as among the designated authentic techniques to be used by lower secondary school students in teaching the English subject. However, it should be used appropriately along with other relevant techniques.

When teachers were requested to explain what they knew about the CBLT based on the use of prior knowledge as an essential characteristic of competence-based teaching, teachers could not associate the CBLT techniques with what they stated. In CBLT learning, the use of prior knowledge linked with the new knowledge is of great importance because it helps learners to connect the knowledge of the subjects clearly rather than memorising the facts through drills and repetitions. This also helps the learner to construct his/her knowledge which lasts longer than receiving knowledge from the teacher (Richards & Rodgers, 2014; Weddel, 2006). The findings revealed that no single interviewed subject teacher was able to conceptualise the CBLT in relation to the application of prior knowledge during the teaching and learning process. In this regard, one teacher from school B echoed:

I don't know the meaning of using prior knowledge in teaching and learning. What I usually do is that during the language teaching and learning process, I usually read a passage to students then I translate it in Kiswahili language so that my students can understand well (T3, FIV, SB).

Similarly, another teacher in school B expressed that:

In our environment here, English language is not a second language like it is with the students born in towns. Here the language spoken commonly by our students is their mother tongue (Fipa language). So, if I tell them to discuss in groups using English language, no learning can take place. Hence, that is why I often use the lecture

method though I know that I am supposed to use participatory methods of teaching (T4, FIII, SB).

The responses in the two quotes above indicate that even the group discussion strategy was not a well-conducted technique in everyday teaching as most of the teachers tend to use the old technique which is lecturing method. The reason for the lecture method being applied more frequently was based on environment, where most of their students faced difficulties in speaking English language because to them English language was the third language after Kiswahili and Fipa language, which was the native language of the majority students in the study area. It also shows that the teachers were still using traditional methods of teaching (grammar translation method) in the teaching of English subject. In CBLT, the use of prior knowledge and the target language in learning is important as the learner constructs knowledge by doing activities which encourage them to draw on scaffolding in order to become more competent in the language use (Willis & Willis, 2013). Again, the teacher from school C said:

I don't know the meaning of using prior knowledge as used in CBLT; it is a new terminology to me (T3, FIV, SC).

Generally, teachers from school A, B and C claimed that they do not know the essence of using prior knowledge during teaching and learning process although they had attended pre-service training. Equally, three English language teachers from school D admitted that they did not understand the use of learners' prior knowledge in relation to CBLT. This continued to reveal the teachers' inadequate understanding of the CBLT requirements as the use of prior knowledge is one of the important elements required in the teaching and learning process. With CBLT, students are required to construct their own knowledge by using their existing knowledge and try to use English because they are not as empty as slates to be filled through lecturing, instead teachers play the role of a facilitator and needs analyst of the learning process (Nzima, 2018). CBLT involves a continuous critical assessment of the knowledge and skills achieved by learners, instead of assessing primarily fact-based knowledge (Barron & Hammond, 2008; Jacobs & Farrell, 2001).

The interviews further revealed the teacher's use of the traditional techniques where they referred written tests as the only tool for assessing the learner's language progress. CBLT required teachers to use oral tests, interviews and

observations to assess the language skills acquired in an integrative manner. A teacher from school F said the following on the assessment techniques used:

What I know about CBLT regarding the assessment techniques is that nothing is different from traditional teaching methods because we still assess our students' progress on English language competence through written examinations and tests. Nothing has been changed in Tanzania with regard to English subject assessments (T4, FIII, SF).

Through triangulation, one of the observations conducted also revealed the following as recorded during the classroom lessons in Form III class:

Today we are going to learn about reading skills. I will give you textbooks and you will read in groups a passage from the book. Class, understood?" Students: yes madam! The teacher, added: Each group will read aloud and then, I will give you notes about reading skills to copy (T1, FIII, SA).

Although the Syllabus directed teachers to apply tasks for which students could learn language skills while trying to use it, this teacher 1 of school 'A' seemed to continue using the traditional ways of teaching where use of 'notes' written for students is common. When the CBLT techniques were applied on this scenario, we would expect this teacher to give opportunities for students to explore meaning of what they read and present their understanding for classroom discussion. Additionally, the essence of integrating language skills is that it exposes a learner to authentic learning in relation to natural settings (Yulia, 2014). Thus, the subject teachers who are implementers of the curriculum were expected to show their understanding of CBLT techniques to be used when teaching the reading skills as a unit of learning.

The evidence generated from the English language teachers on the understanding of the CBLT approach suggests that they had a limited understanding of approach, although they were implementing it. For that reason, the CBLT implementation was likely to be negatively affected because of the inadequate understanding of the competence-based language teaching and its techniques. Banda (2011) and Barret (2007) argued that it is hard for a teacher to implement

the subject curriculum for which both pedagogy and subject knowledge are hampered.

Students' Views on Teaching and Learning Methods Used by Teachers in the English Subject Classrooms

Students through FGDs revealed that their teachers who were teaching English language subject often grouped them into small groups for discussions during the teaching and learning process. They also expressed that their major role was to listen to teachers and write down notes provided by their subject teachers. They expressed, teachers who taught the English subject would come to the classroom, and start talking, while students were made busy to copy notes as written by the teacher on the blackboard. The following quote was recorded in one of the students focused group discussions:

When the teacher enters in our classroom, he/she starts explaining some concepts about the lesson and also writes notes on the blackboard. Hence, we remain busy copying and the teacher usually elaborates vocabularies through Kiswahili language. Sometimes we are told to be in groups to discuss some questions and topics. The teacher also provides some notes to write in our exercise books (Students' FGDs, School D).

The excerpt from the FGDs above represents the student view which shows that teachers were still using traditional methods that encouraged memorisation and rote-learning throughout the teaching and learning process thereby lessening students' autonomy and participation. This means rote-learning was still encouraged in language teaching and learning where learning of English language was based solely on the reading texts and finding meaning of words in the dictionary and practice memorisation. In this regard, students were exposed to cramming the language concepts in order to answer questions asked in the examinations to pass the examinations. According to Hartfield (2013), this way of learning reflects traditional behaviorist view of learning which encourages repetition of facts for recalling during exams and not acquiring skills through deep and reflective learning achieved in doing activities. This shows how the CBLT potential techniques for developing the English language competences among learners were not utilised because of the teachers' failure to change and adopt to the newly introduced 2005 competence-based curriculum (TIE, 2005a & 2005b).

English Language Teachers Lesson Plans and Delivery

Documentary analysis was conducted and the lesson plans and schemes of work were reviewed. The review indicated that teachers usually planned to use participatory methods of teaching especially the group discussion, question and answers as well as brainstorming. In the documents analyzed, there was no teacher who indicated the use of traditional methods of teaching, such as lecturing. However, the real practice pulled them back to the old ways of teaching. The teaching strategies suggested in schemes of work and lesson plans were not applied in the actual English language lessons. Indeed, what was written in the lesson plans could not be implemented in the actual classroom teaching and learning and this was evident through observations conducted. This suggests that teachers fail to implement what they learnt theoretically in the classroom during pre-service training (Vavrus & Bartlett, 2013). This is because the evidence established showed that teachers continued to use the lecture methods, students cramming of concepts, while encouraging the rote-learning. This is corroborated by Vavrus et al. (2011) who reported that to get the fruits of competence-based learning in Tanzania; the changes should start with teacher education because teachers largely teach the way they were taught.

5.0 Conclusion and Recommendations

The study aimed at exploring CBLT potentials recommended in the English subject teaching in Tanzania lower secondary education. Specifically, it explored how teachers utilise the CBLT techniques for developing English competences among students. It has revealed that majority English language teachers are still using the traditional ways of teaching such as lecture and drill methods. Although a few applied discussion methods, were not used in the way that adequately promoted interaction among learners. The study has also shown that the English language teachers could not encourage their students to engage in different activities in the classroom; thus, students remained passive listeners to the authoritative teacher. It has also shown that the teaching strategies stated by teachers in the lesson plans and schemes of work were not applied during the actual teaching and learning process. This apparently implied that teachers are informed about the methods and techniques required in teaching process; however, they are still not able to apply them in actual classroom situations.

Drawing on the study findings, the study recommends to the responsible Ministry for Education and President's Office-Regional Administration and Local Government (PO-RAG) to increase time allocated for the student teachers' block

teaching practices in teacher colleges and universities. This would allow the prospective-teachers who are trained theoretically to have sufficient time to practice the implementation of the competence-based instruction while spearheading the effectiveness as well as efficiency in the teaching of the English subject. This is because the present time allocated for the block teaching practice (four months for university student teachers and two months for diploma in education students) is not sufficient to enable student teachers to be acquainted with teaching skills. In addition, in-service training on competence-based language curriculum should be conducted on regular basis involving all teachers so that they can enhance provision of the quality education.

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Instructors' and Students' Understanding of the Role of Humour in Teaching and Learning English as a Foreign Language

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Abstract

Humour as a pedagogical tool has been recommended for every grade level from preschool to university and for various subjects. The current study investigates English instructors and students understanding of the role of humour in English literature classes towards teaching and learning English as a foreign language at tertiary level. The participants included 4 English literature instructors and 12 student teachers from the department of languages and literature at Mkwawa University College of Education. The qualitative approach was employed using semi-structured interviews, classroom observations and focus group discussions as data collection methods. The findings revealed that participants had a better understanding of the role of humour in English literature classes as a pedagogical tool to help learners understand the lesson content and learn English as a foreign language. Also, participants confirmed that learning English literature cannot be separated from learning English language as well as humorous materials are indispensable towards teaching and learning English literature. Moreover, the findings revealed that instructors sometimes had to code switch from English to Kiswahili to help learners understand the meaning of humour and connect to the content of the lesson. Based on these results, the study recommends that English literature instructors should use humour in their teaching to motivate students during the teaching and learning process; improves students' ability to retain information more easily and for a long time; and helps learners avoid boredom, anxiety and stress when learning in English as foreign language. Finally, instructors are urged not to use code-switching frequently when practicing humour in English literature classes to help students build positive attitude towards English language and advance the knowledge of the language.

Keywords: role of humour, English literature, foreign language, learner engagement, learning achievement

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1.0 Introduction

The use of humour as a pedagogical tool has been recommended for virtually every grade level from preschool to university and for various subjects such as language, arts, mathematics, statistics, science, and psychology (Ivy, 2013, p. 39) to create a climate that promotes learning (Plattsburgh State University of New York, 2015). The use of humour in teaching and learning, not only influences effective communication between teachers and students but also increases students' willingness to learn (Wanzer, 2002). As Lei et al. (2010) argued that humour has the power to make instructors more likable, approachable, facilitates comprehension, increases attentiveness, improves creativity, and promotes social relationships. Fata et al. (2018) further postulated that humour has many benefits of maximising brainpower, contributing to mind or body balance, improving creativity, facilitating communication and creating an optimal environment for teaching and learning. Therefore, the benefits of humour range from cognitive, emotional, psychological and pedagogical benefits at different levels of educational institutions (Unsal et al., 2018).

Humour has been categorised into different forms. For example, Ziyaeemehr and Kumar (2014) consider humour as verbal, nonverbal and both verbal and nonverbal. Verbal or word-based humour includes; wordplays, funny stories, puns, content related jokes, comic irony, metaphor, hyperbole, metonymy and riddle stories. Examples of non-verbal types of humour comprise funny facial expressions, gestures, and making faces. Chee (2003) has sorted humour forms into four main groups: Textual forms (e.g., stories, jokes), pictorial forms (e.g., cartoons, comics), verbal forms (e.g., puns, word games and acronyms), and action/games (e.g., theatre, video, role play, and contests).

Generally, humour is something subjective in nature and context determines its use. For example, humour is used by radio hosts, comedians, politicians and educators. Politicians use humour in their public speeches to persuade the audience. Meyer (2000) argues that politicians use humour to make their speeches memorable, build a rapport with the audience, show friendliness, and/or reduce negative reactions when critiquing their opponents. In the context of teaching and learning, humour is used to assist or facilitate learning in the classroom (Chabeli, 2008; Garner, 2006). Bakar (2019) asserts that contrary to a stand-up comedians and politician's use of humour, teachers' use of humour serves more than just the goal of eliciting laughter, but they serve as an instructional tool for teaching and

learning purposes. As Aboudan (2009) found that 80% of students reported that jokes help them pay more attention during class time, and (71%) pointed out that humour helps to learn difficult material.

Language and literature are intertwined and learning one component leads to learning the other component. Therefore, it is unquestionably that each genre of literature contributes to language learning in one way or another. For example, poetry makes students familiar with different figures of speech such as simile, metaphor, irony, personification and imagery, which are part of daily language use (Saraç, 2003). Prose or short stories in foreign language curriculum serve as appreciated instrument in attaining cultural knowledge of the selected community and help students coming from various backgrounds communicate with each other because of its universal language (Arioğul, 2001). Drama, promotes learners' comprehension of life experiences and allows learners to reflect on particular circumstances and make sense of their extra linguistic world more deeply (Sarıçoban, 2004). Literature helps learners to build their vocabulary and distinguish figurative meaning from the literal meaning. Besides, it allows learners to develop visual memory and increases their ability to sort out linguistic problems (Munoz, 2005). Lazar (1993) postulated that literary texts enrich the language input in the classroom and stimulate language acquisition by providing meaningful and memorable contexts for processing and interpreting new language. Furthermore, Lazar (1993) suggested five reasons for integrating literature in English language teaching: Expanding students' language awareness, encouraging language acquisition, developing students' interpretative abilities, motivating materials, and educating the whole person.

The uses of humour in the foreign language classroom is based on Krashen's popular Input Hypothesis (1985), which was later developed within the context of second-language learning. Krashen's view on the uses of humour in teaching and learning foreign language is based on the assumption that learning foreign language involves students feeling anxiety and causes mental block in processing information, and consequently leads to unreceptive language input. Scholars like Horwitz et al. (1986) supported Krashen's *Affective Filter Hypothesis* by examining the effects of student anxiety in foreign language classrooms. They observed that anxiety limits students with the task of language learning. Krause (2014) concluded that there are many good reasons for employing humour in the

classroom as it can reduce foreign language anxiety and makes the students more likely to participate in lesson and become engaged with the target language. Specifically, this study was guided by the following research objective:

- To explore English literature instructors and student teachers understanding of the role of humour in teaching and learning English as a foreign language in higher learning in Tanzania.

2.0 Literature Review

2.1 The Role of Literature in Language Learning

From the historical point of view, the place of literature in studying first, second and foreign language education has moved forward significantly for decades. Durant (1993) provided a summary that distinguishes between three phases of the study of literature and language learning. First is the *traditional phase* where literature was considered as crucial goal of all language teaching and given high position. The second phase was between 1960s and 1970s which saw a dramatic change as literature was downgraded, if not entirely excluded, from language courses, which became increasingly functional in their orientation. In this period, literature disappeared from the language curriculum entirely as more functional models of learning and was something extra to everyday communicative needs (Carter, 2007). The third phase was between 1970s and 1980s characterised by discourse stylistics approaches and was a reaction against the second phase that downgraded the role of literature in language classrooms. This phase led to the growth of communicative language teaching methods and reconsideration of the place of literature in the language classroom, with recognition of the primary authenticity of literary texts. Kramsch and Kramsch (2000) term the movement as “an opportunity to develop vocabulary acquisition, the development of reading strategies, and the training of critical thinking, that is, reasoning skills” (p. 567).

Generally, from the historical point of view, literature teaching and learning remains to be a way of developing learners’ language skills competence. Stern (1991) advocated that “the study of a single literary work can combine all the language skills with one another and with increased literary understanding and appreciation” (p. 330). In similar vein, Rahayu (2011) argues that literary texts offer a rich source of linguistic input and can help learners to practice the four-language skills such as speaking, listening, reading, and writing. Furthermore,

Jahanforouz (2017) postulated that some sources provide materials that can meet some of these abilities, but literature has proved a good source that fulfils these four skills. Based on the foregoing arguments it is undoubtedly that literature has power in developing the four language skills.

2.2 Humour in Teaching and Learning English as a Foreign Language

Researches undertaken in the area of humour and foreign language learning acknowledge that teachers' use of humour works better to improve foreign language learning (Gardner, 2008; Krause, 2014; Trachtenberg, 1979; Unsal et al., 2018). Krause (2014) from a linguistic perspective, pointed out that introducing humour in foreign language teaching can be a motivating way to make the students aware of specific features in the phonology, morphology and syntax of the target language. Trachtenberg (1979) provided seven reasons of humour as useful tools for teaching English language: First, they are brief and can be taught in a short period of time; second, they are rule-governed and rules can be taught; third, jokes use a wide variety of speech patterns; fourth, jokes exist in all cultures; fifth, jokes “embody a culture,” and so can transmit culture; sixth, the speech behaviour of jokes is generalizable to other speech acts; and lastly, jokes are funny and keep the classroom awake and spirited. Gardner (2008) grouped Trachtenberg's reasons into three categories: classroom management benefits; linguistic instruction benefits; and culture instruction benefits. From this point of view, Unsal et al. (2018) insisted that due to its cognitive, emotional, psychological and pedagogical benefits, the educational institutions of different levels should aim to facilitate a good sense of humour in students.

Fadel and Al-Bargi (2018) conducted the study on “The use of humour in English as foreign language (EFL) classrooms”. The results indicated that relevant humour to the course content had positive effect to students learning of the foreign language. Similar findings were reported by Gonulal (2018) who examined “The potential of humour in EFL classrooms: An attitudinal study”. The results indicated that Turkish college-level EFL students have largely positive attitudes towards using humour in English classrooms. Additionally, students considered humour as an effective pedagogical tool that can increase their attentiveness, attention span, and confidence in English classrooms. Similar findings have also been reported by Pham (2014) who examined university teachers' and students' perceptions of the roles of humour in EFL teaching, teachers' practices of humour use, and students' response to teachers' use of humour in the context of

Vietnamese higher education. The researcher found the majority of university EFL teachers and students held positive views of the use of humour in EFL teaching and believed that humour has affective and cognitive benefits for students, their learning, and the teacher-student relationship.

Ketabi and Shahla (2009) conducted a study of 300 foreign language learners and 15 foreign language instructors whereas diverse groups of Persian EFL teachers and learners were asked to evaluate the use of humour in their classrooms. Results of this study strongly confirm a perceived effectiveness for humour as a very useful strategy of learning and teaching foreign languages. Al-Duleimi and Aziz (2016) conducted a mixed research study on “Humour as EFL Learning-Teaching Strategy” in Iraq. The findings revealed that humour is useful pedagogical tool in teaching and learning. Syafiq and Saleh (2012) conducted quasi-experimental research on “Humour English teaching material for improving students’ speaking skill with high and low learning motivation”. The results showed that humour as teaching material has significant effect on the students’ speaking skill to those who have high and low learning motivation. These findings reflect what Askildson (2005) postulated before that “humour as a formidable tool for sensitising students to phonological, morphological, lexical, and syntactic differences within a single language or between a student’s first language and the language of teaching” (p. 49).

2.3 Theoretical Framework

The present study used two theories that support teachers’ use of humour as a pedagogical approach to motivate learners into learning.

2.3.1 Instructional Humour Processing Theory (IHPT)

The theory helps to understand how humorous messages are cognitively and affectively processed and potentially affect students learning in the classroom context (Wanzer et al., 2010). According to Wanzer et al. (2010), learning will take place when humour creates positive feelings and lead to better attention and enriched motivation on the part of students as they attempt to understand and participate in the learning process. Specifically, the theory highlights two important considerations when using humour in the classroom: namely “relevant” and “appropriateness” (Banas et al., 2011). In the first aspect, *relevant*, the theory pinpoints that humour which are related to course content in many times increases motivation to learn and the ability to receive information. Regarding the

second aspect, *appropriateness*, consideration is on the suitability of humour to control the affective response (Banas et al., 2011). In the light of the purpose of the current study, English literature instructors' use humour in the classroom which is relevant and appropriate to the lesson content may contribute much towards students learning. As Wanzer et al. (2010) postulated that humour will be relevant or appropriate to instruction if students recognise the presence of humour and interpret it as humour and then process the humour by making the connection between the humour used and the instructional information.

2.3.2 Information Processing Theory

This theory was developed by an American psychologist George Miller (1950s) grounding on Tolman (1886-1959) who asserted that learning is a multifaceted and internal process occurring with some mental processes (cognitive approach). The theory describes how our brains filter information, from what we are paying attention to in the present moment (sensory memory), to what gets stored in our working memory and ultimately into long-term memory. In the view of this study, teachers' use of humour or humorous materials like wordplay, content related jokes, riddles, textual and pictorial forms (cartoons and comics), action or games (theatre, video, and role play), act as stimuli whereas learners become attentive and get interested to the lesson. Hackathorn et al. (2011) found that students not only expressed favourable comments about their professors who used humour in the classroom, they also showed higher success rates and levels of engagement. Therefore, it can be justified that through humour, learners can be motivated to learn, process information from sensory register memory, short term memory and long-term memory and being able to retrieve when the information is needed.

3.0 Methodology

The study employed a qualitative approach which was informed by an interpretive paradigm. Qualitative approach was appropriate because of the nature of the study which required deep explanation by using words rather than numbers (Hancock & Algozzine, 2006). On the other hand, interpretive paradigm guided researchers to understand participants' beliefs and experiences on the use of humour in teaching and learning in a higher learning institution. Therefore, qualitative approach and interpretive paradigm helped researchers to understand English literature instructors and student teachers about their understanding on the role of humour in teaching and learning English as a foreign language in Tanzania.

3.1 Participants

Purposeful sampling technique was employed to obtain a sample of 16 participants from Mkwawa University College of Education, of which, four were English literature instructors and 12 were student teachers studying Bachelor of Education in Arts (B.Ed. Arts) degree programme (majoring in English literature) and Bachelor of Arts with Education (B.A. with Education) degree programme (majoring in two teaching subjects including English literature). Purposeful sampling technique was used to select English literature instructors who served as key informants in the study. Accordingly, second- and third-year student teachers were purposively selected because they have so far studied a reasonable number of literature courses from different instructors. As Tongco (2007) points out that the power of purposeful sampling is to select respondents “who can and are willing to provide the information by virtue of knowledge or experience” (p. 147).

3.2 Data Collection Methods

In this study, data were collected using three methods, namely observations, interviews with the instructors, and Focus Group Discussion (FGD) with student teachers.

3.2.1 Observation with Classroom Video Recordings

This was the first stage of data collection method where each instructor was observed twice. The researchers assumed a position of complete observers during classrooms observation and instructors and students were aware about the presence of the researchers. Using the iPad, the researchers managed to record instructor’s actions in front of the class. Field notes helped to note student teachers’ reactions from instructors’ humour. Indeed, some reactions were recorded like laughing sounds and clapping hands. Also, with the help of observation checklist plan, appropriate and inappropriate humours were identified. Researchers’ observation of humorous behaviours/actions from instructors and students and the filling of the observation checklist plan were done simultaneously.

3.2.2 One-on-One Interview with Instructors

Interviews with instructors were done after classroom observation in instructor’s office based on the agreed schedule and each interview lasted between 35-45 minutes. During the interview with each instructor, the researchers used ‘stimulated recall’ technique (Zacharias, 2011). In this technique, field notes and

audio recordings from the classroom observations helped to recall the lessons and activated the discussion with instructors. With each instructor's permission, both note taking and audio recording were done simultaneously during interviews.

3.2.3 Focus Group Discussion

The researchers divided FGD into two groups with six students for each group to enhance active group interaction (Merriam & Tisdell, 2015). The researchers ensured that in each group there was equal number of second year and third year student teachers. The presence of peers from different years of study stimulated the curiosity about their experiences of their instructors' use of humour in English literature classes towards learning English as a foreign language. Again, the recordings from these focus groups were done and later were verbally transcribed. The FGDs were done in the classroom and lasted about an hour.

3.3 Data Analysis

For observed data, recorded videos of lecture sessions and information from checklist plan were analysed based on appropriate and inappropriate humour. Interview and group discussion transcripts were analysed thematically by using three stages outlined by King and Horrocks (2010), namely descriptive coding, interpretive coding and overarching themes. The first procedure was to read and re-read thoroughly the transcripts, highlight key words from participants' responses and give codes for each brief notes identified. The second procedure was to gather/cluster the relevant codes found in the transcripts and its meaning. The final procedure was to identify key themes and continuously key themes were refined and interpreted to reflect the purpose of the study.

4.0 Findings and Discussion

The findings revealed that all participants had an understanding of humour and they were aware about the role of humour in teaching and learning English as foreign language. During the study, participants reported numerous roles of humour in teaching and learning English as a foreign language as discussed in subsequent sections.

Humour Enhances Retention of the Learned Information

During face-to-face interviews with instructors, when they were asked if it was worth for them to use humour or humorous materials as pedagogical tool in teaching English as foreign language in English literature classes, all the four instructors reported that students do catch up and remember information in the presence of humour such as funny stories and jokes. Furthermore, instructors

reported that literature and language learning as well as humour and teaching English as a foreign language cannot be separated. Instructors' responses were as follows:

It is possible to develop English language skills such as vocabulary because the use of humour involves manipulation of language creatively in jokes or storytelling to bring the authenticity of literary works at the same time developing language skills (Interview, Instructor D).

We get message from literary works by looking how language is used by writers to send his/her message to the targeted audience... humour is not only used by teachers during classroom teaching, but also writers use them to make their work interesting to readers (Interview, Instructor A).

In similar vein, during FGDs with students when they were asked if they can learn better English as a foreign language in English literature classes in the presence of humour, students reported that instructor's use of humour in English literature classes made them enjoy studying English literature and consequently developed English language skills. One student teacher reported that:

Yes, when the teacher makes jokes or stories using figurative language, idioms, and sayings makes us attentive to the lesson and easy for us to remember it for a long time. During the exams it is easy to remember examples teachers provided through stories and other jokes. For me, I do write them to get marks if related to the question (FGD, student LG).

Findings from both instructors and student teachers suggest that instructors' use of humour is an appropriate approach for teaching and learning English as a foreign language because it enables learners to remember information for a long time. Moreover, writers' use of humour in their literary works helps readers including students to enjoy reading literary works and develop language skills. As Munoz (2005) proclaims that humour facilitates the acquisition of vocabulary and helps to distinguish figurative from literal meaning. Munoz (2005) further argues that "humour is closely related to memory since it is easier to recall an experience that occurred in a humorous context" (p. 24). Al-Duleimi and Aziz (2016) mentioned that humorous activities in English as Foreign Language classroom

range from idiomatic expressions, riddles, or proverbs, pronunciation, games, comics, the use of regalia, and jokes or typical grammatical errors.

Findings from the interviews and FGDs corresponded with what was observed by the researchers in classroom through observation checklist plan. It was observed that instructors had an understanding of humour that they were using in the class. Instructors' utterances or sentences articulation and other humorous materials used were identified and categorised into appropriate and inappropriate humour based on number of occurrences (see Table 1 and 2).

Table 1: Instructor's Use of Appropriate Humour and Frequency of Occurrence in Classes

Appropriate humour	Occurrence
Humour related to course materials	9
Telling story related to the content of the lesson	12
Teasing students in a light-hearted way or uses students in class as examples of the course content	8
Uses language in creative and funny ways to describe lesson material	10
Facilitate role-play exercises to illustrate lesson content	11
Performs or acts out course material to illustrate concepts	3
Funny photo or quiz question related to the content of the lesson	5
Stories unrelated to the lesson	4
Jokes unrelated to the lesson	7

Source: Field data

Table 2: Instructor's Use of Inappropriate Humour and Frequency of Occurrence in English Literature Classes

Inappropriate Humour	Occurrence
Use of sarcasm in the class	2
Teasing students about their dressing	1
Make humorous comments about a student's religion	1
Make humorous comments about a student's personal life or personal interests.	2

Source: Field data

Based on the data from Table 1 and 2, appropriate humour was frequently used by instructors in English literature classes whereas stories related to the content of the lesson were more used, followed by role-play exercises to illustrate the lesson content, and the use of language in creative and funny ways to describe lesson materials. This is in line with Instructional Humour Processing Theory (IHPT) by Wanzer et al. (2010) who postulated that humour will be relevant or appropriate to instruction if students recognise the presence of humour and interpret it as humour and then process the humour by making the connection between the humour used and the instructional information.

Humour Motivates Students to Learn and Speak English Language

During interviews, three out of four instructors reported that when they were using humour or humorous materials created rapport with students and developed them with confidence to speak in English language during classroom interactions.

I feel happy when I teach my students and see them smiling, laughing and speaking freely in the class. I carefully select humour to use as a means to explain concept but also to make my learners enjoy the lesson (Interview, Instructor B).

Likewise, students in FGDs reported the following:

You know English is not our mother tongue language, so sometimes we don't have confidence to speak... but when the teacher is funny or friendly it encourages us to speak in the class (FGD, Student KS).

The above findings concur with views from Chabeli (2008) who remarks that "using humour that is appreciated by learners can act as intrinsic motivator because it will elicit positive emotions while generating sustained interest in construction of one's own learning (p. 55)." Similarly, Krause (2014) noted that introducing humour in foreign language teaching can be a motivating way to make the students aware of specific features in the phonology, morphology and syntax of the target language. In the light of the purpose of this study, instructors' proper use of humour in English literature classes is a catalyst towards learning English as a foreign language.

Humour reduces boredom, anxiety and stress of learning English as a foreign language

In this aspect both instructors and student teachers expressed their views. During interviews, instructors expressed the following views:

English is still a problem to our students and using English for communication is more stressful to our students and many students fear to even speak in the class... but when involve learners with humorous stories, it helps them to remove boredom and anxiety. (Interview, Instructor C).

Sometimes I do code switch English to Kiswahili to help my students understand every humour I use in the class and relate to the content of the lesson. When they laugh, smile and speak I like it because I know that learning environments are friendly. (Interview, Instructor B).

Similarly, during FGD one student teacher reported the following:

Like the drama course which is offered in this semester, I like the course and I like the teacher. Our teacher is very funny, his comments when we act, the way he acts some characters' behaviours with students in the class is good, I like it (FGD, Student Teacher TJ).

The findings above imply that instructors being humorous in the classroom make learners like the subject, avoid anxiety and engage learners into learning. This echoes Robinson's (1983) argument that what is "learned with laughter is learned well" (p. 121). This is also supported by Appleby (2018) who reported that when teachers use humour in the classroom, students understand the content, like the teacher more, more likely to talk to their instructor outside the classroom, more likely to seek help from their instructor about how to do better in the class, more likely to enrol in that instructor's classes, and more likely to give that instructor higher student evaluation scores at the end of the semester.

With regard to the instructors' use of code switching (English to Kiswahili), it was found that during actual classroom observation code switching was sometimes used by the instructors to give funny comments, jokes and other related

humorous stories. With reference to Tanzania context, the findings imply that although English language has been recommended as a language of instruction from post primary schools, Kiswahili is still the language spoken mostly by the instructors and students and it is used in teaching and learning process in higher learning institutions in Tanzania. As Senkoro (2005) argued that even if Kiswahili language is not assigned any role as a medium of instruction at secondary and university levels, it is nonetheless regularly used in those institutions. This study suggests that although telling humour using both English and Kiswahili language was sought to be more effective to make learners understand the meaning of humour and connect to the lesson content, instructors communicating humour in English language as a language of instruction is more appropriate to help learners build a positive attitude of English as a foreign language and advance the knowledge of the language.

5.0 Conclusion and Implications

The findings advocate that all respondents had a better understanding of humour and its usefulness in teaching and learning English as a foreign language. Instructors' sense of humour which was reflected through the use of idiomatic expressions, riddles or proverbs, pronunciation games, comics, realia, jokes, and funny comments played a great role in making students attentive, interested to the lesson/subject and remember the concept taught for a long time. Also, the findings revealed that appropriate humour categories such as humour related to the content of the lesson, the use of language in creative ways to describe materials, and role-play exercises to illustrate lesson content were frequently used by instructors in English literature classes. Moreover, the findings revealed that instructors sometimes had to code switch from English to Kiswahili to make students understand the meaning of humour and connect to the lesson content. Overall, the study findings imply that despite the fact that humour in the classroom was presented in a non-serious manner, there is a need for English literature instructors to integrate humour in their teaching to motivate students to like the subject and consequently develop skills of English as a foreign language. English literature is a useful vehicle to teach and learn English to students who are learning English as a foreign language like Tanzanian students. It is also necessary for instructors to avoid too much use of code-switching when incorporating humour in their teaching of English literature. Instead, instructors should try to use English language as the targeted language of instruction to help learners build positive attitudes of English language and advance the knowledge

of the language. It is recommended for further research to be done on investigating whether the use of humour in classes influence instructor's use of code -switching in the context of bilingual education policy or multilingual society.

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The Practice of Co-curricular Activities in Tanzania: A Reflective Inquiry of Its Importance in Primary Education

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Abstract

This paper explores the practice of co-curricular activities in primary school by reflecting its importance in the context of Tanzania. Guided by pragmatism philosophical paradigm, the study employed a mixed methods research approach informed by concurrent triangulation research design. The study involved 135 participants, comprising 125 teachers, 8 heads of school and 2 education quality assurers. Heads of school and education quality assurers were purposefully sampled based on their positions while teachers were selected through simple random technique. Data were collected through questionnaires and semi-structured interviews. Questionnaire method was administered to teachers while interview method was administered to heads of school and education quality assurers. Qualitative data were analysed through thematic analysis whereas quantitative data were analysed through descriptive statistics, and presented in tables. Findings of this study revealed that despite various barriers such as shortage of time, inadequacy of facilities and equipment and shortage of expertise which hindered the implementation process of co-curricular activities, it was revealed that the practice of co-curricular activities had positive impact because students participated in various subject clubs where they acquired the competencies and performances regarding the discussed subject. Moreover, it was revealed that through participating in various activities students learned various entrepreneurship skills and were identified with different talents from the sports and games activities which are part of co-curricular activities. From the study findings, it is concluded that co-curricular activities are an important component of the primary schools' education that needs to be emphasised and enhanced in the provision of primary school education in Tanzania. Finally, it is recommended that due to its importance in the education system, the government and education stakeholders need to practically sensitise the practice of co-curricular activities and accord similar status with the core curricular in order to develop learners of primary schools holistically in cognitive, affective and psychomotor domains as emphasised by the Tanzania's Education and Training Policies of 1995 and that of 2014, as well the Sustainable Development Goals of 2030.

Keywords: Perceptions, practice, co-curricular activities, primary schools, teachers

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1.0 Introduction

Historically, it is well known that co-curricular activities are as old as the education system itself. These activities are traced back in the era of Ancient Greece, China, India and Near East (Wuest & Bucher, 1999). The implemented activities during that era aimed at maintaining religious issues, survival, health, active life, recreation and defence. Later on, most of the co-curricular activities were included in school curricula just to meet the benefits obtained through the implementation of these activities (Broh, 2012; Coven, 2015). For example, the United States of America (USA) reviewed their education systems to ensure that co-curricular activities such as quiz bowls, musical groups, sports and games, student governments, school newspapers, science fairs, debate teams and clubs focusing on academic areas were effectively practised in their schools (Dhanmeher, 2014; Haber, 2006; Storey, 2010). This, in turn, fostered a good environment for tapping, nurturing and developing knowledge, skills and attitudes and generally exposed pupils to the real meaning of education (Darling et al., 2005).

In Kenya, Wangai (2012) reported that co-curricular activities help pupils to achieve better results in various areas of learning. Through co-curricular activities, pupils attain various skills such as creative problem solving, entrepreneurship, sports and games, cooperation, communication and leadership (Ndirangu, 2015). However, in the same country, other researchers report that some of the schools spend too little time on the practice of co-curricular activities (Ndirangu, 2015; Wanyama, 2012). Also, Uganda is still implementing co-curricular activities whereby the government has arranged special capitation funds for implementation of co-curricular activities (Isanga et al., 2017).

In Tanzania, for many years, co-curricular activities held a place of great importance in the field of education for developing different careers to learners (Japhet, 2010; Lazaro & Anney, 2016; Mafumiko & Pangani, 2008; Makwinya & Straton, 2014; Shehu, 2001). During pre-colonial period, children participated in informal co-curricular activities such as hunting, swimming, dancing, singing and playing by considering the experiences of their surrounding culture and they were informally acquired (Mafumiko & Pangani, 2008; Ndee, 2010). During colonial period, co-curricular activities were done in schools whereby different sports and games were practised (Kazungu, 2010; Machera, 2012). However, during this period education benefited pupils from the upper class (Germany & English

families) and middle class (Indians &Arabs) and few Africans, particularly the sons and daughters of African chiefs (Mafumiko & Pangani, 2008).

After independence, the government of Tanzania adopted and implemented co-curricular activities in schools (MoEC, 1995). Unlike colonial education, post-colonial education was meant for all Tanzanians who were in schools without prejudice (Mafumiko & Pangani, 2008). Various policies such as Education for Self-Reliance of 1967; Education and Training Policies of 1995 and 2014; Basic Education Curricula for pre-primary, primary and secondary education as well as the curriculum for teachers' education were implemented parallel with co-curricular activities (Lazaro, 2015; MoEC, 1967, 1995; MoEST, 2016; MoEVT 2014).

The government of Tanzania has also placed a strong emphasis on quality environment that aim at improving learning process and environment that enhance pupils' learning outcome (MoEC, 1995; MoEVT, 2014). For example, the Education and Training Policy (ETP) of 1995 insisted on preparing the pupils with the foundation of self-creativity, self-advancement and self-confidence which would help them to enter into the world of work (MoEC, 1995, MoEVT, 2014). The government of Tanzania also set the benchmark for establishing good environment for implementation of co-curricular activities such as fields of play, laboratories and libraries (MoEST, 2014). Moreover, the government of Tanzania through the Ministry of Education has developed a curriculum which emphasises the implementation of co-curricular activities in schools such as subject clubs, sports, arts and games activities, entrepreneurship activities, library, gender, life skills and cross cutting issues (MoEST, 2016).

Furthermore, Tanzania agreed on the resolution adopted by the General Assembly on 25 September 2015 which postulates that all girls and boys should complete a free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes by 2030 as one of the Sustainable Development Goal-SDG (UNO, 2015). The aforementioned measures are indicative of the fact that the implementation of co-curricular activities in schools lays the foundations for instilling different principles, skills, knowledge, social aspects and attitudes that stimulate and consolidate learning.

1.1 Statement of the Problem

Studies and policies show that Tanzania recognises the importance of co-curricular activities in the school curriculum in order to ensure that pupil's access and acquire holistic education (Machera, 2012; MoEC, 1995; MoEVT, 2014; Sultana, 2012). The Education and Training Policy of 1995 and that of 2014 both emphasise the implementation of co-curricular activities in schools. Regardless of the recognition and importance attached to co-curricular activities in schools through policy documents and the government directives, the implementation of co-curricular activities in most primary schools is increasingly neglected (Juma, 2015; Kibona, 2015; Lazaro, 2015; Machera, 2012; Makwinya & Straton, 2014). These studies indicate that in some schools' co-curricular activities are not well implemented for the reason that they are time-consuming and are a wastage of time for learning. In this regard, more efforts are placed on teaching core curricula subjects that are evaluated through the National Examinations Council of Tanzania (NECTA) (Juma, 2015; Kibona, 2015; Lazaro, 2015; Machera, 2012; MoEST, 2016). The foregoing studies imply that co-curricular activities are underestimated as an important part of the school curriculum.

Moreover, experience from various studies indicates that some schools face the problem of high enrolment rate, large class size, limited time, shortage of teachers, shortage of facilities and equipment which increase the rate of truancy to pupils, drop out and other delinquency behaviour (Machera, 2012; Makwinya & Straton, 2014; MoEVT, 2014). From those studies, it was recommended for an intervention through implementing co-curricular activities in order to increase learners' attendance to school. Despite under-estimating the contribution of co-curricular activities in the school curriculum by the practitioners and the recommended intervention by researchers, yet there are limited studies that have explored the practice of co-curricular activities in primary schools as stipulated in the ETP of 1995 and that of 2014 in Tanzania. Thus, this study was crucial in order to fill this knowledge gap.

1.2 Objective of the Study

To explore the practice of co-curricular activities by reflecting the inquiry of its importance in primary schools' education in Tanzania.

2.0 Literature Review

2.1 The Concept of Co-Curricular Activities

Co-curricular activities are conceptualised differently based on different contexts. According to McKown (1952), co-curricular activities are as old as the education system itself. They include athletics, music, sports, games, oratorical competitions, and clubs for students, debating, dramatics, honour awards and special day celebrations. These activities are predominantly organised by the pupils themselves. School timetable and equipment are provided, though there is little official recognition and no credit is awarded to participants. In Tanzania, MoEST (2016) delineates co-curricular activities as activities recognised and sponsored as essential part of educational institutions, such as schools or colleges although they are not part of the academic curriculum. Generally, co-curricular activities are activities, programmes and learning experiences that complement what pupils are learning in the school core curriculum during class hours.

2.2 The Practice of Co-Curricular Activities in Schools

It is evident that co-curricular activities are found at all levels of school system (Foster, 2008). Globally, different countries have been implementing co-curricular activities from time immemorial. These activities have influenced the way others think, feel, believe, and act; social events, athletics, clubs, and all other many leisure activities become part of values and virtues of the objectives of education and of democratic life (Foster, 2008). Primary education is the most significant part of formal education, which covers the period of early childhood and adolescent stage of human development. Therefore, the organisation of co-curricular activities at this level brings about the maximum bodily development and thus pupils need to participate in various games and sports to make their bodies active (Sultana, 2012). Nevertheless, the school may place students at significant risks of underachieving or not completing primary education unless an appropriate curriculum is provided to engage and challenge their abilities (DECD, 2012). Nesan (2009) opines that it is wrong to force students to specialise too early in specific areas because children have remarkable abilities in all sorts of different areas. For that case, the school is responsible for preparing rich learning environment that fosters wellbeing and learning outcomes consistent with learners' abilities. It has to provide educational pathways and appropriate challenging and enriching experiences (Lazaro & Anney, 2016).

From these perspectives as narrated above, different literature classifies co-curricular activities in different categories. Shehu (2001) classifies co-curricular activities into five (5) groups, UNESCO (2005) classifies CCAs into thirteen (13) groups, and Sultana (2012) classifies co-curricular activities into eleven (11) groups, and MoEST (2016) classifies them into two categories. Yet, the implementation of co-curricular activities that are practiced in primary schools differs from one school to another depending on availability of facilities and equipment. For the purpose of this study, CCA under discussion are modified from Shehu (2001), Lazaro (2015) and MoEST (2016) as indicated in Table 1.

3.0 Methodology

The study employed a mixed-methods research approach by integrating quantitative and qualitative researcher approaches. The selection of this approach was based on the nature of philosophical underpinnings of this study, namely pragmatism and its arguments which point out that combining both quantitative and qualitative approaches in a study provides better understanding of the research problem (Creswell, 2007). The study employed concurrent triangulation mixed research design. The design was used because it focused on collecting, analysing, interpreting and reporting concurrently both quantitative and qualitative data and the approaches have equal weight in presentation. The central premise of using this design was to develop better understanding of a research problem being investigated rather than using a single approach (Creswell & Clark, 2011). The design helped the researcher to concurrently collect qualitative data through interview method and quantitative data through questionnaire method. The data collected through interview were analysed through thematic analysis while the data collected from the questionnaire were analysed through descriptive statistics. However, the collected data were analysed, interpreted and reported simultaneously at the same time (Onwuegbuzi & Teddlie, 2007).

Table 1: Co-Curricular Activities Practiced in Primary Schools

Types of Co-Curricular Activities	Activities for Each Category
Sports and games	<ul style="list-style-type: none">• Track and field activities i.e., running, throwing, jumping• Ball games i.e., football, netball, volleyball, basketball, & handball.• Racket games i.e., table tennis and lawn tennis.• Traditional games.
Club activity	<ul style="list-style-type: none">• Girls' and boys' clubs, press club, school band, dramatic club, religious/choir group, science club, literacy and debating society, music club, sports club, culture club• Scout
Social and voluntary services	<ul style="list-style-type: none">• Blood donation/health education, peer counselling, environment conservation, helping the sick, fund raising, advocacy.
Productive activities	<ul style="list-style-type: none">• Spinning, tailoring, embroidery, knitting, weaving, toy making, basket making, gardening, floriculture.
School leadership	<ul style="list-style-type: none">• Student duties at school, hostel and classroom level, morning assemblies, orientation programme, students' unionism, prefects, monitors and team leaders.
Literacy activity	<ul style="list-style-type: none">• Publication of school magazine, wall papers, pamphlets and bulletins, essay writings, review and summary of books.

Source: Adapted and modified from Shehu (2001), Lazaro (2015) & MoEST (2016).

4.0 Results and Discussion

The purpose of this study was to explore the practice of co-curricular activities by reflecting the inquiry of its importance in primary schools' education in Tanzania. To achieve the objective, the data were collected through questionnaire method that was administered to teachers and interview method that was administered to school heads and education quality assurers. Beginning with the questionnaire method teachers were required to respond to a five-point Likert scale whereby those who responded Strongly Agree (SA) and Agree (A) were treated as agreed, while those who responded Neutral (N) Disagree (D) and Strongly Disagreed (SD) were treated as disagreed on the postulated statements. The findings are presented in Table 2:

Table 2 indicates that majority of primary school teachers (80.8%) believed that co-curricular activities are important to be implemented in their schools. Teachers through open ended question items indicated that implementing co-curricular activities helps pupils to be active in learning, understand different cultures, avoid delinquent behaviours, and understand various global issues and help pupils to work in team in various school and home activities. In the light of this finding as it was obtained from questionnaire it was further revealed during the interview with schools' heads who argued that co-curricular activities are important to be implemented in schools because they reduce the level of truancy amongst students. It was revealed that through participation in various co-curricular activities like sports, games and other subject clubs' pupils raise the interest of attending to schools and other schools' activities. This was quoted during the interview with one of the school heads:

Sports, entrepreneurship and subject clubs' activities are among important kinds of co-curricular activities that help pupils to gain different skills and consolidate the core curricula through avoiding the delinquent behaviour and truancy (Interview Session, September, 2021).

The above quotation revealed that the practice of co-curricular activities is important and help pupils to learn more skills and avoid the negative behaviour such as the truancy. This finding implies that co-curricular activities are essential components in the context of primary education. The findings are in agreement with the observation developed by DECD (2012) that the school may place students at the significant risk of underachieving or not completing primary education unless the appropriate curriculum is provided to engage and challenge their abilities. Also, in the argument developed by foster (2008), co-curricular activities have an influence towards the way other think, feel, believe and act, whereas social events, athletics, clubs and all other leisure activities become part of value and virtues of education.

Table 2: Teachers' Responses on the Practice of Co-curricular Activities

Statement	Teachers' Responses				
	SA	A	N	D	SD
Co-curricular activities are important to be implemented in schools because they improve the academic performance of pupils.	76(60.8%)	25(20%)	10(8%)	10 (8%)	4 (3.2%)
Co-curricular activities improve learning of pupils in cognitive, affective and psychomotor domain.	91(72.8)	29(23.2%)	4(3.2%)	1(0.8%)	0(0%)
Pupils who participate in co-curricular activities are more active than those who do not.	85(68%)	35(28%)	1(0.8%)	4(3.2%)	0(0%)
Pupils enjoy participating in different co-curricular activities.	84(67.2%)	33 (26.4%)	4(3.2%)	1(0.8%)	3(12%)
Co-curricular activities are crucial for developing pupils' talents.	89(71.2%)	30(24%)	1(0.8%)	4(3.2%)	1(0.8%)

Key: SA-Strongly Agreed, A = Agreed, N = Neutral, D = Disagreed, SD = Strongly Disagreed

Source: Field Data (August, 2021)

Also, teachers were asked to respond in the Likert scale whether co-curricular activities improve the learning of pupils in cognitive, affective and psychomotor domains. The findings as shown in Table 2 reveal that majority of teachers (96%) agreed that participation of students in different co-curricular activities helps pupils to improve learning in all aspect such as cognitive, affective and psychomotor perspectives. In the same aspect the researcher interviewed the school heads and it was found that through participation in different co-curricular activities as planned by schools majority of students improved mentally in reasoning, in controlling emotion and even in doing various school activities that are assigned by teachers. This finding was revealed in the interview with one school head:

Our students especially those who attend in various sports activities and in the subject clubs have been improving their ability of thinking by being critical in reasoning on various matters, they have been active in controlling the emotion and doing various schools and individual activities (Interview Session, September, 2021).

The above quotation reveals that the practice of co-curricular activities is an important since it helps students to improve in various aspects such as their thinking and reasoning, controlling the emotions and performing different school and individual activities.

On the second thought, the researcher administered an interview with the quality assurance experts and the findings revealed that in the evaluation especially the practice of extra activities schools with good facilities like sports facilities, subject club facilities have been doing well in the continuous assessment and in the standard four and standard seven examinations. They identified that the co-curricular activities have an indirect contribution toward attainment of the intended competences. The finding was noted during the interview session with one district quality assurer:

In our evaluation as a key role of our office we have been noticing that some of schools with proper timetable for subject clubs, sports, games, entrepreneurship activities together with their required facilities have been doing well in the academic performances especially in the standard four and standard seven examinations compared to the schools without proper facilities of sports, subject clubs and external projects (Interview Session, July, 2021).

The above quotation implies that practicing co-curricular activities in schools have been contributing in the achievement of the academic performances in both examinations in Tanzania. It is therefore, co-curricular activities are important as they help students to perform well in the examination. The findings are in agreement with the findings by Machera (2012) that investigated the impact of school base activities on the academic performance of primary schools in Kenya and the findings showed that in some schools where the government banned the co-curricular activities the academic performance was also poor compared to some schools with those co-curricular activities.

Moreover, teachers were asked if they observed any differences between pupils' who participate and those who do not participate in co-curricular activities in primary schools. Findings in Table 2 show that there were differences between pupils who participated in co-curricular activities and those who did not. The findings from teachers' responses indicated that pupils who participated in co-curricular activities were very active in various schools' activities compared to those who did not participate in co-curricular activities (96%). Furthermore, findings from open ended questions indicated that majority of pupils who participated in co-curricular activities had good discipline, good management of time and were very social and popular within and outside the school compound. Additionally, the researcher conducted the interview to school heads and the results revealed that there was a big difference on the pupils who participated in different co-curricular activities compared to those who did not. In the responses from the school heads revealed that pupils who participated in the implemented co-curricular activities were more active in learning compared to those who poorly participated in the activities. For example, one of the school heads said:

Pupils who attend well in sports activities, school subject clubs and in different entrepreneurship skills activities are more active and perform well even in the academic subjects compared to those who do not take part in those activities (Interview Session, 2021).

The quotation above shows that through participation in different co-curricular activities pupils are becoming active in all aspects compared to the pupils who are weak and poor in participation on the implemented activities. Additionally, teachers agreed that the schools had the necessary materials to support the implementation of co-curricular activities. It was further observed that classes, books, play grounds, and some space for farming and gardening were appropriate resources for supporting the implementation of co-curricular activities which raised the interest of pupils to participate in different co-curricular activities. However, through observation method the researcher found that majority of private primary schools had better facilities which motivated pupils and teachers to participate in different co-curricular activities than majority of public primary schools that had unattractive facilities. The findings are similar to those of Wanyama (2011) and Nesan (2009), who found that active participation in co-curricular activities, prepares the learners in their future career. In these studies, it was shown that when pupils participate in co-curricular activities they gain and

develop positive behaviours (Mabagala & Mabagala, 2014; Lazaro & Anney, 2016).

Regarding whether pupils enjoyed participating in different co-curricular activities, findings as indicated in Table 2 show that majority of the respondents (98.4%) agreed that pupils enjoyed when they have been participating in various co-curricular activities. Moreover, in the interview with school heads the finding revealed that once the bell rang especially for co-curricular activities majority of the pupils were happy and within short period pupils dispersed in different activities of their choice. This was quoted in the interview with one school head:

Pupils are interested to participate in different co-activities especially in sporting activities like football, netball and other traditional games. I have been witnessing that when the bell rings to indicate time for sports activities majority of pupils outshine by being happy. Thus, my opinion is that pupils have been enjoying when attending to some of the co-curricular activities (Interview Session, September, 2021).

The quotation above reveals that pupils have been enjoying when they participate in different co-curricular activities. The findings are in line with those of Njeri (2012), who established that majority of teachers in secondary schools in Kenya had positive perception on the importance of co-curricular activities, and students have been enjoying when participating in different co-circular activities. This implies that when the pupils participate in any of co-curricular activities, they enjoy and are becoming active in almost every aspect of their life.

On whether co-curricular activities are crucial in developing talents of the pupils, the findings as indicated in Table 2 revealed that through participation in co-curricular activities pupils are able to develop different talents and are supported by the school administrators. They further revealed that the school administration provided moral and material support to teachers who were assigned the responsibilities of supervising co-curricular activities so that they can be in the better position to identify the talents and have been connecting the talented pupils who are identified through participating in co-curricular activities with other agents working in developing the talents of pupils. It is therefore, co-curricular activities are important in helping students develop their talents. Findings in Table

2 reveal that majority of teachers (95.2%) agreed that the implementation of co-curricular activities was useful in developing pupils' talents. Generally, the findings in this study show that majority of teachers had positive perception regarding the implementation of co-curricular activities in primary schools. They believed that the implementation of co-curricular activities has a great importance and helps pupils in attaining the planned objective of education. These findings concur with those of Lazaro (2015), which indicated that most secondary school teachers agreed that the practice of co-curricular activities play a great role in developing students' talents and academic performance.

Finally, it is noted that these findings in this study refute the belief developed in the schooling system of Tanzania that victimised the practice of co-curricular activities basing on the belief that when pupils participate in co-curricular activities consume the academic time, hence leading to poor academic performances (Machera, 2012). This belief of discrediting the role of co-curricular activities in improving academic achievement of learners has also been shown in Kenya and South Africa where by some teachers in some schools concentrated in teaching the academic core subjects for the purpose of improving academic performance simply because the results are easily seen by their officials (Wanyama, 2011).

5.0 Conclusions and Recommendations

In the light of the findings in this study, it can be concluded that co-curricular activities are important to be implemented and have a follow up in all primary schools as important part of primary education. School and teachers were aware of the contribution of co-curricular activities in the holistic development of learners. This understanding, therefore, calls for the need for schools to improve the practice of co-curricular activities by ensuring that there are adequate and appropriate resources for various co-curricular activities. Based on the conclusion of this study, it is recommended that educational stakeholders should be educated on the importance of co-curricular activities in schools in order to increase the involvement of teachers and pupils in various co-curricular activities. Consistent with this, the school owners and administrators should ensure that relevant resources and various co-curricular activities for different groups of pupils' populations are put in place. This will ensure active participation of pupils with various abilities in co-curricular activities that are well implemented in all level of education from pre-primary to university education level in Tanzania.

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THEME III: INCLUSIVE EDUCATION FOR SUSTAINABLE DEVELOPMENT

Improved Vision through Vision Stimulation in Primary School: A Study from Tanzania

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Abstract

Good vision is essential in children's learning and development. Pupils with vision problems might mistakenly be evaluated as hyperactive, passive or having dyslexia. The aim of this study was to detect pupils with disturbed vision in primary schools in Tanzania. Specifically, the study intended to evaluate if vision qualities would improve through vision stimulation. The study was a quasi-experiment with a descriptive design. Twenty-one (21) pupils were identified with vision disturbances, and four of them were involved in the study. After the vision assessment, the participants went through a structured individual vision program. Each lesson lasted for 45 minutes and all had one lesson daily for 21 days. All four cases represented various issues of disturbed vision before intervention and reached improved vision due to the stimulation. The stimulation focused on better controlled and coordinated eye movements before the next assessment. Descriptive analysis was used through basic statistics with measures of the central tendency and disparity to study eventually vision changes. From this study, the most significant finding is that vision can be improved through structured vision exercises in schools. Improving vision will make learning easier. The study concludes that functional vision assessment of children prior school enrolment and of pupils struggling in school is important for establishing intensive adapted education for better learning.

Keywords: Vision disturbances, visual challenges, vision stimulation, vision intervention

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1.0 Introduction

The process of learning involves various senses including sight, hearing, taste, touch and smell (Miglino, 2014; Ponticorvo et al., 2019;). Vision has a special place in academic learning (Alvarez-Peregrina et al., 2021; Wood et al., 2018) and is necessary in reading (Lane, 2005; Nunes et al., 2019). Even vision challenges not classified as low vision might have serious consequences for pupil's performance, endurance and concentration. Such "milder" visual problems are often overlooked even in countries with highly developed eye health-care system although many children exhibit them (Sterner, 2004; Wilhelmsen, 2012).

In the absence of vision screening, children may have unnoticed vision problems and academic challenges which often are attributed to other problems, such as learning or cognitive disabilities (Wilhelmsen & Felder, 2020). Due to the fact that vision inputs are involved in nearly 70 % of all activities in school (Narayanasamy et al., 2016), disturbed vision qualities can be a hindrance to educational achievements and have lifelong consequences. Education should be adapted for individual needs. All pupils can learn to their potentials and develop through childhood so that they can contribute to the society (Gilliland, 1986). The presented study is focusing on pupils' vision functioning. In the actual school some pupils went through an assessment for evaluation of their functional vision. Four pupils with disturbed vision functions were given individual vision lessons in school. The aim was to see if vision qualities, important for reading, could be strengthened through structured and well-targeted exercises. None of the four participants had vision reductions classified as low vision or blindness (ICD-11, WHO, 2021).

2.0 Background

Vision disturbances is the expression used in this study to refer to vision qualities which neither appear normal nor classified as a vision impairment in the World Health Organisation's International Classification of Diseases (ICD 11, WHO, 2021). Vision impairment as described by World Health Organisation (WHO) is limited to reduced visual acuity, the ability to see tiny details, or to a narrowed visual field, the area we see when the eyes are fixated straight forward, after clear criteria. But a child might even have normal visual acuity (20/20 feet, 6/6 meter or 1.0) yet still struggle with disturbed eye muscle capacity and precision. This includes fixation problems and reduced accommodation. Accommodation is the flexibility of the eye lens to adjust its refraction power to a specific distance. This

is especially challenging when looking at something nearby. With a weak accommodation the image will be perceived as foggy or blurry. Many children are also struggling with low convergence capacity where the two eyes drift to different positions after a period with near activities. This is a sign of problems with binocular teaming which results in challenges moving the gaze precisely along a line of print when reading (Lane, 2005). They may perceive the text double or experience that letters or words change position. White et al. (2017) found that 30 % of pupils in Standard III showed these borderline vision results. These kinds of visual disturbances will cause problems in reading and learning and even result in headache, eyestrain, poor concentration and comprehension when performing near tasks (Sterner, 2004).

The significance of high-quality vision for reading and learning has been the subject of substantial study. Various researchers (Alvarez-Peregrina et al., 2021; Kibby et al., 2015; Leong et al., 2014; Wang et al., 2014; Zhou et al., 2014) have shown that good visual capabilities are valuable for learning to read and to read with comprehension. However, the prevalence of visual problems in primary and secondary schoolchildren (6–18 years old) in many countries, including Tanzania, is unknown because there is no mandatory vision screening of pupils in school. Studies elsewhere show that up to 20-40 % of children in primary schools have vision problems (Awan et al., 2018; Black et al., 2019; Bourne et al., 2017; Ekpenyong et al., 2020; Okoye et al., 2013; White et al., 2017; Wilhelmsen, 2012) which was also the case in a research study from a primary school in Tanzania (Wilhelmsen & Felder, 2021b). The number of pupils with disturbed vision varies with the number of vision qualities tested. Several vision challenges might be preventable or treatable. This shows the importance of early vision assessment for starting an early vision intervention.

Vision assessment and vision care is mostly seen as a thematic for the health system. The fact is that vision is learned from the day of birth and develops through activities in school and daily life (Wilhelmsen, 2012). To follow this development and vision capacity, there is a need for focusing on vision in an education setting. Vision elements and challenges can develop further when specific exercises are given (Barraga, 1964; Cyvin & Wilhelmsen, 2008; Lane, 2005; Sterner, 2004; Wilhelmsen & Felder, 2021a; Wilhelmsen & Knudsen, 2020;).

The present study aimed at using structured vision lessons in a primary school setting to see if important vision qualities like visual acuity, accommodation and convergence can improve through a limited number of vision lessons. The pupils were subjected to a vision assessment before and after the period with the stimulating and structured vision lessons to answer the question: Which impact does a structured vision stimulation program have on pupils' vision qualities?

3.0 Methodology

To answer the research-question, some pupils assessed by vision teachers and researchers in an earlier screening (Wilhelmsen & Felder, 2021b) were invited to participate in the study. These pupils were from the same primary school and had disturbed vision which was not classified as low vision (ICD-11, WHO, 2021) or serious enough to be treated in the health system.

Design: The study was a limited experiment with four cases. As other experiments, it presented pre- and post-tests. Since the participating pupils were not randomly chosen, the experiment is classified as a quasi-experiment. The data was collected by standardised screening tools and methods. Based on the data, a quantitative description is given where the goal is to evaluate the connection between the intervention and eventually changes in the assessed vision functions.

Table 1: The Design of the Quasi-Experiment

Pre-Screening	Intervention for 21 Days	Post-Screening
Visual acuity, accommodation and convergence, binocular tests	Exercises to strengthen especially the accommodation and convergence.	Visual acuity, accommodation and convergence, binocular tests

To study the effect of the vision stimulation, the actual pupil's visual acuity, accommodation and convergence, and some other binocular tests were screened to check how the two eyes were working together (Stidwill & Fletcher, 2011) before and after the intervention period, Table 1. These tests would uncover vision stress for reading (Lane, 2005). Visual acuity was evaluated both monocularly (with each eye alone) and binocularly (both eyes used together) at near (40 cm) and distance (3m).

Sample: The pupils involved in this study had one or more disturbed vision qualities detected in an earlier vision assessment arranged in the school (Wilhelmsen & Felder, 2021b). Four pupils, between 12 and 14 years in Standard VII, were selected among 21 pupils through a stratified sampling technique. Some participants were day scholars while others were in boarding. Socio-economically, the pupils' families were able to pay for food and/or accommodation for their child to be able to attend the school.

Instrumentation: In the vision assessment, standardised tests and screening tools were used to get insight in pupil's functional vision, Table 2. With this information, a vision teacher can understand and be aware of the pupil's individual challenges and needs in learning.

Table 2: Standard Screening Material and Methods Used for the Vision Assessment

Instruments	Vision Function
Lea Chart for distance (3 meters)	Visual acuity for distance
Lea Chart for near (40 centimetres)	Visual acuity for near, a reading distance
Push up test: Ruler, patch 6 tiny dolls/figures	Accommodation
Patch up test: Ruler	Convergence
Cover and fixation figure	Binocular capacity

Tools used included the two *Lea charts with five symbols on each line* for measuring the visual acuity at near, 40 cm, and at distance, 3 m, Table 2. These vision charts are especially designed for screening children (M&S Technology, 2009). Other tools and strategies included ruler, pencil, dolls, eye patches and eye cover in testing convergence, accommodation and other eye movements (Koslowe *et al.*, 2010) with standardised procedures. The results were used as the basic information for developing individual structured vision lessons with the purpose to stimulate and strengthen vision qualities, especially ocular motor functions.

Vision stimulation lessons: The pupils received their intervention/vision lessons individually. Each vision lesson went on for 45 minutes once a day for 21 days. The lessons took place in a spaced, big room with enough light and ventilation. Various structured exercises were used to stimulate vision sensor qualities like visual acuity and attention, to first strengthen accommodation and convergence.

As for teachers, motivating lessons were developed with constant variations of exercises and equipment, to make participants eager to follow the program and stretch their endurance. Different tools were used in the vision stimulation program like colourful response cards, conditioning flashcards, toys, puzzles and brock strings were stimulation-tools used in the exercises (The Vision Therapy Centre, 2021). Eye patches were worn when stimulating one eye alone. Fixation sticks, pencils, symbols and letters on various objects with different colours and sizes were shown at different distances. Reading was not trained. It was important to observe changes in the pupil's reactions, endurance and capacity, so necessary adjustments could be arranged as the exercises proceeded. Pupil's comments through the lessons on specific exercises were noted together with observations of endurance and concentration.

To strengthen the convergence, it was important to work with each eye alone and both eyes together. For clear visual singles at near and far, it was necessary to strengthen the flexibility of the eye-lens, the accommodation. All exercises were performed with pupil's head upfront and a fixed head position to allow only the eyes to move during the instructions from the researcher. The angles, size, distance and tempo of the presented stimulus changed rapidly during the lessons, so the eye muscles worked continuously and quickly (Sterner, 2004; Wilhelmsen & Felder, 2021b).

Data analysis: Data from the pre- and post-test were analysed descriptively through simple, or basic, statistical methods (Nandi, 2018). It was necessary to identify challenging vision elements so the lessons could be adapted to fit their individual needs. The post-test showed changes connected to the influence of the vision lessons. It was also important to observe pupils remaining needs.

Ethics: This study was conducted with adherence to Tanzania national rules and regulations pertaining research undertaking. Informed consent, anonymity and confidentiality as well as research clearance and other official permits allowing the researchers to carry out the study were taken care of before and during the process of data collection and analysis. Participants were assured of their freedom to withdraw from the study at any time they would wish to do so. Verbal and written informed consent were obtained from all respondents after the details of the nature of the study were explained to them. Verbal consent from the boarding pupils were witnessed by the head of school and class teachers. Numbers instead of names were used to assign participants for the purpose of anonymity.

4.0 Results

The pre- and post-results of the visual acuity tests, the accommodation and convergence capacities and the pupils eye movement performance results are presented subsequently.

Visual Acuity

Visual acuity was measured at a reading distance of 40 cm and at 3 meters to evaluate the pupil's capability to see details in books as well as letters and numbers on the chalkboard. Normally, the visual acuity on each eye alone, monocularly, is nearly the same and when both eyes are used together, binocularly, it ought to be a little better (Stidwill & Fletcher, 2011).

The findings from pre-and post-tests are presented in Table 3 where positive changes are marked with bold numbers. Due to the participants age (between 12 and 14 years), it was expected that the visual acuity results would be 1.0 for near and 1.25 at a 3 m distance (Wilhelmsen, 2012). None of the participant reached these expected levels before the intervention. All had a near visual acuity of 1.0 or above after the intervention, Table 3. All participants improved both their near and distance visual acuity on the binocular test (ou). Participant number three showed the largest improvement of visual acuity on the distance test. Here the visual acuity is 1.25 after the intervention although it was at the boarder of low vision, 0.5 (ICD-11, 2021) before the intervention.

Table 3: Results on Visual Acuity (VA) at Near (40 cm) and Distance (3 m) on the Pre- and Post-Screening

Participant No	VA-near				VA-distance		
	Test	Od	Os	Ou	od	os	Ou
1	Pre	0.50+1	0.63	0.80	0.80	0.80	0.80
	Post	1.0	0.80	1.0	1.0+1	1.0	1.25+1
2	Pre	0.63	0.63	0.63	0.63	0.80	0.80
	Post	0.80	1.0	1.0+2	0.80	0.80	1.0
3	Pre	0.80	0.80	0.80	0.63	0.50	0.50
	Post	0.802	1.0	1.25	1.0	0.80+2	1.25
4	Pre	0.80	0.80	0.80	0.40	0.50	0.63
	Post	0.80	0.80	1.0	0.80	0.63	1.0

Key: od = right eye, os = left eye, ou =both eyes together

With the near visual acuity, pupil no 2 had the best improvement. It changed from 0.63 to the normal area of 1.0 and even two of the symbols on the 1.25 line was

seen. Participant no 4 struggled most during the visual acuity testing. This participant was easily tired and had a general low visual endurance.

Figure 1 shows the changes in visual acuity binocularly (ou) for the four participants. The dotted bars present the pre-results for near and distant when the fully coloured show the visual acuity post intervention. All participants, after the vision lessons had a visual acuity in the normal range between 1.0 and 1.25 (Wilhelmsen, 2012).

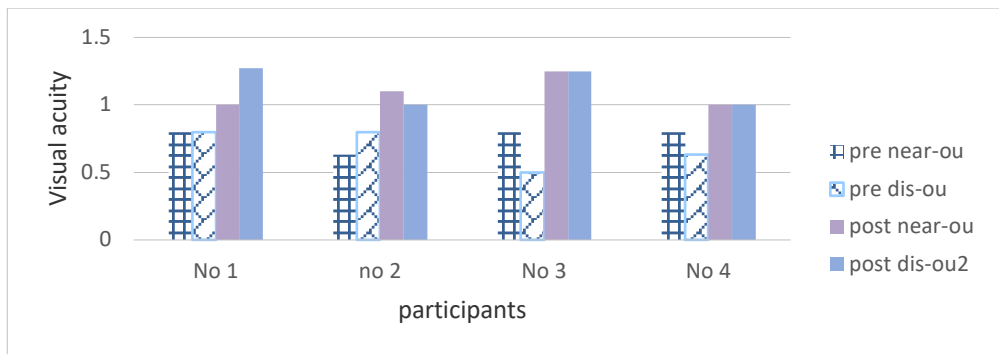


Figure 1. Visual Acuity for Near (Pattern) and Distance (Full Coloured) Binocularly (ou) Before and After the Intervention

To reach a good visual acuity, it is necessary to have an effective accommodation that can be kept steady and a precise convergence where the eyes fixate at the same spot. Increased accommodation and convergence capacity will positively improve the vision acuity and give a more comfortably vision for performing various visual activities over time (Lane, 2005).

Accommodation and convergence

The lens ought to accommodate its shape to secure that the image can be see clearly at 6-8 cm in front of the eyes or even closer (Ludden et al., 2017; Nel et al., 2014; Sterner et al., 2006). At the same time, it is expected that the two eyes work together as a team directed at the same spot at this short distance. An effective accommodation and a stable convergence will help the eyes to produce a clear picture and stay in power for near work over a longer period (Lane, 2005).

Only participant no 1 had a normal accommodation and convergence before the intervention. Participant no 3 opened her eyes so widely that she was tearing during the first accommodation and convergence test. Here the accommodation

was 12 cm and the convergence 10 cm, Table 4 This participant reached the most positive changes, both in accommodation with 5 cm and on convergence with 3 cm, after the intervention. Participant no 4 struggled with arranging both eyes to focus on the same object during the accommodation and convergence tests before the vision lessons. This was easier on the pre-test.

Table 4: Accommodation and Convergence Results on the Pre- and Post-Test Presented in Centimetres. The Changes Are also Shown in Centimetres

No	Accommodation			Convergence		
	Pre	Post	Change	Pre	Post	Change
1	7 cm	5 cm	+2 cm	6 cm	5 cm	+1 cm
2	9 cm	7 cm	+1 cm	7 cm	5 cm	+2 cm
3	12 cm	7 cm	+5 cm	10 cm	7 cm	+3 cm
4	11 cm	8 cm	+3 cm	9 cm	7 cm	+2 cm

Table 4 shows that all four participants increased their accommodation and convergence capacity through the 21 vision lessons. The changes in cm are the improvement of how much closer to the eyes an object is seen clearly, accommodation, and how much closer to the eyes the gaze can fixate on the same spot, converge, after the lessons (Table 4 and Figure 2)

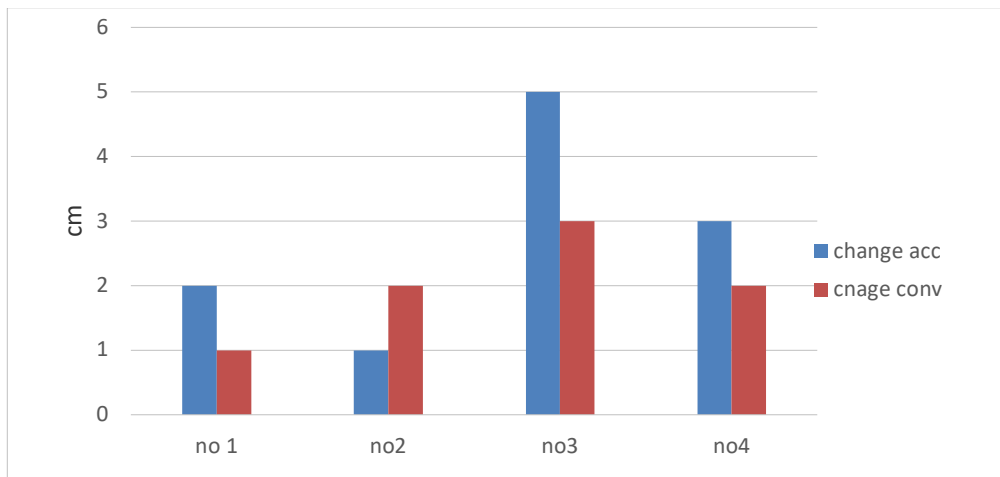


Figure 2: Improved Accommodation and Convergence for Each Participant from the Pre-Test to the Post-Test Measured in cm from the Eyes

Pursuit Movements

Participants' pursuit eye movements and smooth eye movements were observed when they had to follow a moving object in different directions. Three participants showed normal eye movements in all directions. Participant no 4 however had problems doing diagonal movements. During the pre-test, she was opening her eyes widely and her eyes were tearing. After the period with vision lessons, even participant no 4s' eye movements were normal.

Binocular Vision Checked with Cover Test

The convergence test gives some information about how well the eyes are working together at nearby. The binocular capacity can also be observed when covering one eye at a time. During the cover-test. the participants must focus on an object that is slowly moved inwards from 20 to 8 centimetres. When uncovering, the covered eye ought to have the same position as the not covered eye. That indicates a stable binocular vision. The test is also done when the participant looks at a distant object during covering and uncovering. Abnormal results are observed when the covered eye stays in another position. It might be in a more up-down position or in-out position compared to the uncovered eye.

Two participants had a normal fixation of the covered eye when the cover was removed. Before the intervention participant no 3 and 4 had problems with their binocular functions at nearby. Participant no 4 also showed disturbed binocular vision at a longer distance. Both participants experienced the pre-test procedure as stressful. However, after the vision lessons both were observed with normal eye positions when uncovering one and the other eye, Table 5

Table 5: Results on Cover Tests at Near and Distance Pre- and Post the Vision Lessons for Each of the Four Participants; N= Normal

No		Cover Test - Near		Cover Test - Distance		
		Od	Os	Od	Os	Ou
1.	Pre	N	N	N	N	N
	Post	N	N	N	N	N
2.	Pre	N	N	N	N	N
	Post	N	N	N	N	N
3.	Pre	Abnormal	Abnormal	N	N	N

	Post	N	N	N	N	N
4.	Pre	Abnormal	Abnormal	Abnormal	Abnormal	Abnormal
	Post	N	N	N	N	N

Key: (od-right eye, os- left eye, ou-both eyes)

In the current study, four Standard VII pupils at a primary school in Tanzania participated in a quasi-experiment with the purpose to learn more about the possibilities of improving disturbed vision qualities in a school setting. The participating pupils were not classified as visually impaired due to the ICD-11 criteria where a visual acuity less than 0.5 at near or at distance is defined as low vision. No 4 had a visual acuity of 0.4 when only the right eye was used at distance. When using both eyes (ou) together the acuity reached 0.63. Participant no 2 had the lowest acuity at near with 0.63 when using both eyes (ou). No 3 was with 0.5 (ou) at distance on the boarder of low vision. None of the participants had the normal level of visual acuity, which is between 1.0 and 1.25, neither at distance nor at near before the vision lessons. After 21 vision lessons they all reached the visual acuity expected for their age (Wilhelmsen, 2012) both at distance and at nearby. An increased and normalised visual acuity at distance will help them to see the text on the blackboard clearer and the improved visual acuity at near gives them better visual inputs for near activities like drawing, writing and reading.

5.0 Discussion

From this study, the most significant finding is that vision can be improved through stimulation in a school setting. Because vision plays a vital role in the reading process, pupils who lack good basic visual skills often struggle unnecessarily in school (Hopkins et al., 2020). Vision improvement through structured visual stimulation can be an effective way of helping pupils in their learning. Vision needs to be taken seriously in education and this knowledge must be implemented in teacher's education (Felder et al., 2021).

In school, vision is used for nearly all activity (Ludden et al., 2017; Narayanasamy et al., 2016; Nel et al., 2014) and it is necessary to be able to focus at objects and symbols far away and at near. This is possible with an effective and flexible accommodation and convergence for long lasting near work. There are evidences that reduced visual acuity have a negative influence on academic performance (Hopkins et al., 2020). Many children in schools, Tanzanian included are

struggling with these vision capacities (Wilhelmsen & Felder, 2021a; Wilhelmsen & Felder, 2021b) without anyone, either parents, teachers or even the pupils themselves, understand their challenges.

Although visual disturbances often influence pupils' daily school activities negatively, few of them are complaining. The pupils have never experienced another vision and do not understand that their peers might see the letters in the book clearer or can continue working for longer periods due to better eye motor capacity (Lane, 2005).

Sterner (2004) found that pupils struggling with reading in school had a reduced accommodation capacity compared to the others. He strengthened their accommodation over a period with selected exercises and experienced that their reading improved. The improved accommodation was found stable even a couple of years later. Also, Wilhelmsen and Felder (2021a) succeeded in establishing better reading after structured eye motor activities over a limited period.

Together with a good visual acuity, it is necessary to have eye movements which are stable over time (Lane, 2005). To have an accommodation capacity under 8-6 cm from the eyes is seen as normal (Sterner, 2004). Three of the participants, no 2, 3 and 4, had an accommodation between 9 and 12 cm before the vision lessons. Accommodation is connected to the regulation of the eye lenses and was trained with push-up exercises in high tempo (Lane, 2005). These exercises strengthened all the participants' accommodation.

The effect is that they can see more clearly over time. Participant no 3 had the best improvement, from 12 cm to 7 cm. Convergence and accommodation are closely connected and no 3 was also the one with the weakest convergence. The eyes started drifting apart 10 cm in front of the eyes before the lessons but first at 7 cm on the post-test. The other participants had improved their convergence with one or two cm after the implementation period. Cover-test was also used for evaluating how the eyes were working together. Here no 3 and no 4 showed challenges at near before the intervention and no 4 showed disturbances even at distance. On the post-test they both had stable fixation of the gaze when uncovering.

The four participants went through vision lessons where their individual challenges were focused. They had to concentrate on keeping steady head position when exercising eye movements. When children use abnormal head movements instead of effective eye movements, they will get neck problems and often headache (Orfield, 2007). Nobody, not their parents, their teachers or the pupils themselves knew that they had disturbed vision qualities. This illustrates the importance of assessing pupils' functional vision when children are enrolled and even later in school. When 70 % of the school activities are connected to vision (Narayanasamy et al., 2016) good vision is important for the academic learning and development.

When structured vision lessons given in a rather short period of time can improve visual qualities, this ought to be focused and tried out more in the education system to improve reading, learning, visual endurance and concentration. All participants showed positive changes in visual acuity and ocular motor control and capacity. These results are in line with previous studies (Sterner, 2004; Wilhelmsen & Felder, 2021a; Wilhelmsen & Knudsen, 2020). Other researchers who have used exercises primarily for the treatment of strabismus and other binocular disorders have also reached positive vision improvements (Gallaway et al., 2017; Lee & Kim, 2018; Li et al., 2015).

6.0 Conclusion

This study confirms that pupils in schools have undetected vision disturbances, which might hinder their academic development, especially near visual activities like reading and writing. There is a need of early vision screening of all learners to identify those with vision disturbances. The results from intensively vision lessons show that vision functions can be improved rather quickly. However, there is a need of more research in this area to see how vision intervention ought to be provided in a school setting. Some children can improve in a short period with individual lessons, others perhaps need repeatedly lessons to secure the necessary vision development. It might also be possible to stimulate vision in groups or classes to ensure that pupils' visual functions reach a good quality. Vision is developing through all years in school therefore, this study is relevant for teachers at all levels in the educational system. There is also a need of vision screening and examinations for children prior to their enrolment and to assess functional vision when learners struggle with reading, endurance or concentration.

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The Implementation of Inclusive Education in the Context of Fee Free Education in Tanzania

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Abstract

The challenge of educating students with special needs in inclusive classrooms and school settings has been documented worldwide. In Tanzania, the implementation of inclusive education is a recent phenomenon. Secondary education has been made fee free in Tanzania with the aim of expanding access to secondary education in order to achieve the target of education for all by 2030 as enshrined in the agenda 2030. The implementation of inclusive education requires substantial investment in both human and financial resources. The government has been supportive in the provision of education for students with special needs by employing teachers with relevant qualifications and supply schools with necessary equipment. Despite the effort in implementing inclusive education, stakeholders' engagement and participation is desired.

Keywords: Inclusive education, fee free education, special education, secondary education, Tanzania

1.0 Historical Context of Education in Tanzania

Tanzania is a former British colony which attained its independence in 1961. At the time of independence, Tanzania, then Tanganyika, inherited a colonial education system which was full of defects, including geographical disparities, gender inequalities, and racial segregation (Nguni, 2005). The Tanzanian education structure, which was inherited from the British system, follows a 2-7-4-2-3⁺ system. Since independence in 1961, Tanzania has made public education a national priority, bringing about waves of related policy changes and investment strategies. The constitutional protections of education range from general aspirations toward universalising primary school to unequivocal guarantees of free and equal access to education at all levels (Heymann et al., 2014). The independent government passed the Education Act of 1962 to regulate the provision of education in order to address the defects of the colonial education system

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(Ministry of Education and Culture, MoEC, 1995; MoEC, 1962)¹. The major changes that resulted from the Education Act of 1962 included the abolition of racial discrimination in the provision of education and the racially segregated educational systems were unified. In 1967 Mwalimu Julius Nyerere, the first President of the United Republic of Tanzania announced Education for Self-Reliance (ESR) as a policy guiding educational practices in the country (Nyerere, 1967). Tanzania's development goals and strategies were based on the policy of socialism and self-reliance enshrined in Nyerere's Arusha Declaration of 1967. Nyerere regarded ESR as an appropriate and rational education alternative for Tanzania and many Third World countries (Kassam, 1983). Among the fundamental principles of ESR was the use of education as a tool for liberation from the colonial mentality of being oppressed through developing an inquisitive mind among students and making education more relevant by attempting to 'Africanise' the curriculum content (Meena, 2009). Between 1967 and 1978, the government took several steps to legalise actions taken as a result of the Arusha Declaration and Education for Self-Reliance. These steps included the Education Act of 1969 whereby all teachers serving in public schools were to be paid by the government, and only Tanzanians could teach in primary schools; the National Education Act No. 25 of 1978 – an act to repeal and replace the Education Act of 1969, and to provide for the better development of the system of National Education; the Decentralisation Programme of 1972 – giving power to the people at the national sublevel; and Universal Primary Education (UPE) and the Musoma Resolution of 1974. In Tanzania, primary education is compulsory in terms of enrolment and attendance (MoEC, 1995).

The provision of educational opportunities, especially of basic education has been an objective of investment of many countries all over the world. At the national level, a constitutional commitment to education matters both symbolically and practically. Constitutions delineate a country's fundamental values and commitments as well as its economic and political organisation. In Tanzania, the right to education is provided in the Constitution of the United Republic of Tanzania 1977 Article 11(1) (2) and (3) (URT, 1998). The government of the United Republic of Tanzania is committed in the provision of basic education that encompasses pre-primary, primary and ordinary level secondary education.

¹The Education Act of 1962 repealed and replaced the 1927 Education Ordinance (Ministry of Education and Culture, 1962).

Primary education and ordinary level secondary education have been made free and basic.

The Sustainable Development Goal 4, Target 4.1 requires by 2030 to ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes (Loewe & Rippin, 2015). Tanzania is implementing a five year Education Sector Development Plan (ESDP) 2016/17-2017/21 (URT, 2018). The five year ESDP 2016/17-2020/21 responds to the implementation of key targets and indicators for education and capacity development; skills development; science, technology and innovation in the National Five Year Development Plan (NFYDP), 2016/17-2020/21 (URT, 2018). The main focus of the sector policies is to transform the education sector into an efficient, effective and outcome-based system, which would facilitate the achievement of the educational goals as delineated in the Tanzania Development Vision 2025 and the objectives of the NFYDP II 2016/17-2020/21. Additionally, the plan takes on board key initiatives as stated in the Education and Training Policy (ETP) of 2014 (URT, 2015). The Five-Year Development Plan and the Education and Training Policy form the overarching framework within which the ESDP is designed. The implementation of education programmes within the framework of Sustainable Development Goals is consonant with the FYDP objectives which recognise that an educated populace is a prerequisite for becoming a Middle-Income Country, the plan which Tanzania aspires (MoEVT, 2014). The government's on-going investment in basic education implies being responsible for 95.2% of pre-primary, 96.6% of primary, 82.2% of O-Level and 70.4% of A-Level secondary enrolment.

The government of the United Republic of Tanzania is committed to the provision of fee free education from primary to secondary education. This commitment signifies that education is free and universal. The national educational policies globally are increasingly influenced by the international human rights bodies such as the United Nations (UN, 2016). The adoption of the United Nations Convention on the Rights of Persons with Disabilities (CRPD) in 2006 is an opportunity to confront concerns surrounding the elasticity of inclusive education (UN, 2016). States are obliged to ensure that people with disabilities are not excluded from the general education system. People with disabilities, are able to access an inclusive, quality and free primary and secondary education on an equal basis with others in the communities in which they live.

Also, they are provided with support to facilitate their effective education (UN, 2016). The government's commitment to inclusive education defines the efforts towards realising national education policies and international commitments in special education.

The Government issued Circular 5 on 27th November 2015 which implements the Education and Training Policy 2014 and directs public bodies to ensure that secondary education is free for all children. This includes the removal of all forms of fees. The Circular reads: "...*provision of free education means pupils or students will not pay any fee or other contributions that were being provided by parents or guardians before the release of new circular*". This resulted into expansion of enrolment in primary and secondary schools. Data indicates that the total enrolment in primary schools increased by 81.56 per cent between 2012 and 2018. Similarly, secondary education enrolment increased by 80.57 per cent between 2012 and 2019². This was contributed by an increase of Standard I pupils and form one enrolment as a result of fee free education policy (MoEST, 2016b). However, whilst most fees are covered, including examination fees, some indirect costs still remain. Lindsjö (2018) reported that education today is the main expenditure item for the majority of rural families. It was unfortunately revealed that without parental contributions, the schools are unable to run as expected as only 42 percent of the government capitation grant of 10 US\$ per pupil reaches the school (Lindsjö, 2018; URT, 2015). If the government cannot afford to meet the cost in regular education, educating children with special needs would become more demanding. The next section exposes a brief history of special education in Tanzania and how the development of special education is linked to the national priorities, plans and strategies.

2.0 Special Education in Tanzania

Although special education in Tanzania is about 70 years old, it is still in the infant stage and slowly developing. Tanzania established its first special education service in 1950, when the Anglican Church opened a school for the blind, the Wilson Carlile School for Blind Boys, now known as Buigiri School, near Dodoma (Kapinga, 2012; Possi & Milinga, 2017; Reynolds & Fletcher-Janzen, 2007; Tungaraza, 1994). Despite the lack of a specific policy on special education,

²<http://statistics.go.tz/dataset/takwimu-za-shule-za-sekondari-zilizoainishwa-kwa-uandikishaji-umri-na-jinsi>

attempts were made by the government and non-governmental organisations, such as religious organisations, to provide education for children with visual, hearing and physical impairments during the 1960s and early 1970s. Several schools were opened during this period, including Tabora School for the Deaf (1962), Irente School for the Blind (1963), Buhangija School for the Blind (1966), Mugeza School for the Deaf (1966), Uhuru Mchanganyiko for the Blind (1966), and the Salvation Army opened the first school in Tanzania for children with physical disabilities in 1967. Other schools include Masasi School for the Blind (1967), Pongwe School for the Blind (1968), and Hombolo School for the Blind (1970) (Possi, 1999; Reynolds & Fletcher-Janzen, 2007; Siwale & Sefu, 1977). The majority of special schools and programmes for students with special needs in Tanzania were supported by external non-governmental organisations and the church (Hippensteel, 2008).

Among the targets set for the 1981-1986 Development Plan was the expansion of special education facilities for students with special needs. Following this plan and the impetus from the International Year of the Child (IYC) (1979), the International Year of the Disabled Persons (IYDP) (1981), guidelines for special education were developed by the Ministry of Education and Culture, with funding from the Swedish International Development Agency (SIDA) (Mboya, 1992). According to Mboya (1992), the guidelines indicated priority areas in special education which involved the expansion of services for children with special needs. As a result of these guidelines, a number of schools for children with disabilities were established. For example, between 1992 and 1994, four schools for the deaf were opened namely Kigwe (annex), Lukuledi (unit), Mtwivila (special school) and Njombe (special school) (Possi, 1999). More primary and secondary schools have been established by the government and charitable organisations in the country. The recent philosophy has however been to expand the existing regular primary and secondary schools in order to accommodate students with special needs. A number of secondary schools, for example, have been designated for the purpose with units established and managed by trained specialist teachers. Recent data shows that 82 secondary schools now accommodate students in the categories of visual impairment and albinism, hearing impairment and physical disabilities countrywide.

3.0 Progress towards Inclusive Education in Tanzania

The objective to provide education for all by the year 2021 includes students with disabilities (URT, 2017). According to Ferguson (2008), inclusion has become an important aspect of educational systems around the world in recent decades with noticeable increase in access to regular education for pupils with special educational needs. In June 2019, the world venerated the 25th Anniversary of the World Conference on Special Needs Education, which was co-organised by UNESCO and the Ministry of Education and Science of Spain held in Salamanca. The conference came up with the Salamanca Statement and Framework for Action on Special Needs Education. This is one of the most significant international documents that has surfaced the field of special education. In addition, most national policies and strategies have made reference to this document. In the mainland Tanzania, a National Strategy on Inclusive Education 2009-2017 was introduced to enhance the implementation of inclusive education. The country is now implementing the National Strategy on Inclusive Education 2018-2021 (URT, 2017) which is built on the strengths of the National Strategy on Inclusive Education 2009-2017. In Zanzibar, the model of inclusive education is described as ‘inclusive special education’, which involves having most learners in mainstream classrooms and a few special classes integrated in schools. Special units continue to exist within some schools and enrol students with special needs if necessary, including those with severe and complex disabilities (Juma & Lehtomäki, 2016). However, from the survey conducted by Lehtomäki, Tuomi and Matonya (2014), the concept and principles of inclusive education in Tanzania are still unclear to the majority of teachers, parents as well as educational administrators and other educational stakeholders.

Moreover, the global movement towards inclusive education since Salamanca has witnessed a shift from a focus on the medical model of individual differences which was a phenomenon since the 1950s to sociological perspectives of how society contributes to the social construction of special needs and disability. The medical model of disability defines disability in a fundamentally negative way, whereby disability is regarded as objectively bad, as a pitiable condition, a personal tragedy for both the individual and her family, something to be prevented and, if possible, cured, while the social model of disability regards it as a socially constructed phenomenon (Thomas, 2010). Although significant changes have been made in the special education subsector, Pather and Slee (2019) argue that the move towards inclusive education in Africa since Salamanca in 1994 has been

slow. According to Pather and Slee (2019), the reasons for slow progress is that the inclusion of children with disabilities is seen as a separate agenda and support from this is often left to a separate department within Ministries of education and the work of NGOs, Disabled People's Organisations and other community organisations.

The government of the United Republic of Tanzania has made a progressive achievement in the enrolment of students with disabilities in the last decades. Inclusive education mainly focuses on the position of students with special needs. In many countries, these students do not even attend schools, let alone a special one (Srivastava, de Boer & Pijl, 2015). The Government has set out its vision, embracing policy and strategic objectives for the education sector in a series of five-year or ten-year Education Sector Development Plans (ESDP) since 1997. The ESDP 2016/17-2020/21 is built on the priorities of the Tanzanian Government as set out in the Tanzania Development Vision 2025, the National Five-Year Development Plan 2016/17-2020/21 and the Education and Training Policy of 2014. One key policy initiative that distinguishes this ESDP 2016/17-2020/21 from previous plans is Tanzania's commitment to providing twelve years of free and compulsory Basic Education to the entire population, leaving no one behind (URT, 2017). The National Strategy for Inclusive Education 2018-2021 aims at strengthening education system to provide, in an equitable manner, learning opportunities for all children, adolescents and youth, including vulnerable groups, and enable them to acquire necessary knowledge and skills to contribute to transformation of Tanzania into the middle income and semi-industrialised nation by 2025 (URT, 2017).

Tanzania started to implement inclusive education idea after the Salamanca Conference in 1994. The initiative started in 1998, when the government of Tanzania, the Salvation Army and UNESCO carried out a joint venture project at Temeke district in Dar es Salaam aimed at introducing inclusive education in primary schools in Temeke (URT, 2008). This was part of the national programme for inclusive education. Seven schools were involved in the project and until 2008, 280 primary schools were involved in inclusive education in different regions of Tanzania (URT, 2008). As a result of the project, more children with disabilities have been accepted in the schools. However, there is a dearth of data related to enrolment in this category. The official statistics reveal that the number has remained low.

In February 2015, free compulsory basic education up to the lower cycle of secondary education (ordinary level of secondary education) was proclaimed. This policy replaced the former basic education financing system where Government contributed a part of the running costs and the rest was contributed through fees and parental contributions. This action has helped a great deal in attaining SDG 4. The Government further issued Circular No. 3 of the year 2016 for the purpose of providing guidance on how to implement fee free basic education. The Circular clarifies the responsibilities of stakeholders in the provision of fee free basic education (MoEST, 2016a). In addition, the circular provides government's commitment in the provision of free basic education from pre-primary to secondary education as part of the implementation of the Education and Training Policy 2014 (MoEST, 2016a). With this Circular, the government has gone beyond its Constitutional obligation to provide free, quality primary education and brings Tanzania in line with the target of the Sustainable Development Goal 4 which requires states to ensure that everyone "completes free, equitable and quality primary and secondary education". The directive now means that children in Tanzania will enjoy eleven years of free schooling. The abolition of school fees at the secondary level has increased enrolment and attendance, as occurred in 2002, when primary education was made free and the primary net enrolment rate jumped from 59% in 2000 to 94% in 2011³. According to the Voluntary National Review (VNR), the free education initiative has relieved pupils and students of the burden of paying fees or other contributions that were being provided by parents or guardians from primary to university level (URT, 2019). The inclusive education initiative has ensured the enrolment of children with disability at all levels of education. Furthermore, alternative education for out-of-school children and drop-outs has also been introduced.

There has been an increase in enrolment at all levels of education over the past three years. According to the budget speech of the Minister in the President's Office-Regional Administration and Local Government (PO-RALG) for the financial year 2021/2022, there are 37 special residential schools and 709 units attached to primary and secondary schools in the country⁴. In addition, as of February 2021 a total of 66,083 students with special needs have been enrolled in

³<http://www.right-to-education.org/news/tanzania-implements-free-education-policy-secondary-education>. Downloaded on 21st December 2016 at 4:56 P.M.

⁴<https://www.tamisemi.go.tz/storage/app/media/uploaded-files/HOTUBA%20YA%20WN%20OR%20TAMISEMI%202021.22.pdf>

schools compared to 55,185 students with special needs reported in 2020. Moreover, in 2020, a total of 2,487 students which is equivalent to 98.1 percent passed standard seven examinations which is an increase of 20.88 percent of the pass rate. This signifies that access to both primary and secondary education for pupils and students with special needs has increased. Furthermore, it denotes the government is positive in supporting the provision of education for individuals with special needs. In order to ensure that students with special needs have an access to quality education, the government in the 2020/21 financial year employed 766 teachers with qualifications in special needs education and supplied the schools with support equipment. The increase in enrolment has been attributed to increased knowledge and awareness among communities about the rights of children with special needs and improvement in school infrastructures. The speech revealed further that a total of 53,104 braille and large print textbooks for Standard I-V were distributed in schools. The increase in enrolment was mainly contributed by the Fee Free Education Policy being implemented and the presence of a strong partnership between Government, the private sector, Faith Based Organisations (FBOs) and Community-Based Organisations (CBOs) in the provision of primary education. The average dropout rate in primary education is 0.7%, well below the target of 5 per cent set for the year 2020. The national Pupil Teacher Ratio (PTR) and Pupil Qualified Teacher Ratio (PQTR) for primary education in 2018 were 1:51 and 1:52 respectively. This shows a change from 2017 which was 1:47 and 1:48 respectively which signifies a significant change in the education sector. These statistics suggest that the increase in the number of students does not cope with the expansion of school infrastructure while teachers' deployment rates have remained stagnant for the past five years.

4.0 Policy Context of Inclusive Education in Tanzania

Tanzania aims to increase the population of students with disabilities in secondary schools. The government of the United Republic of Tanzania regards education as a basic right for all its citizens, including those with barriers to learning and development (URT, 1998). In 1994, the government of the United Republic of Tanzania ratified the Salamanca Statement, which underlines the need to provide children with special needs basic education (UNESCO, 1994). This implies that with the implementation of inclusive education programmes, special education has to be developed. Special education provision follows the official curriculum. The official curriculum is developed for both regular and special education. However, the blind, due to the nature of their disability, do not study mathematics

beyond the primary school level in Tanzania (UNESCO, 2006). There are however, no individual plans available for students with visual impairment. The Tanzania's Persons with Disabilities Act of 2010 affords persons with disabilities the same right to education and training in inclusive settings as other citizens, and provides strong protections from discrimination in learning institutions⁵. The Education and Training Policy 2014 states that the Government will increase the range of educational opportunities and training for equality for all social groups in all levels, including children with special needs (MoEVT, 2014). There has been a significant expansion towards the inclusion of students with disabilities within secondary schools in the past decade. Statistics show that the net enrolment of students with disabilities in secondary schools increased from 716 in 2006 to 10,749 in 2018 (MoEST, 2018; MoEVT, 2011)⁶ although the number of children admitted to secondary education is limited by the number of places available, the number of qualified teachers and the direct costs of enrolment to households (Lewin, 2008). The leading type of disability in government secondary schools is poor vision (3,763) (PO-RALG, 2018).

According to the World Health Organisation, 15% of the world's population experience some form of disability, and disability prevalence is higher for developing countries (WHO, 2011). The 2008 Disability Survey conducted in Tanzania revealed that persons with disabilities were twice as likely not to have attended school: overall four out of 10 (41.7%) of all persons with disabilities aged 5 and above had no school experience compared with two out of 10 (23.5%) of non-disabled individuals (URT, 2008). According to NBS⁷ (2016), there were 4,094,663 persons with disabilities in Tanzania of whom 2,362,294 (57.6%) were females and 1,732,369 (42.3%) were males. The schools have established units and resource rooms for catering the needs students with special needs. In addition, the schools have specialist teachers who have been trained in the areas of special education.

5.0 Progress towards Fee Free Education in Tanzania

The United Republic of Tanzania has made lower-level secondary education universal. This is consistent with the Education Sector Development Plan (ESDP) 2016/17-2020/21. The ESDP aims to transform the education sector

⁵<http://parliament.go.tz/polis/uploads/bills/acts/1452071737-ActNo-9-2010.pdf>

⁶Majority of the students with disabilities in secondary schools have poor vision.

⁷<http://www.nbs.go.tz/disability/index.php/welcome/Reports>

into an efficient, effective, outcome-based system and ensure equitable access to education and training for all, including the most disadvantaged (SDG 10). The priorities include: equitable participation and completion of fee-free basic education for all, with particular attention to marginalised groups, children with disabilities and out-of-school children; completion of twelve years of education increased through universal access up to lower secondary education (URT, 2019). Of the estimated 400,000 school-age children with disabilities, only 42,783 children are registered in primary schools and 8,778 in secondary schools. This leaves a large out-of-school population of the most vulnerable children. In addition, there are only 2,179 primary school teachers working in primary schools who are qualified to support learners with special needs. At secondary school level, there is an acute shortage of teachers able to communicate in sign language or able to support blind learners (URT, 2019). According to the report (URT, 2019), qualified teacher shortages, together with weak community awareness about the possibilities that exist and may be created for children living with disabilities, the long distances to specialised schools, costs and resistance from regular schools to register children with disabilities are the most common barriers to the education of children living with disabilities. The Government's strategy is to include children living with disabilities into the regular education system. However, children whose disabilities are too severe for regular schools are to be enrolled in special schools.

Tanzania is implementing a Secondary Education Quality Improvement Project (SEQUIP) (2020-2026) with funding from the World Bank. Tanzania has pledged to improve access to education for pregnant girls after receiving a US\$500m (£402m) World Bank loan⁸. The target of the loan is to reach more than 6.5 million secondary school students across the country, without discrimination and shall include girls who drop out of school for various reasons, including pregnancy as reads part of the Public Notice issued by the Ministry of Education, Science and Education on 6th April 2020⁹. Of the 60,000 students who drop out of secondary school every year in Tanzania, 5,500 drop due to pregnancy. While there is no government policy that states pregnant students must be expelled from public schools, most pregnant girls do drop out. The main goal of the project is to provide children in Tanzania with better, safer, and more accessible secondary

⁸<https://www.theguardian.com/global-development/2020/apr/10/tanzania-to-ease-education-ban-on-pregnant-girls-but-not-in-classrooms>

⁹<http://moe.go.tz/en/component/jdownloads/send/1-root/427-sequip.html>

education to help building the country's human capital. Specifically, the project will: (a) keep children in school and help all secondary school dropouts, including pregnant girls, pursue their secondary education; and (b) provide them with a path back into the formal public education system in the next cycle¹⁰. Such similar bans have been lifted by several African governments including Sierra Leone that prohibited pregnant schoolgirls from attending school and sitting examinations¹¹. Despite progress and achievements in previous years as well as introduction of fee free education in 2016 there are still some challenges that the Ministry of Education needs to instantly and urgently address. It is reported that in primary schools, there is less attractive school and classroom environment which contribute to Out of School Children (OOSC).

Tanzania ratified the Convention on the Rights of Persons with Disabilities (CRDP) on 10th November 2009. Under the CRPD, Tanzania is also obliged to ensure that schools are accessible to students with disabilities. This entails both an obligation to ensure that facilities are physically accessible to students, and an obligation to ensure that the education schools offer is itself accessible as well. This includes, for example, the need to ensure that schools have teaching materials and methods accessible to students who are blind or have hearing disabilities. Tanzania is obliged both to develop accessibility standards to guide the design of new facilities, products, and services and to take gradual measures to make existing facilities accessible. This is observed, among other things, by the shortage of classrooms, estimated at 45%. The pupil desk ratio in primary schools is 1:5 against the recommended average of 1:3 (MoEST, 2016). In addition, the Pupil Latrine Ratio (PLR) was highest at 1:39 and lowest at 1:17. Moreover, teacher absenteeism recorded highly in 2014 ranging from 58% to 17%. Also, Pupil Classroom Ratio (PCR) is 1:73 against the Standard of 1:45. The adequacy of latrines and classrooms is still a major challenge in primary schools with notable variations among regions (MoEST, 2016).

6.0 Conclusion

In this paper, we have discussed the implementation of inclusive education in Tanzania in the era when public education at lower level sub-sector is made fee

¹⁰<https://www.worldbank.org/en/news/factsheet/2020/03/31/tanzania-secondary-education-quality-improvement-program-sequip>

¹¹<https://www.theguardian.com/global-development/2020/mar/31/sierra-leone-lifts-ban-on-pregnant-girls-going-to-school-but-shutdown-expected>

free. The discussion in this paper has drawn experiences from both local and international encounters. The sixth phase government in Tanzania has made efforts to provide fee free education particularly in public schools which is consistent with international and local obligations. The expansion in the implementation of inclusive education is both an international push and a local initiative. The effort to implement inclusive education in Tanzania is not a new phenomenon. This is not the first time that inclusive education has featured in the national policies, strategies and plans. Similarly, this is not the first time that inclusive education is featured in the international conventions and deliberations. The main dilemma is its implementation which has posed a number of challenges especially for developing countries. While implementation of inclusive education requires an investment in both human, infrastructure and materials resources, governments in developing countries have embarked into the business unprepared. Looking at statistics, the achievement of fee free education is unlikely. Stakeholders' engagement, commitment and understanding is missing. There is a need to communicate strategies, policies and plans to all education stakeholders for successful implementation of inclusive education.

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The Status of Inclusive Education for Learners with Autism Spectrum Disorders in Elementary Schools in Tanzania: A Review

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Abstract

This study explores the status of inclusive education for learners with Autism Spectrum Disorders (ASD) in the elementary schools of Tanzania. The study answers two research questions: (i) How do the International and National Policy documents address the issue of ASD inclusion in schools? (ii) What is the status of implementation of inclusive education for learners with autism spectrum disorders in elementary schools in Tanzania? The data were collected through documentary search. The findings revealed that Tanzania has signed and committed to comply with the international declarations on inclusive education for all learners as portrayed in the Salamanca statement and stated clearly in its constitution, education and training policy, disability act and national strategy for inclusive education that all learners will receive education in the inclusive setting. This is to ensure that no child is left behind in education. However, a significant gap has been observed in the implementation of inclusive education due to attitudinal, environmental and knowledge barriers. The study recommends clear and specific policies and acts on inclusive education as well as curriculum modifications and capacity building to schools and teachers to ensure effective implementation of inclusive education for learners with autism in elementary schools in Tanzania.

Keywords: autism spectrum disorders; elementary schools; inclusive education

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1.0 Introduction

The common practice in many parts of the world including Tanzania has been to seclude children with ASD from mainstream schools. Hence, a large number of individuals with ASD have been institutionalised in the centres that cater for persons with disabilities (Ismail & Nazri, 2016; Manji & Hogan, 2013; Mapunda et al., 2017). However, recent studies have pointed out that children with autism benefit much by being included in the mainstream schools in an arrangement that is commonly known as inclusive education. This practice has proven to be working not only for the future outcomes of the learners with autism, but also for the development of the inclusive mindset to other children (Briskman et al., 2020). Other advantages of including learners with ASD in mainstream elementary schools have been mentioned to be significant improvement in social interaction, improvement in communication skills, self-help care, perception, motor activities as well as improvement in cognitive performance (Briskman et al., 2020; D'Elia et al., 2014; Nigmatullina et al., 2021). The inclusive education setting is also associated with significant contribution towards the development of inclusive societies in the future (Briskman et al., 2020; European Agency for Development in Special Needs Education, 2011; Gavaldá & Qinyi, 2012).

The Persons with Disabilities Act, 2010 (Act No. 9 of 2010) of the United Republic of Tanzania stipulates that children with disabilities (such as ASD) should attend ordinary public or private schools (URT, 2004). Such children should be provided with appropriate support relevant to their kinds of disability. Learners with ASD are entitled by the act to other necessary learning services from qualified teachers or a teacher assigned for a purpose (National Council for Special Education, 2011; URT, 2010). Other necessary learning services include occupational therapy, behavioral therapies from developmental psychologists, speech and language therapies, other associated medical support as well as special education interventions (Briskman et al., 2020; Majoko, 2017; Manji, 2018; Nigmatullina et al., 2021). This paper seeks to establish standard rules for educational provision for learners with ASD as stipulated in the international declarations and conventions, national acts, policies and constitution as well as to assess the status of the implementation of inclusive education for learners with ASD in elementary schools of Tanzania. The paper argues that; all key international documents have provided clear standards and directives as well as establishing the essence of inclusive education for all learners including learners with ASD. Tanzania has committed herself to these international documents, and

stated clearly in her constitution that all learners have the right to access quality and inclusive education, and freely participate in societies without discrimination. However, a significant gap has been observed in implementation of inclusive education for learners with ASD in elementary schools due to attitudinal, environmental and knowledge barriers as well as lack of clear and specific policy on inclusive education, to provide guidelines on the implementation.

1.1 Definition of Key Terms

ASD is a neurodevelopmental disorder characterised by primary impairments in social interactions, communication, and repetitive and stereotyped behavior (American Psychiatric Association, 2000). Recent data indicate that 1 in every 162 children is diagnosed with ASD worldwide (Centre for Diseases Control and Prevention (CDC), 2018).

Inclusive Education is an approach which transforms the education system, including its structure, policies, practices and human resources, to accommodate all learners in mainstream education by addressing and responding to learners' diverse needs. It involves adaptation and modification of curriculum content, teaching and learning materials, pedagogy and environment to ensure access and participation of all learners (URT, 2017).

2.0 Research Questions

This study attempted to establish the standard rules for provision of inclusive education as stipulated in the international and national policy documents. The paper seeks to look on the implementation of inclusion for children with ASD in elementary schools in Tanzania. In this regard, the study focuses on the following lines of inquiry;

- i. How do the International and National Policy documents address ASD inclusion in schools?
- ii. What is the status of implementation of inclusive education for learners with ASD in elementary schools in Tanzania?

3.0 Rationale for the Study

Several educational issues in Tanzania justified the need for this paper. First, for decades people with disabilities have been stigmatised and have minimal participation in education. Statistics in Tanzania indicate that out of more than

400,000 children with disabilities in Tanzania (of which majority are falling in the group of those with intellectual disabilities, ASD being part of), it is only 49,000 who are going to school (Bhalalusesa, 2022). Globally, individuals with ASD have been put in institutions that cater for the needs of people with disabilities and have not been included in schools and societies. This practice has been robbing them of their dignity and the right to freely participate in education just like their peers as stipulated in the United Nations Convention on the Rights of the Child (UN, 1989). In Tanzania, it is estimated that out of the 1,377,409 children enrolled in schools in 2020, 215 of them have autism, 1064 have intellectual disability and 235 have multiple impairments (MoEST, 2020). These numbers call for the essence of establishing the status of their inclusion in elementary schools in Tanzania to ensure that no one is left behind.

4.0 Theoretical Framework

This study is grounded in the social model of disability whose origin can be traced back to 1969 and early 1970s through the consistent work of academicians and activists (Tekin & Bluhm, 2019). It is believed that this ideology began when Alif Morris was defending his bill presented before the British government which was proposing to remove the severe and gratuitous social handicaps that he believed were inflicted on disabled people. In his bill he stated that "...I want to stop the society from treating disabled people as if they were a separate specie..." (Oliver, 2013). The evolution of the social model of disability became concrete through the disability rights movements around 1970. In 1975 the United Kingdom Union of the Physically Impaired Against Segregation (UPIAS) claimed in our views it is society which disables the physically impaired people (Oliver, 2013; Tekin & Bluhm, 2019). They pointed out that disability is something imposed on top of people's impairments by the way that they are unnecessarily isolated and excluded from full participation in society. It was after the UPIAS "social definition of disability" in 1983 that the disabled academic Mike Oliver coined the phrase Social Model of Disability in the reference to this ideological development (Hughes & Peterson, 1997; Oliver, 2013). Later the social model of disability was extended to include all persons with disabilities including those with learning disabilities, intellectual disability, emotional disturbance, mental health disorders and behavioural problems.

The social model of disability proposes that a person's disadvantage is the combination of personal traits and social setting. It expounds that disability is

brought about through the influence of two factors; one is a person's physical or mental traits, and second is the surrounding environment which is at least partly constructed by others (Burchardt, 2004; Thomas, 2004). According to the social model of disability, both factors must be present before the disability condition can surface. It insists on the social origins of impairments and the sociology of impairment (Hughes & Peterson, 1997).

The social model of disability was chosen to inform this study because of its relevance as a key tool in the analysis of cultural representation of disability. This Model has become the conceptual analysis in challenging stereotypes and archetypes of disabled people by revealing how conventional structures reinforce the oppression of disabled people (Oliver, 2013; Thomas, 2004). These qualities of social model of disability make it fit to guide this study on the status of inclusive education for learners with ASD in the elementary schools of Tanzania. The model guided the author to delve into the subject by exposing the systemic barriers to inclusive education for learners with autism as well as the reasonable accommodations/adjustments that are required in order to effectively include learners with ASD in our elementary schools. The social model of disability focuses on changes required in society in order to help individuals with disability live and thrive in our communities. The changes it advocates are in terms of attitudes, social support, information, physical structures as well as reasonable accommodation in the education policies and practices so as to remove barriers for learners who have diversity of needs in our school systems (Oliver, 2013).

5.0 Research Design and Methods

This is a library-based search study whose framework employed purposeful review of selected literature. The documents reviewed included International and National Policy Documents such as:

- i. The Universal Declaration of Human Rights (United Nations, 1948)
- ii. The Salamanca Statement (United Nations, 1994)
- iii. The Convention on the Rights of the Child (United Nations, 1989)
- iv. The Constitution of the United Republic of Tanzania (URT, 1977)
- v. The Tanzania Persons with Disability Act (URT, 2010)
- vi. The Education and Training Policy (URT, 2014)
- vii. The National Strategy for Inclusive Education (URT, 2017), and
- viii. Available empirical literatures on ASD inclusion in elementary schools in Tanzania.

The criteria for selection of the documents were guided by the two objectives of the study, as well as the key terms “autism spectrum disorders” and “Inclusive Education” in Tanzania. Data were analysed by using content analysis and the results are presented in the form of ideas, appearing under each theme with conclusions and supported by secondary data and quotes from the codes developed.

5.1 Data Analysis

Data were analysed through content analysis approach, which is defined as a detailed and systematic examination of the contents of a particular body of materials for the purpose of identifying the patterns, themes or biases (Ary et al., 2009; Creswell, 2007; Hsieh & Shannon, 2005; Mohajan, 2018; Ritchie & Lewis, 2003). Based on the analysis, the results are presented in the form of ideas, appearing under each theme with conclusions and supported by secondary data and quotes from the codes developed.

6.0 Findings and Discussion

6.1 Inclusive Education for Learners with ASD as Stipulated in the International and National Documents

Mandate of Inclusive Education Globally

The findings have revealed that The 1948 Universal declaration of human right serves as the focal point for the dialogues on the inclusive education and inclusive communities for all, including autistic learners (Dragu, 2013). Also, it has been pointed out that United Nations educational, scientific, and cultural organisation (UNESCO) has the mandate to coordinate the international community to achieve the goals for universal education for all, which is necessary to all UN member states. The findings have made it clear that ambitions for education are essentially captured in the sustainable development goal number four (SDG 4) of the 2030 agenda, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all by 2030, including learners with autism.

It is indicated clearly that the Education 2030 framework for action was put forward as a roadmap to guide the governments and partners on how to turn the commitments into action (UNESCO, 2015). However, the gap and challenges of

inclusive education for learners with ASD has continued to be a thorn in the flesh, as many of them end up being excluded from schools or institutionalised in secluded settings. The enrolment of all children in regular schools has been stressed by UNESCO and coined as “Schools for All” which depicts institutions to include everybody, celebrate differences, support learning and respond to individual needs (UNESCO, 1994).

Tanzania’s Commitment to Inclusive Education

Through the findings it has been exposed that the constitution of the united republic of Tanzania has given the provision to education for all kinds of learners, stressing that; individuals with disabilities be included without discrimination at all levels in education and employment (URT, 1977). From this statement, one can easily assume that children with all types of disabilities are being accommodated in the Tanzanian educational system. However, it is argued here that the statement sounds too general and vague to accommodate the complexities and diversities of individuals in schools and working places. Extensive research is needed to guide the policy makers on the exceptionalities of individuals with ASD and how they can be well accommodated in schools and working places. The guidelines should state clearly on the number or percentage of children with disabilities which should be mandatory at all levels of education during the enrolment process. Clear measures should be put in place to ensure all of those who are enrolled with disabilities in schools, attain successful completion of their studies by removing all barriers to successful completion.

Findings have further pointed out that the Education and Training policy (URT, 2014) is currently guiding the provision of education in the country. And its key objective, among others, is to ensure that the pre-primary education serve the purpose of identifying children with abnormal patterns of development or educational potentials and devise special programmes for them (URT, 2014). It is clear in the policy that Tanzania has poor mechanisms to recognise students with special needs; the learning environment for special learners is also poor. This gap is even wider for learners with ASD whose condition is new in the Tanzanian community and has not received due attention in the education sector.

In 2017, Tanzania developed a National Strategy on Inclusive Education 2018-2021 which is the authority document for issues related with special learners in inclusive education setting. The two key objectives of the national strategy on

inclusive education are: firstly, teaching and learning should respond to the diverse needs of learners. Secondly, educational support should be made available to all kinds of learners (URT, 2017). However, it is noted here that there is a significant gap of research that considers the complex needs of support that learners with ASD do require in the context of developing countries such as Tanzania (Lyimo, 2020; Manji, 2018). This finding has been confirmed by the empirical study done by Tungaraza(2020) which pointed out that the effective implementation of inclusive education requires and should be preceded by the changes in the teacher training' curriculum. All teachers at all levels of education should be aware and well trained on inclusive education in order for schools to be able to accommodate all kinds of learners and support them accordingly.

6.2 Implementation of Inclusive Education in Tanzania

Policy Adjustments

Having the right policies in place is critical for effective implementation of inclusive education. These findings have appeared in all the documents, including the Universal Declaration of Human Rights. The necessity for policy adjustments has also been mentioned as a key component for realisation of inclusive education in the definition of inclusive education that has been put forward by the Tanzania's National Inclusive Education Strategy (2018-2021). Significant improvements have been suggested to be done on the Complementary Basic Education (COBET) and the integrated program for out of school youths (IPOSA) in order to allow learners such as those with ASD to be included into regular schools. Findings have suggested for the formation of the Inclusive Education Policy and Inclusive Education Act in Tanzania, in order to appropriately accommodate learners with ASD in Schools.

Despite the good intentions of the government of the United Republic of Tanzania to ensure equity and access to education for all learners, findings have indicated that; issues of disability have not been adequately captured in the Education and Training Policy 2014 (James, 2012; Malle, 2016; Mapunda et al., 2017; Opini & Onditi, 2016; Tungaraza, 2014; URT, 2014). One review cited about the status of inclusiveness in the education and training policies for selected African countries has pointed out that the National Policy on Disability of 2004 is the earliest policy document that initiated disability-specific policy statements. Within it there is a line that states the commitment of the government to

collaborate with other stakeholders in the provision of conducive environment for inclusive education for all learners with disabilities. However, there is a gap in the type of needs and how the government will ensure that they are thoroughly met (Malle, 2016; URT, 2004).

Need for Reasonable Accommodations (Curriculum, Pedagogy and Environment)

All the reviewed documents have mentioned the need for reasonable accommodation for learners with special educational needs and insist that instead of focusing on preparing children to fit into existing schools, we should focus on preparing schools so that they can deliberately reach out to all learners. Findings from empirical studies on the implementation of inclusive education for learners with ASD have echoed to this statement by mentioning the need for school environments adjustments and pedagogy restructuring in order to include learners with ASD. Some learners with ASD have diverse needs of lightnings, colours, textures and sounds and these adjustments have not been observed in most of Tanzanian schools.

Paucity of Community Awareness on ASD

ASD is mentioned to be the least known disability in Tanzania, with the status of being in the awareness stage. The widespread lack of national knowledge on autism spectrum disorders is linked with the notable paucity in treatment services for ASD in Tanzania. In western countries, where there is plenty of treatment options, parents have played major role in increasing ASD awareness, advancing research and encouraging empirically supported treatments. Findings have suggested more efforts to be directed on creating awareness for ASD in order for the community to be informed of the condition. These findings have consistently appeared in several studies reviewed as it can be affirmed by the voice in the studies done by Manji and Harrison (Harrison et al., 2016; Manji, 2018), individuals with ASD are being misdiagnosed, mislabelled and mistreated in schools and communities due to lack of knowledge on the condition. Moreover, majority of parents of children who are in the spectrum are in the denial stage. This situation fosters late diagnosis and late intervention, which are the key factors that put individuals with ASD to a state of life long disability.

Attitudinal Barriers

Findings have indicated a notable minimal participation of learners with ASD in Tanzania educational system. Some of the barriers to participation have been

identified to be attitudinal, as well as cultural prejudices, inadequate data on the number of children with ASD in Tanzania as well as lack of trained teachers and professionals to support these learners (Harrison et al., 2014, 2016; Manji & Hogan, 2013). In most African countries including Tanzania, ASD has been linked to witchcraft and superstitious beliefs. Most children with ASD are locked inside the houses, not taken to schools or allowed to participate in social activities like other children.

Early Diagnosis for ASD and Placement

The education and Training Policy in Tanzania stated its key objective among others, is to ensure that the pre-primary education serves the purpose of identifying children with abnormal patterns of development or education potentials and devise special programmes for them. The 2017-2021 National Inclusive Education Strategy has mentioned the improvement of screening system at primary level to enable early identification of learners with special needs. This objective is in line with the finding which pointed out that; early diagnosis and early intervention of ASD has been empirically associated with better outcomes in schools and improvement in the overall symptoms of ASD in teenage hood and adulthood. Early identification and placement of learners with ASD in schools is a critical issue that needs to involve policy decisions. The National policy on disability of 2004, states that; there is no early intervention national programme for children with disabilities in Tanzania. There is an inferred objection to have national campaigns to screen all children below 5 years age for ASD as it was suggested by the American Association of Paediatricians.

Accessibility, Rehabilitation and Support Services in Schools

Findings have indicated that principles and practice of inclusive education for all learners with disabilities are addressed in the national strategy for inclusive education (2017), in the same regard officers from the Ministry of education who participated in a study by Malle (2016) echoed that; they are aware of the inclusion of the special education and training needs of students with disabilities in policy, legal and implementation instruments however they voice out that specific needs of some impairments requiring special attention have not been properly addressed in the documents. For example, the physical and psychosocial rehabilitation for ASD and other severe impairments are not adequately included in the policy statements (Malle, 2016; Opini & Onditi, 2016; Tungaraza, 2020). Various people with disabilities have argued that the rehabilitation and specific needs of students

with disabilities have not been properly addressed and inferred, that policy revision is needed in order to make the statements compatible with the internationally accepted principles of special needs education (Malle, 2016; Tungaraza, 2020)

It has been revealed through the findings that children and youths with disabilities are not receiving the appropriate professional support that addresses their needs in schools. This finding has been supported by the emerging high numbers of repetition rates and large out-of-school population. It then reiterates the objective to provide children and youth with basic education through better trained school personnel and provide appropriate learning conditions. In the same note findings have indicated that most primary school teachers have little to/no knowledge about children with ASD. While the situation is like this in Tanzania, the Salamanca statement stipulates that; Inclusive education should go hand in hand with other standard rules, such as those on accessibility, rehabilitation and support services. Children with ASD require services such as speech therapy, occupational therapy, behavioural therapies and other psychological support in order to do well in school and life, these kinds of services are lacking in most regions of Tanzania.

6.0 Conclusion

Generally, findings have pointed out that; inclusive education has significant positive outcomes to both learners with and without ASD in schools. Benefits of Inclusive education have been associated with improved social skills, improved communication, improved academic skills and other basic life skills. All international documents reviewed have set clear standards for inclusion of special learners in mainstream schools and insist that inclusion in educational programmes upheld dignity and promote equal participation in societies as it is a basic human right. Findings have revealed that; majority of learners with ASD are still excluded and some are put in institutions for special individuals. This makes them to miss educational opportunities like their peers. There is a laxity in the specification of inclusive education provision in the education and training policy, with no mention of the word “autism” in all these key documents in Tanzania, no mention of the word inclusive education in the education and training policy. The National Strategy for Inclusive education has appeared to be the guiding document in matters of inclusive education in Tanzania. The status of inclusive education for learners with ASD in Tanzania has been observed not to be matching with the expected standards. The compliance level of Tanzania

regarding to international declarations and conventions on inclusive education appears to be well stipulated in some documents, while a significant gap is observed in the area of implementation.

7.0 Recommendations

From the findings, the following are recommended;

- i. Inclusive education for learners with ASD requires policies adjustments, there is a need to shift from “having it all” in the education and Training Policy, to the formulation of a “stand alone” Inclusive Education Policy in Tanzania.
- ii. A change of mindset to all stakeholders in education (transformation of the heart and attitudes), as it has been stressed that “Inclusive education is a mindset before it can become a practice”
- iii. Reorientation related to assessment, teaching methods and classroom management, including adjustment of the environment.
- iv. Redefinition of teachers’ roles and teachers training, including reallocation of human resources.
- v. An overall flexible educational system including a flexible curriculum and examination system.
- vi. Further research is needed to guide policy makers in Tanzania on the exceptionalities of individuals with ASD and how they can well be accommodated in schools.

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PART II

THEME IV: SCIENCE, TECHNOLOGY, ENGINEERING AND MATHEMATICS EDUCATION

Implementation of Inquiry-Based Science Teaching in Sub-Saharan Africa: A Review

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Abstract

This paper reports the findings of a documentary review study that explored the conceptualisation and implementation of Inquiry-based Science Teaching (IBST) in selected Sub-Saharan countries: Zimbabwe, South Africa, Namibia, Rwanda, and Tanzania. IBST is crucial for fostering students' engagement with critical thinking skills and acquiring knowledge. The study scrutinised 30 documents to answer four research questions: How does the inquiry-based science teaching conceptualised in the literatures of some Sub-Sahara African countries? What kinds of inquiry-based teaching do Sub-Saharan African countries under review practise? What challenges does the practice of inquiry-based science teaching face in Sub-Saharan African countries under review? What potentials of inquiry-based science teaching do literatures of sub-Saharan African countries under review highlight? The study used ATLAS.ti, a qualitative data analysis and research software to code, consolidate, and analyse information from the document review. The review found a discrepancy between curriculum statements and the reality on the ground. Even though curriculum documents in the studied countries prescribe IBST, the attendant practices were too insufficient to be effective and bring about the desired outcome. Moreover, teacher-centred rather than the student-based approach to teaching and recipe-based practical work dominated the science classroom session. To make matters worse, such an approach was largely undercut by contextual challenges such as limited resources, large classrooms, less competent teachers and examination-oriented teaching. Paradoxically, many of the reviewed articles focused mainly on the challenges to the implementation of IBST whilst overlooking the solutions to these hurdles. Indeed, there were insufficient studies focusing on the approaches that can

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support students' engagement with IBST amid contextual challenge of usually resource-poor countries. Thus, this study, calls for more research in sub-Saharan Africa to explore IBST potentiality for schools based on the prevailing contextual challenges.

Keywords: Inquiry-based science teaching, science education, Sub-Saharan Africa

1.0 Introduction

Provision of quality and inclusive education is one of the Global Sustainable Development Goal (SDGs) 4 targets. The SDG 4 emphasises on quality education to promote life-long learning. Quality education is the one that can contribute to meaningful learning among students, equip them with requisite skills for the job market, and eventually to contribute to sustainable development. United Nations (UN) sustainable development goal 4.7 stipulates also that “we must ensure knowledge and skills of sustainable development is offered to majority of the population by 2030” (O’Flaherty & Liddy, 2018). In that regard, science education is one of the areas that contribute to the attainment of sustainable development goals. Osborne and Dillon (2008) contend that students universally need to be educated as critical consumers of scientific knowledge for them to contribute subsequently to solving problems resulting from advancements in science and technology. By implication, equipping learners with relevant skills for them to contribute meaningfully to sustainable development such as ensuring availability of clean water and food, and parting in alleviating global warming, learners need to be engaged in inquiry-based science learning. When learners actively engage in the knowledge creation process, they can become critical consumers and producers of scientific knowledge and can contribute to sustainable development. Kokotsaki, Menzies and Wiggins (2016) argued that project-based learning or inquiry-based science teaching can contribute to students' effective engagement in the learning process and can also nurture conceptual development to learners.

According to a review study by Crawford (2014), many countries emphasise teaching science as an inquiry, but there is no a common definition of the approach. Exploring the core features of inquiry-based learning, Kokotsaki et al. (2016) generated a synthesis of five inquiry cycles: Orientation, Conceptualisation, Investigation, Conclusion and Discussion. Crawford further noted that inquiry-

based science teaching is glaringly absent from many science classrooms due to challenges such as limited resources, examination-focused teaching and learning, and the need for professional development. Apparently, the curricula globally highly encourage inquiry-based science teaching, yet the reality on the ground in many countries falls far short of such ideal teaching of science. The stumbling block has largely various factors hindering such inquiry-based learning.

Though much emphasis these days have been on inquiry-based learning in science, both the traditional teaching approach and inquiry-based science learning have their strengths and weaknesses (Khalaf, Zin & Bt, 2018). Whereas traditional teaching can contribute to students' better performance, inquiry-based science learning can contribute to learner conceptual development. Moreover, Alake-Tuenter et al.'s (2012) review, which focused on competences of primary school teachers in inquiry-based science learning and American National Science Education standards, concluded that primary teacher competencies for inquiry-based science teaching concurred with those stipulated by American National Science Education Standards. According to Ogunniyi and Rollnick (2015), some curriculum documents in some African countries emphasise on active learners' participation in science teaching and learning; however, actual teaching and learning in science classroom in those countries mostly amounts to the transmission approach. The emphasis of the transmission approaches to science teaching and learning is attributable to overcrowded classrooms, shortage of resources, and teachers' die-hard beliefs and competences (Ogunniyi & Rollnick, 2015). Studies that have been conducted in African countries have established that some contextual challenges tend to limit inquiry-based science teaching (Mkimbili & Ødegaard, 2020; Mkimbili, Tiplic & Ødegaard, 2017; Wandela, 2014). Many reviews on inquiry-based science teaching have been conducted in other contexts and less so in sub-Saharan Africa (Crawford, 2014; Minner, Levy & Century, 2010). This document review, therefore, focused on conceptualisation and practice of inquiry-based science teaching in some African countries. The study was guided by four research questions:

- i. How do literatures of sub-Saharan African countries under review conceptualise inquiry-based science teaching?
- ii. What kind of inquiry-based teaching do the sub-Saharan African countries under review practice?

- iii. What challenges does inquiry-based science teaching face in sub-Saharan African countries?
- iv. What potentials of inquiry-based science teaching do the literatures in the sub-Saharan African countries under review highlight?

2.0 Conceptual Framework

The significance of inquiry-based learning in science subject cannot be over-emphasised. Using inquiry-based science teaching has been mentioned to develop students' critical thinking skills (Crawford, 2014; Kipnis & Hofstein, 2008; Mkimbili & Ødegaard, 2020), which can contribute to education for sustainable development. Scientific inquiry can also help students develop analysis, critical thinking, and evaluation skills (Crawford, 2014). Some studies have attributed inquiry-based science to enhancing students' interest in science (Alake-Tuenter et al., 2012; Crawford, 2014; Jiang & McComas, 2015; Ramnarain & Hlatswayo, 2018), and assisting learners in understanding scientific concepts (Chu et al., 2021; Ramnarain & Hlatswayo, 2018). Furthermore, Chu et al. (2021) argue that inquiry-based learning can engage learners in knowledge creation process.

Literatures offer different definitions on inquiry-based science teaching (Alake-Tuenter et al., 2012; Crawford, 2014; Kokotsaki et al., 2016). Kokotsaki et al. (2016) define inquiry-based learning as a student-centred teaching approach characterised by student autonomy, constructive investigations, collaborations, communication and reflection. Implicitly, inquiry-based science teaching empowers learners to take an active role in the knowledge construction process. Drawing on Dewey (1993), Khalaf et al. (2018) identify learners' engagement with discussion, suggestion of evidence, formulation of explanations based on the evidence available, linking the explanations to scientific knowledge and evidence, and communicating their findings as the main features of inquiry-based science teaching. Under this definition, learners can explain based on the evidence at their disposal and link their explanations to scientific theories, which imply that learners get opportunity to take an active role in the knowledge creation process, which makes them critical consumers and producers of scientific knowledge.

Alake-Tuenter et al. (2012) identified six essential features of inquiry-based science teaching: Learners addressing scientific oriented question, investigating to collect evidences, answering the questions based on the available evidences, explaining, connecting scientific explanations to scientific knowledge and

communicating the findings. Inquiry-based learning can engage learners in scientific investigations of a phenomenon and higher thinking. Crawford (2014) noted that inquiry-based science teaching can occur even without the engagement of students in laboratory activities. To answer a question posed by the teacher, the student can collect evidence by reading books, observing the natural setting or an experiment in the laboratory (Crawford, 2014). Teaching students to inquire includes engaging them in developing questions for investigation, designing and investigating, developing model and explanation from the data and, ultimately, communicating the findings (Crawford, 2014).

The classification of inquiry-based science learning occurs at different levels depending on students' engagement in different aspect of the endeavour. Jiang, Jiang, and McComas (2015) developed levels of inquiry addressing four questions from the Programme for International Student Assessment 2006 questionnaire: (1) Do students conduct activities by themselves? (2) Do students make conclusions from data by themselves? (3) Do students design the investigations by themselves? (4) Do students raise the questions for investigations by themselves? Based on student and teacher involvement in the different aspects of inquiry-based science teaching, this study has classified inquiry-based science teaching into five levels. Level 0 is teacher-centred inquiry-based science teaching, whereby the teacher is the one doing all the activities raising the question for investigation, designing an investigation, investigating and drawing the investigation from the data. Level I gives learners opportunity to engage in conducting activities, but the teacher is the one raising the question for investigation, designing the investigation, and drawing conclusions from the evidence collected. At level II, the teacher develops a question for an investigation and designs an investigation with the students executing the investigation and drawing conclusion from the findings. At level III of inquiry-based science teaching, the teacher only develops the question for investigation, whereas the students assume more authority in an inquiry activity by designing an investigation question, investigating and drawing conclusion based on the findings. Level IV according to Jiang and McComas (2015) is an open-ended inquiry where the students is doing all the activities of inquiry-based science teaching by themselves by asking the question for investigation, designing the investigation, investigating and drawing conclusion from the data. Main features of inquiry-based science teaching as drawn from the literatures reviewed (Alake-Tuenter et al., 2012;

Crawford, 2014; Jiang & McComas, 2015; Khalaf et al., 2018; Kokotsaki et al., 2016) involve engaging students in the following:

- i. Developing a question for investigation.
- ii. Investigating to collect evidences.
- iii. Interpreting the evidence by comparing it with an existing body of knowledge.
- iv. Drawing conclusion based on the evidence.
- v. Communicating and defending the findings.

Depending on the students' level of engagement in various activities, the inquiry-based instruction can either be more closed (teacher-centred) or more open (learner-centred). Learner-centred inquiry-based teaching offers more authority for the learner in taking active role in all inquiry-based science teaching activities from developing a question for investigation to communicate and defend their explanations and findings. On the other hand, inquiry-based science teaching can be teacher-centred when more activities from developing a question for investigation to communicating and defending the explanations are done by the teacher.

3.0 Methodology

This study reviewed extant empirical and theoretical literatures on the conception of IBST and its practice in selected Sub-Saharan African countries. The literatures reviewed were purposively selected from five sub-Saharan African countries: Zimbabwe, South Africa, Namibia, Rwanda and Tanzania. These countries were selected based on the assumption that their schools may have similar socio-economic and contextual challenges that can influence the IBST practice (Nsengimana et al., 2020). The selected papers studied the conceptualisation of IBST in the selected countries, its significance and how it is implemented in the mentioned countries. The papers also described the challenges for the implementation of IBST in the selected countries and approaches that can support the execution of IBST in the countries under review.

The articles selected for this review were those published from 2010 to 2021 including both empirical and review studies. The selection processes of articles for review in this study were guided by the research questions as suggested by Newman and Gough (2020). Thus, searching words drawing from the research questions were inquiry-based science teaching; challenges to the implementation

of inquiry-based science teaching; approaches to the implementation of inquiry-based science teaching, practice of inquiry-based science teaching. The database used in this review for the selection of resources was Google Scholar, Microsoft Academic, and Education Resources Information Centre (ERIC). Using these inclusion criteria resulted in the acquisition of 50 papers reporting results from studies conducted for review.

Following the procedures suggested by Newman and Gough (2020), the 50 empirical studies that were first selected were subjected to further checks to determine their relevance to the research questions. This was done by scanning through the abstracts of the selected papers. After this screening procedure, 30 papers were selected for the review process. These selected documents were analysed using the ATLAS.ti program. All the selected articles were imported into the program for coding relevant aspects gleaned from the documents. The coding of results was guided by the items in the research questions. For instance, for challenges facing the implementation of IBST phrases such as “high-stake testing”, “huge content to be covered,” “insufficient time,” “lack of competent teachers”, “larger classes”, “limited resources”, and “practical examinations” served as codes. Likewise, for the approaches to the implementation of IBST, the phrases that served as codes included the use of school-based continuous assessment instead of final practical examinations; the use of computer simulation, the use of local resources for students’ investigation; the use of open question linked to local science application, assessment and examinations need to link to IBST; and teacher training. The research questions also constituted themes in the results and discussion sections.

4.0 Results and Discussion

These review studies aimed to focus on conceptualisation and practice of inquiry-based science teaching in some African countries. The study was guided by four research questions. These research questions are the themes guiding the presentation in this section:

Meaning of Inquiry-Based Science Teaching Portrayed by Reviewed Studies

Studies in the countries under review indicate that the respective curriculum underscored inquiry-based science teaching. In South Africa, Ramnarain and Hlatswayo (2018) observed that Inquiry-based Science Teaching (IBSL) is

recommended in the latest national curriculum document. The study further disclosed that the aim of learning science as prescribed in the curriculum is to develop scientific skills for learners, which are essential in developing learners' investigative skills. Another study from South Africa by Dunn and Ramnarain (2020) disclosed that inquiry-based science education is emphasised in science curriculum in South Africa where the second specific aim of the Curriculum and Assessment Policy Statement requires learners to plan and carry out investigations and engage in problem-solving.

Recent innovation in curriculum in Rwanda in lower secondary school has introduced IBST (Leon, 2015). Mugabo (2012) found that the aspects of Inquiry-based Science Learning (IBSL) at the heart of the Rwanda curriculum, which encourages individual research and investigations. The inquiry-based activities the Rwanda curriculum prescribes include engaging students in identifying the hypothesis for experimentation, identifying tools to be used for investigation, and planning for the experiment method. In Tanzania, the on-going competence-based curriculum emphasises learner-centred teaching and, specifically, highlights IBSL. One of the general objectives in Chemistry syllabus states that by the end of the four years course students need to have ability to design and carry-out chemistry experiments (MoEV, 2007). Likewise, among the general competences prescribed by Ordinary level Biology syllabus is the students' ability to collect, analyse and interpret data from scientific investigation, which are IBST aspects (MoEVT, 2005). In Zimbabwe, the advanced level secondary education syllabus for 2008 to 2012, has one of its main objectives highlighting the use of inquiry-based teaching to ensure students engage actively in experimental and practical chemistry to make them informed and interested in scientific matters (Mandina, 2012). Namibia's grade eight curriculum introduced inquiry-based science teaching that allows students to engage in inquiry tasks such as developing an investigation question, making hypothesis and predictions, collecting and analysing data as well as drawing conclusion (Shinana, Ngcoza & Mavhunga, 2021).

Literature reviewed in this study offered different meanings of inquiry-based science teaching. According to Kinyota (2020) and Luvanga and Mkimbili (2020), IBST is the teaching process involving posing researchable questions, planning investigations, designing investigations and communicating the results of the probe. A slightly different definition for inquiry-based science teaching is given

by Mugabo (2012, p. 50), as the process of engaging learners in scientific oriented question, learners prioritising evidence in responding to questions, learners linking explanations to scientific knowledge, learners communicating and defending their explanations. Leon (2015) adapted the definition of IBST from NRC (2000) who described it as engaging students in scientific oriented question, learners prioritising evidence, learners develop and evaluate explanations, then learners are engaged in formulating explanations based on evidence obtained to answer scientific oriented question, and finally students engage in communicating their findings. Another definition of IBST is given by Fatuma (2015). Fatuma treats it as a teaching procedure that allow learners to work with a problem that they are not familiar with, engage in explanations to find answers for the problem, and acquire new information for understanding the world.

IBST processes include engaging students in owning the learning process to develop general investigative abilities such as posing and pursuing open-ended questions, synthesising information, planning, and conducting experiments, and analysing and presenting results (Athuman, 2017). Van Graan (2020) defined the term ‘inquiry’ as a process of gaining information through investigation by involving learners voluntarily in a form of active learning and which stresses questioning, predictions, data analysis, critical thinking and communication. IBST allows students to use scientific skills such as raising question collecting data, engagement in scientific reasoning, evaluating the evidence based on what is already known and drawing conclusion (Kambeyo & Csapó, 2018).

These definitions of inquiry-based science teaching offered by the literatures in the countries under review revealed the following basic features of inquiry-based teaching: Engaging learners in scientific-oriented questions, designing and investigation to obtain evidence to respond to the questions, developing explanations for the questions and communicating the results. The definition of IBST drawn from the literatures from the countries under review concur with that of Alake-Tuenter et al. (2012); Crawford (2014); Khalaf et al. (2018); and Kokotsaki et al. (2016). The conceptual framework of the current study also suggests similar definition. In other words, the definition of IBST in the sub-Saharan African countries is like the common definition of IBST suggested by the literature on science education.

Inquiry-Based Teaching Practiced in the Sub-Saharan African Countries under Review

Many of the studies reviewed indicate that the IBST practice was at the lower level or were simply teacher-centred in the countries studied. In this scenario, the teacher prepares the question for investigation and students follow experimental procedures designed by the teacher to conduct an experiment (Chirikure, Hobden & Hobden, 2018; Gudyanga & Jita, 2019; Kinyota, 2020; Leon, 2015; Mkimbili et al., 2017; Paul, 2014; Shinana et al., 2021). For instance, a study conducted by Mkimbili et al. (2017) in Iringa Tanzania revealed that although teaching science as inquiry has been prescribed in the general objectives of the syllabi in Tanzania context, what was practised in the classroom was students' engagement with lower levels of inquiry such as conducting activities and drawing conclusion. The study further disclosed that higher levels of inquiry are not part of a science lesson because they are not part of the national examinations, thus are not emphasised by the specific objectives of the syllabi. Similar observation in the Tanzania context noted that most of the investigative tasks such as experiments were mainly teacher-directed and highly structured (Kinyota, 2020). In the science teaching and learning, the question for investigation and its procedures are suggested in advance (Kinyota, 2020). Yet, engaging students in inquiry-based science teaching is not formally emphasised in the curriculum in Tanzania.

Another study, which was conducted by Shinana et al. (2021) in Namibia on the development of teachers' pedagogical content knowledge for a Scientific Inquiry-based Teaching Approach in the country's rural schools have disclosed that teaching in science classroom is teacher-centred oriented in which learners are engaged in experimental activities following the instruction provided step-by-step, which limit the students from acquiring the desired competences. Sheehama (2018) found out that although the IBST practice is emphasised in the Namibia curriculum, in science classroom only structured IBST is underscored by both urban and rural science teachers in the country, and these recipe-based practical work aimed principally to prepare students for examinations. A study by Leon (2015) investigated the teachers' attitudes and perception of the introduction of IBST in Rwanda. The observations were made in 10 lessons and the results indicate that two of the 10 lessons were teacher-centred, but others included some aspects of inquiry whereby students participated in lower level of inquiry by doing experiment following teachers' guideline (Leon, 2015).

Studies conducted in South Africa have also revealed that even though the implementation of inquiry-based science teaching is emphasised in the curriculum, its implementation is a challenge, especially in rural schools (Ramnarain & Hlatswayo, 2018). Teachers in these schools generally had positive attitudes to the implementation of inquiry-based science teaching; however, were not ready to engage students in such activities primarily because of challenges such as limited teaching and learning resources, large classes and insufficient time for covering the curriculum (Ramnarain & Hlatswayo, 2018). Gudyanga & Jita (2019) noted that the list of practical work to be done in grade 11 level were prepared by the Department of Basic Education in South Africa whereas the structured experimental procedures, as lesson plans for the experiments, are designed by local authorities at the province level (Gudyanga & Jita, 2019). These experiments were found to be recipe-based type and engaged learner far less in inquiry-based learning than anticipated.

The results presented thus far show that IBST is generally emphasised in the science teaching and learning across different Sub-Saharan African countries under review. However, the implementation process in many classrooms was a different matter altogether and entailed students' engaging with highly structured inquiry and teacher-centred classroom activities. In many classrooms, students lacked opportunities for designing their own investigation and asking the question for investigation. Activities that the students practised in the classrooms included carrying out an investigation following procedures prepared by the teacher and drawing conclusion from the results. Such practices are important by not sufficient for engaging students with critical thinking skills. The next section discusses challenges that limit teachers' practising of a full range of inquiry as disclosed by the literatures reviewed.

Challenges for Implementation of Inquiry-Based Science Teaching

The literatures reviewed have disclosed several challenges that impede the implementation of IBST in Sub-Saharan Africa as indicted in Figure 1 below. The critical challenges include: insufficient time (Gudyanga et al., 2013; Kinyota, 2020; Ramnarain & Hlatswayo, 2018), lack of competent teachers (Gudyanga et al., 2013; Twahirwa & Twizeyimana, 2020; Van Graan, 2020) large classes (Kinyota, 2020; Ramnarain & Hlatswayo, 2018), and limited resources (Gudyanga & Jita, 2019; Leon, 2015; Luvanga & Mkimbili, 2020). Many articles in the sub-Saharan

Africa countries studied suggest that these countries have similar challenges for the implementation of IBST.

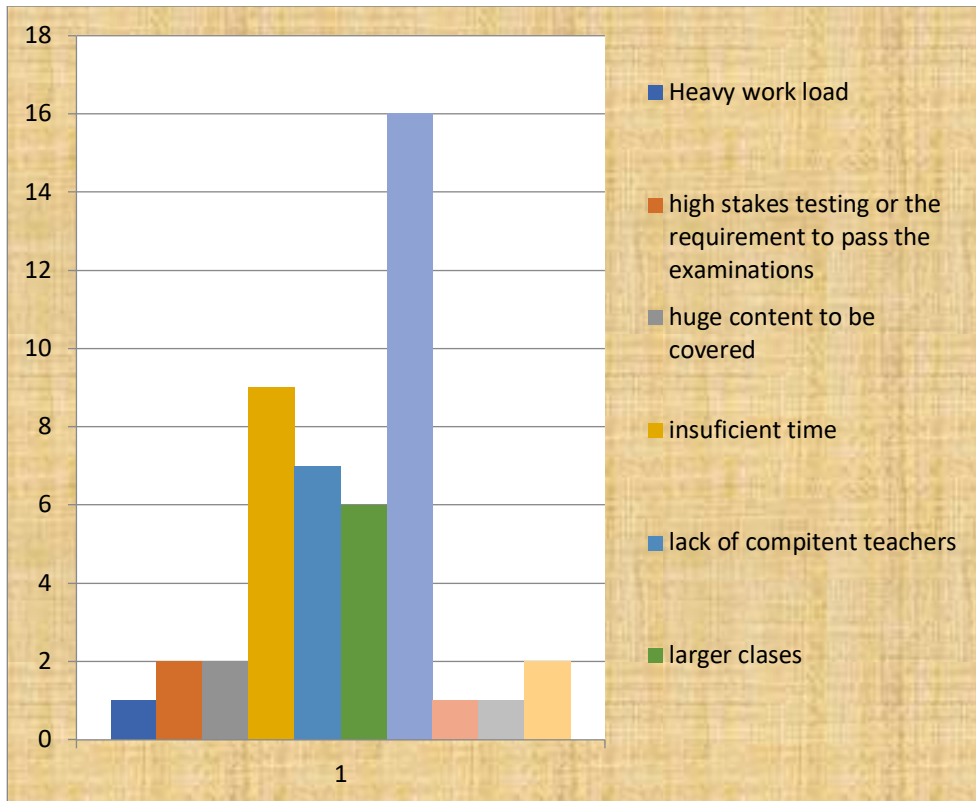


Figure 1: Challenges to the IBST Practice in Some Sub-Saharan Counties

Limited resources is a challenge that featured in many articles reviewed. This indicates that it is a common challenge impeding the practice of IBST in sub-Saharan Africa countries. Most of these countries had similar contextual challenges, and hence teaching and learning materials such as textbooks, labs and lab equipment, ICT facilities science classrooms are not sufficient. For example, a study from Tanzania by Mkimbili et al. (2017) observed that out of 12 teachers that were interviewed, 11 reported that the schools studied had insufficient lab equipment to allow for students’ active participation in the practical work. Due to limited teaching and learning resources, the teachers interviewed claimed that they mostly conducted practical work for examination classes to prepare students for examinations. Similar challenges were also revealed by another study from

Tanzania, in which pre-service teachers engaged in a study revealed that they could not use library appropriately at the College as there were inadequate books and those available were incomplete as some students borrowed them to support their assignments (Paul, 2014).

A study by Ramnarain and Hlatswayo (2018) conducted in rural districts in South Africa observed that the main factors that made the use of IBST difficult were the absence of laboratory facilities and teaching and learning materials such as computer. Teachers interviewed in this study claimed that there was a mismatch between what the policy stipulated and what prevailed in the classroom; the policy prescribe practical work to be conducted frequently whereas limited classrooms resources for experimentation precluded such activities. Similar study from South Africa by Gudyanga et al. (2013) also noted that the prescribed practical requires specialised equipment that most schools did not have. In consequence, most of the schools failed to conduct such experiments because of limited laboratory facilities. In the Rwanda context, Twahirwa and Twizeyimana (2020) found that IBST was less practised due to limited resources such as lack of enough laboratories and laboratory equipment. Limited resources made the teaching of science teacher-centred whereas students learned by memorisation. Also, Limited resources was mentioned to limit effective science teaching in Zimbabwe, where Shedrack (2012) reported that inadequate teaching and learning resources and ill-equipped laboratories (inadequate equipment, apparatus and reagents) emerged as obstacles to actuating meaningful science learning.

Another factor that limited the implementation of IBST in sub-Saharan African countries that was mentioned by many literature sources was insufficient time. In this regard, studies indicate that teachers had to cover huge content within a very short time; consequently, they resorted mostly to teacher-centred approaches to bridge the gap. For instance, a study by Kinyota (2020) reported that insufficient time and over-emphasis on content coverage are challenges that need to be addressed in Tanzania to allow for effective implementation of IBST in Tanzania. In addition, a study from South Africa by Gudyanga and Jita (2019) found that teachers could not engage students in IBST because they did not have ample time to prepare experiment for individual candidates. In preparing for practical work, the teacher needs to prepare equipment, solution and reagent but in most cases, teachers have no such time. Thus, the study reported that practical in the

classroom were mostly demonstrative in nature, thus individual students could not conduct experiments (Gudyanga & Jita, 2019).

In South Africa, a study on inquiry-based education in professional learning programme was conducted (Graan, 2020). Graan's (2020) study noted that the qualifications of teachers impeded the attainment of grade 12 curriculum goals. In this regard, the curriculum aims to focus on implementation of inquiry-based science teaching can hardly succeed with teachers with insufficient competences. Another study from South Africa has also disclosed that teachers' competence in science teaching has been mentioned to limit the implementation of IBST even for schools with sufficient teaching and learning resources (Gudyanga & Jita, 2019). Having resources alone without the presence of competent teacher is not sufficient for the practice of IBST. Even with the provisions for the supply of laboratory regularly teachers' insufficient expertise in using the equipment, chemicals and other apparatus can limit the successful implementation of laboratory instruction (Gudyanga & Jita, 2019). A study by Mugabo (2012) conducted in Rwanda on the introduction to inquiry-based science teaching in lower secondary schools found inadequate training on how to implement inquiry-based science teaching. The study reported low confidence and lack interest in implementing inquiry-based science teaching among teachers as an impeding factor. In implementing inquiry-based science teaching, teachers need to be creative, confident and equipped with skills and knowledge of the subject matter to use IBST (Twahirwa & Twizeyimana, 2020). Twahirwa and Twizeyimana noted also that some teachers lack a sense of creativity, self-confidence, and enough knowledge and skills for handling complex topics in science teaching. Thus, teacher training on inquiry-based science teaching can support its implementation in Sub-Saharan Africa.

Larger classes, is another factor that limited the implementation of IBST based on the literatures reviewed. According to Gudyanga and Jita (2019), large classes are a militating against the enactment of inquiry-based learning in physical sciences classrooms in the South Africa schools studied. Teachers' implementation of laboratory practical in the South African physical sciences curriculum was much influenced by large classrooms (Gudyanga & Jita, 2019). According to this study, large classrooms and other challenges in the studied schools in science classrooms largely failed to involve learners in higher levels of inquiry. In most cases, students were engaged in conducting recipe-based

experiments with predetermined procedures. According to Mugabo and Nsengimana (2020), large classes, especially in the cases where a classroom has more than 50 students constituted one of the impediments to IBST execution in Rwanda. Teaching that focuses on passing examinations also emerged in the literatures reviewed as a factor that limited the implementation of IBST. The need to ensure students did well in examinations made teachers focus less on engaging students with IBST. In this regard, a study that was conducted in Tanzania disclosed that having national practical examinations made science experiment in school focus on students' memorisations of procedures of the experiment to allow them to perform better in examinations (Mkimbili et al., 2017). This study found that many teachers in schools where students needed to do practical examinations used examinations past papers to guide their teaching, and only focused on the aspects of the experiment that were testable in the Tanzania national examinations (Mkimbili et al., 2017). To allow students to undertake meaningful practical work for IBST, final practical examinations needed to be conducted together with formative assessment, or school-based continuous assessment, whereby students can be engaged in long-term investigation projects (Chirikure et al., 2018).

Potentials of Inquiry-Based Science Teaching

Extant literatures from Sub-Saharan African countries studied have proposed several opportunities for the practice of IBST (Chirikure et al., 2018; Luvanga & Mkimbili, 2020; Mkimbili et al., 2017; Paul, 2014; Ramnarain & de Beer, 2013). Some studies have suggested the use of students' investigation using local materials available as one of the approaches to enhancing IBST in schools with limited resources. In this regard, Ramnarain and de Beer (2013) from South Africa established that students can be engaged in open investigations project for schools with limited teaching and learning materials. In such an investigation, the students link their experiences from home with what they learn in the classroom and acquire meaningful learning. A study in Zimbabwe by Chirikure et al. (2018) found that replacing practical examinations with long-term investigations can offer a good opportunity for the IBST practice.

The school-based investigation can be assessed within the school context and can contribute to the students' meaningful learning. A study conducted in the Tanzania context on the role of contextual challenges for the practice of inquiry-based learning found that using local available materials can allow students to link

science from the classroom with what is happening in their local context and acquire meaningful learning. Mkimbili et al. (2017) suggested that the schools with limited resources can have recourse to locally-available resources to engage students meaningfully in IBST. In such investigations students engage in the knowledge creation process and are not only receivers of information. In fact, using locally available materials can make science learning more authentic and well-integrated in the daily lives of the learner. Mkimbili et al. (2017) further disclosed that the use of open question focusing on local science application can serve as a potential for engaging students in IBST.

When students engaged with open questions, they can participate in aspects of critical thinking skills such as problem solving, back claims with evidence and draw conclusions based on the facts at their disposal. For such context, limited resources can provide opportunities for converting a challenge into the opportunity for engaging students with inquiry-based science learning. Paul (2014) in the study conducted in Tanzania also suggested that the use of micro research activities near universities can expose student teacher to IBST. In such micro-research activities, students can participate in developing questions for investigation, designing investigation procedure, investigating, analysing, interpreting data, and communicating the results. Undertaking such activities can enhance students' engagement with critical thinking skills (Mkimbili & Ødegaard, 2020). Some of scientific concepts such as the study of tiny object like atom can be too abstract to be comprehended by students (Dunn & Ramnarain, 2020). A study by Dunn and Ramnarain in South Africa noted that using simulation can facilitate the implementation of inquiry based science teaching for aspects that are too abstract and theoretical such as an atom, and facilitate meaningful chemistry learning to students (Dunn & Ramnarain, 2020).

5.0 Conclusion

In this review, it has been noted that the definition of IBST portrayed by the studies reviewed concurs with the definition of IBST from the theoretical framework informing the study. However, the studies have revealed that IBST is insufficiently practised in the classroom context. Studies have also reported that recipe-based practical works dominate classroom sessions, in which students conduct experiments following the guidance of the teacher. Most of the experiments that are conducted in the studies reviewed are teacher-centred experiments, which give students little room for engaging in critical thinking skills.

The studies reviewed have also focused on the challenges that impede the implementation of IBST. These challenges include large classrooms, limited resources, incompetent teachers, teaching that focus on examinations. In the studies reviewed, what is not given much emphasis is the approach that can facilitate the implementation of IBST while considering the contextual challenges in Sub-Saharan countries. There are few studies which have focused in that (Chirikure et al., 2018; Mkimbili et al., 2017; Ramnarain & de Beer, 2013), and these studies have suggested the use of students' investigation using locally available materials to engage students with IBST. These studies have shown that students' investigations using local available materials can enable students to assume authority in their own learning and acquire meaningful science learning. However, more research in this area is necessary, especially interventional studies aimed to explore the approaches that can facilitate the students' engagement with Sub-Saharan Africa's IBST. These studies from Sub-Saharan Africa have affirmed that these areas face similar contextual challenges undermining effective science teaching and learning processes.

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The Influence of Problem-Based Learning on Students' Motivation in Learning Biology in Tanzania Secondary Schools

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Abstract

The aim of this study was to examine the influence of problem-based learning (PBL) on students' motivation in learning Biology subject in Tanzania secondary schools in terms of the teaching and learning materials (T/L) and assessment activities employed. The study was conducted in Njombe Region employing a quasi-experimental design with the model of a pre-test post-test control group design framed within social constructivism theory. The participants for the study were Form 1E, 2D and 3B (n = 95) students in experimental school and Form 1D, 2C and 3D (n = 126) students in control school who participated in the topics of Safety in our environment, Balance of nature and Coordination in living things. Data were collected using a structured questionnaire and were analysed using a paired sample t-test technique. The findings show that the use of PBL increased the mean scores from pre-test to post-test on motivation in terms of the T/L materials that was statistically significant at $p = .00$ with a large effect size ($e^2 = 0.13$) compared to traditional methods that was not statistically significant at $p = .51$ with no effect size ($e^2 = .00$). Moreover, the use of PBL increased students' scores in students' motivation in terms of assessment activities from pre-test to post-test that is statistically significant at $p = .00$ with a large effect size ($e^2 = 0.14$) compared to the traditional methods that was not statistically significant at $p = .52$ with no effect size ($e^2 = .00$). The study recommends a continuous use of learner-centred approaches like PBL in learning Biology so as to increase motivation.

Keywords: problem-based learning, students' motivation, assessment activities, teaching and learning materials.

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1.0 Introduction

Motivation is one of the fundamental drivers for students' learning. Students work better and bring positive outcomes in learning process if they are interested and motivated to learn (Putra & Dewi, 2018). Studies have shown that the number of students who opt to study science subjects has been declining in Tanzania secondary schools (Mkimbili, 2018; Ndalichako & Komba, 2014; Nyamba & Mwanjombe, 2012). Lack of motivation in learning science subjects amongst students has been one of the reasons the decline (Ndalichako & Komba, 2014). Other factors include a shortage of science teachers and laboratory facilities; lack of teaching and learning materials; irrelevant assessment activities; and poor learning environment (Kasuga, 2012; Nyamba & Mwanjombe, 2012). It has been documented that lack of teaching and learning (T/L) materials and use of traditional assessment methods are linked to low students' motivation in science subjects after the adoption of the competence-based curriculum (CBC) (Kitta & Tilya, 2010; Mkimbili, 2018). This is because the use of traditional teaching methods provides less opportunities of using T/L materials and assessment activities. With the inception of CBC, problem-based learning (PBL) has been made an integral part of the instructional processes. PBL is a form of learner-centred approach that facilitates learning using problem as a starting point of learning (Bokonjic et al., 2009). It is believed to be powerful and effective approach compared to traditional teaching approaches in motivating students through using various T/L materials and learner-centred assessment activities (Balim et al., 2016). The roles of T/L materials and assessment activities in students' motivation in PBL are discussed in the following sections.

2.0 Teaching and Learning Materials and Students' Motivation in PBL

T/L materials are fundamental vehicles for learning to take place. It is important for teachers to use relevant T/L materials in their teaching in order to motivate students and provide independent learning (Edori, 2014; Jeong & Hmelo-Silver, 2010; Shabiralyani et al., 2015). It is therefore necessary for teachers to know how to motivate their students using the available T/L materials. If the materials used are not authentic, they are liable to make students bored and loose interest in the subject matter (Shabiralyani et al., 2015). Sun (2010) found that students can be motivated to learn the subject when using visual and authentic T/L materials. T/L materials improve learning outcomes and motivation (Busingye & Najjuma, 2015; Bušljeta, 2013). Studies have indicated that teachers do not use the available T/L materials and that negatively affects students' motivation in their subjects, leading

to poor performance in their respective subjects. For example, a study conducted in Uganda indicates that though the teaching materials were available in schools there were not utilised (Busingye, & Najjuma, 2015). Also, there was uneven distribution of the T/L materials between urban areas and rural areas. The use of T/L materials depends on the teaching method employed. According to Putra and Dewi (2018), PBL enhances students' ability to analyze the material by challenging them to learn, work together in groups and find solutions to real problems curiosity and analytical skills. Furthermore, they suggest that such curiosity can be enhanced through PBL to attract students to learn by presenting them with interesting problems. The use of PBL insists learning in the context of real-world, authentic through problems and projects, inquiry, discovery, and invention as opposed to traditional methods that concentrate on learning the facts, drill and practices, rules and procedures (Putra & Dewi, 2018).

Ajoke (2017) found that the T/L materials such as film strips, flipcharts, cartoons, slides, flashcards, posters and newsletters motivated students to learn the subject and increased their performance. The study further elaborated that the materials make learning process interesting, practical, realistic and appealing. They enable teachers and students to participate actively and effectively in lesson sessions. Kochhar (2012) found that T/L materials assisted teachers in presenting lesson logically and sequentially to the learners and hence motivated them to learn the subjects. Oluwagbohunmi and Abdu-Raheem (2014) and Jekayinfa (2012) found that T/L materials aided explanations and make the process of learning easier to be understood to learners. Kochhar (2012) suggested that teachers need to find necessary T/L materials for instruction to supplement what textbooks provide in order to broaden concepts and arouse students' interest and motivation.

Afolabi and Adeleke (2010) identified that non-availability, inadequacy and non-utilisation of the T/L materials as the result of teachers' poor knowledge due the use of lecture method. Kizito (2016) reported that the use of improvised T/L materials reduced the misconceptions in learning Physics lessons in Rwanda. Furthermore, the study found that students from schools which used T/L materials performed better than those in which T/L materials were not used. The schools with T/L materials used learner-centred methods while schools without T/L materials used the traditional methods in teaching such as lecture. Bušljeta (2013) found that T/L materials if used effectively bring motivation to students; arouse students' interest; clarify, interpret and compare important concepts,

phenomena and events; promotes better understanding and development of different skills and attitudes; promote teacher-student and student-student communication and interaction. In PBL the T/L materials are compulsory (Edori, 2014). During the stage of searching for information, students either individually or in groups require as many teaching resources such as books, computers, internet sources so as to find the solutions for the identified problems (Bokonjic et al., 2009).

3.0 Assessment Activities and Students' Motivation in PBL

The second aspect that plays part in motivating students to learn science subjects including Biology is assessment activities. Assessment is the process of collecting information on students' achievement in the learning process (Kitta & Tilya, 2010; Mkimbili, 2018). One of the salient features that were added in the CBC was the use of learner-centred assessment methods (Kitta & Tilya, 2010). For example, the assessment methods that were suggested to be used in the CBC are oral tests, self-assessment, peer-assessment, portfolio, performance assessment and written reports (Kitta & Tilya, 2010; MoEVT, 2005). In many classrooms teachers have been using the outdated types of assessment that for one part has been a cause for the students to lack motivation in learning science subjects. For example, the study by Kasuga (2012) found that the assessment methods which were required to involve learners such as self-assessment, written report, essays and practical tasks were rarely used. Furthermore, even the assessments that were done were separated from the teaching and learning process contrary to what the CBC of 2005 recommends.

Assessments are highly salient elements that one can use to establish motivational climate during the teaching and learning process (Mkimbili & Kitta, 2019; Stefanou & Parkes, 2003). Researchers from various fields including education have suggested that assessment has the potential to affect learners' behaviour in aspects of cognitive strategy and motivation. One of the factors that have contributed to lack of motivation among students regarding assessment activities is the teaching method employed in classroom lessons delivery. The uses of traditional teacher centred methods have found to have less value in motivating students regarding the assessment activities conducted (Kasuga, 2012; Mkimbili, 2018). Traditional teaching methods have adopted the use of pen and pencil type of assessment that provides less opportunity for the students to own the learning process through assessment activities. One of the LCA that has shown to

motivate students in learning science subjects regarding assessment activities is a PBL approach.

Assessment in PBL is a key towards assessing the process itself together with the outcomes. When learning becomes the focus and ultimate goal of students' achievement and motivation assessment plays a key role (Schuwirth & Van der Vleuten, 2011). In this study, learner-centred assessment is a process of gathering and discussing information from many different sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experience gained using PBL (Jamieson et al., 2017). PBL accommodates various forms of assessments such as portfolio, self-assessment and peer-assessment. These forms of assessment are very important and are required to reflect the various facets of self-assessment (Tai & Yuen, 2007). Through using peer-assessment and self-assessment in small group interaction, students become more independent and problem solvers (Hung et al., 2008). According to Boud (1988), there are three major features of assessments that have been emphasised in PBL. The first feature is a careful specification of learning objectives/competences and criteria for assessment. In PBL, specifications are mandatory at all levels of the learning process as the content is not indicated independently of what teachers choose to include as problems (Van der Vleuten & Schuwirth, 2019; Jamieson et al., 2017). The second feature is that in PBL assessment is done as a process rather than a measurement activity. The notion of assessment as essentially the task of ascertaining what has been learned at the end of a course (summative assessment) is challenged by PBL (Jamieson et al., 2017). The third feature of assessment in PBL is that assessment is for the benefit of student learning. Assessment in PBL and with reference to the CBC is an activity which aims at learning not just for the sake of accreditation of achievements. This aim of assessment is emphasised in PBL as it can enhance students' learning (Mkimbili & Kitta, 2019; Van der Vleuten & Schuwirth, 2019).

Combining the two aspects of T/L materials and assessment activities in the context of Tanzania, one can note that the two aspects are the salient features of CBC adopted in 2005. Assessment activities suggested in the CBC are learner-centred such as self-assessment, peer assessment, oral assessment, written report and portfolio. These assessment activities have been associated with various T/L materials that have been documented in the CBC (MoEVT, 2005). Problem-based learning approach has been articulated to be one of the most learner-centred

approaches that have been indicated in CBC for motivating students (MoEVT, 2005). The motivation power of PBL is due to its ability of using various T/L materials and assessment activities compared to other teaching methods. The necessity of T/L materials in the CBC triggered the government in equipping all schools with T/L materials such as books, computers and its facilities such as internet, CD, videos and others. These efforts are evidenced in the SEDP I (2004-2009) and SEDP II (2010-2015). Despite all efforts done by the government in making sure that students are attracted to opt for science subjects, studies have found that the number of students opting science subjects has been declining over the years (Mkomele, 2015; Mbwile, 2020; Ndalichako & Komba, 2014). Studies conducted by Kasuga (2012) and Athuman (2017) on teaching and learning approaches used in teaching and learning Biology revealed that the predominant teaching and learning methods used by teachers were traditional and teacher-centred. Teachers failed to promote student-centred learning procedures such as observations, generation and testing of hypotheses through experimentation, discussion of findings from observations and experiments and hence students were remained unmotivated to learn science. It is from these bases that this study was designed to examine the influence of PBL on motivating students as a result of the T/L materials and assessment activities in Biology in Tanzania's schools.

4.0 Theoretical Framework

The study was guided by the social constructivism theory. The theory stresses that knowledge is socially constructed by individuals through interaction. The theory was founded by Vygotsky in 1978 who postulated that people construct knowledge or perspectives of the world through interaction with others. The theory put emphasis on collaboration and cooperation in learning where learners get opportunity to gain knowledge from other students. The reason behind this theory is that different people have different understandings about the world (Richardson, 2003), resulting from their backgrounds (Phillips, 2000). The theory was appropriate for the current study because PBL requires collaboration through group discussions during the journey of solving the identified problem. The collaboration in PBL according to this study requires the teaching and learning materials that are regarded as the hubs for solving problems. Also, when using PBL, assessment is done collaboratively between students themselves and the teacher.

5.0 Purpose and Research Questions

The study examined the influence of PBL on students' motivation in learning Biology in Tanzania in the aspects of the T/L materials and assessment activities. It addressed the following questions:

- i. Is there a significant difference in motivation between students who were taught using PBL and those who were taught using traditional methods in terms of the T/L materials used?
- ii. Is there a significant difference in motivation between students who were taught using PBL and those who were taught using traditional methods in terms of the assessment activities done?

6.0 Methodology

6.1 Participants, Design and Data Collection Methods

The participants for the study were Form 1E, 2D and 3B (n = 95) students in experimental school; and Form 1D, 2C and 3D (n = 126) students in control school who participated in the topics of Safety in our environment, Balance of nature and Coordination in living things respectively. The selection of streams was based on small number of students per stream as it necessitated implementing PBL easily as compared to a stream with large number of students. The study employed a quasi-experimental design using non-equivalent group design (pre-after with control design) of the experimental design (Cohen et al., 2018). Creswell (2014) describes that the pre-test-post-test non-equivalent control group design of the quasi-experimental as the one in which the researcher assigns groups to the experimental and control conditions, administer a pre-test to both groups, conduct treatment to one group and then provide a post-test to both groups after the treatment. Several advantages are inherent with this design one being the ability to use the existing (classes) in normal classroom settings. A quasi-experimental design was used in this study because it was not possible to randomly assign the students to different conditions in the study context.

6.2 Training of Teachers on the Use of PBL and Its Implementation

Training of teachers was done for two days in order to equip teachers with the use of PBL in motivating students in the selected topics. The training was guided by the materials prepared by the researcher on stages of PBL as suggested by Bokonjic et al. (2009). After the training, there was one trial session of implementation for each topic in classroom that aimed at improving the

implementation after they had been given feedback. Teachers demonstrated a high degree of mastering PBL ready for implementation. Implementation of PBL for this study involved several activities towards its accomplishments. The PBL was incorporated in the lesson plans in a stage of lesson development as shown in Figure 1.

Stages of PBL	Time (m)	Activities	T/L Materials and Assessment Activities
Clarifying terms	5	Students in small groups were to draw a table in the selected exercise book with four columns, namely; <i>Facts in the text, problem, hypotheses/explanation</i> and <i>learning objectives</i> . -The text with the problem to be identified and be solved was then introduced to students, and unknown terminologies were to be explained and clarified. After this the facts were to be presented in the column “facts in the text”. -the teacher guided the students in small groups to clarify the terms present in the problem.	Textbooks, supplementary books, charts, manila sheets, videos, CDS Self-assessment, peer assessment, oral assessment
Defining the problem	5	Students conducted small group discussions of what the problem is and which methods can be used to find the solution. The problem was then written down in the “problem” column on the exercise book. Teacher was to guide students to discuss in small groups	Self-assessment, peer assessment, oral assessment
Brainstorming	5	Students conducted another small group discussion in which they used their prior knowledge to come up with ideas for different hypotheses to explain the problem. It was in this step where all students were encouraged to speak their mind and all ideas speculated were valued and noted.	Textbooks, supplementary books, charts, manila sheets, videos, CDS
Hypothesis/ explanations	5	A review of step two and three was carried out and different possible explanations of the problem were given, eventually leading up to one final structured hypothesis, which is then written down in the “hypotheses/explanation” column. The teacher guided students in discussion and encouraged them to use various T/L materials.	Textbooks, supplementary books, charts, manila sheets, videos, CDS
Learning objectives	5	When the hypothesis/explanation is chosen and formulated the students agreed on achievable and comprehensible learning objectives for the task. These learning objectives were written down in the “Learning objectives” column. The teacher guided students in formulating learning objectives.	Textbooks, supplementary books, charts, manila sheets, videos, CDS
Searching for information	35	The search for information was done individually and in small groups with emphasis on mutual learning	Textbooks, supplementary

Stages of PBL	Time (m)	Activities	T/L Materials and Assessment Activities
		objectives. This provided the students with a more profound knowledge regarding the problem they are working on the teachers encouraged students to use various source of information found in school in order to solve the problem	books, charts, manila sheets, videos, CDS Self-assessment, peer assessment
Synthesis	15	During this step the members of the group shared the results of their individual findings with each other using various forms of assessment.	Self-assessment, peer and oral assessment
Feedback	5	Feedback was given both from the students and the teacher, regarding their individual and group process, the organisation of the task, and the teacher's guidance. This was done with the aim of improving the work process for the next session.	Self-assessment, peer assessment, oral assessment

Figure 1: Lesson Plan

Before implementation of PBL in experimental school and traditional methods in control school in the selected topics, the researcher administered a questionnaire to students in both schools (pre-test). Thereafter implementation of PBL was conducted in an experimental school and traditional methods in control school. After completing the topics, there was administration of questionnaire to students (post-test). In control school, the teachers used the lesson plan format suggested by the Ministry of Education, Science and Technology.

6.3 Reliability, Reduction of Threats to Internal Validity and Data Analysis Procedures

To test the reliability of questionnaire items, Cronbach Alpha (α) was computed whereby the value for T/L materials with six items α was 0.79 and for assessment activities with eight items α was 0.82. In order to avoid the threats to internal validity, the researcher dealt with issues of history, maturation, mortality, testing, instrumentation and design contamination. Students in experimental school and control school were taught using the same syllabus. The national examination results of Biology for three consecutive years for the two schools were relatively the same. The implementation was done within eight weeks to complete the topics selected. In the present study, seven students dropped down but their tests were removed from the analysis. Also shortening the time for implementation where eight weeks were used from pre-test to post-test to avoid dropping out from the implementation. Students were not informed on the presence of pre-

test and post-test. The test items between pre-test and post-test were the same. The scorers were the same using the same marking guide and rubric. The control group and experimental group were not in contact as they were 50 Km apart. Data were analysed with the help of Statistical Package for Social Sciences (SPSS) Version 24. The paired t-test was computed to find out the differences in students' means scores between pre-test and post-test at significance of 95% ($p < 0.05$). To measure the effect size of the mean, eta squared (e^2) value was computed. The interpretation of effect size is according to Cohen et al. (2018): 0.01 = small effect size; 0.06 = medium effect size; 0.14 = large effect size.

7.0 Findings

7.1 Students' Motivation towards Teaching and Learning Materials in PBL

The study aimed to assess the extent to which students were motivated regarding the T/L materials that were used in implementing PBL in the selected topics in experimental school. In control school, traditional teaching methods were used. The study employed a pre-test and post-test using a structured questionnaire. The descriptive results of the findings are summarised in Table 1.

Table 1: Students' Motivation towards Teaching and Learning Materials

	Experimental School				Control School			
	Pre-test		Post-Test		Pre-Test		Post-Test	
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
My Biology teacher uses learning materials that increase my interest to learn biology	2.66	1.499	3.88	1.262	3.63	1.430	3.48	1.349
My Biology teacher makes many different learning resources available for me to use hence increase the interest to study Biology.	2.62	1.362	3.95	0.982	3.52	1.361	3.39	1.156
I like when my Biology teacher allows maximum use of learning materials.	2.29	1.081	3.77	1.207	3.34	1.387	3.53	1.250
The teaching materials used encourage me to search for more resources.	2.38	1.204	3.79	1.071	3.35	1.410	3.26	1.253
The teaching materials available encourage independent learning.	2.22	1.113	3.74	1.084	3.50	1.251	3.56	1.255
Generally, the teaching materials used in learning Biology increase interest in learning Biology and other science subjects.	2.22	1.213	3.98	1.072	3.98	1.258	3.75	1.269

Findings in Table 1 show that in experimental school there were positive changes of motivation towards the use of T/L materials from pre-test to post-test. A paired sample t-test was conducted to assess student’s motivation towards T/L materials in experimental school. The results indicate that there was a statistically significant increase of scores from pre-test ($\bar{x}=2.88$, $SD=4.274$) to post-test ($\bar{x} = 4.622$, $SD = 4.316$) at $p = 0.00$. The eta squared statistic was 0.13. In control school, the descriptive findings show that there were positive changes of students’ motivation towards T/L materials from pre-test to post-test for two attributes, however, the changes were not statistically significant at $p = 0.51$.

7.2 Students’ Motivation towards Assessment Activities in PBL

The second aspect this study addressed was to assess the extent to which students were motivated as a result of the assessment activities used during implementation of PBL in experimental school and traditional methods in control school in the selected topics. The study employed a pre-test and post-test using a structured questionnaire. The descriptive analysis of the findings is presented in Table 2.

Table 2: Student’s Motivation towards Assessment Activities in Biology Lessons

	Experimental School				Control School			
	Pre-Test		Post-Test		Pre-Test		Post-Test	
	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD	\bar{x}	SD
I am interested with assessing my own work.	2.80	1.310	3.85	1.167	3.67	1.308	3.25	1.343
I like when the teacher asks each to prepare a report of what we did in the whole topic.	2.55	1.192	3.72	1.191	3.36	1.317	3.38	1.192
The teacher gives opportunity for us to write a report/essay regarding our work.	2.57	1.235	3.73	1.153	3.30	1.298	3.32	1.122
I like when each one assesses the work of the other and provide feedback.	2.43	1.155	3.78	1.109	3.44	1.330	3.54	1.211
I like to be assessed while I do the practical activity or presentation.	2.28	1.182	3.94	1.128	3.72	1.360	3.60	1.260
I normally do Biology assignment before doing other activities.	2.22	1.084	3.81	1.123	3.44	1.330	3.51	1.231
I am always punctual in collecting Biology assignment.	2.09	1.102	3.81	1.075	3.36	1.515	3.56	1.223
The assessment activities provided by the teacher increase interest to study Biology and other science subjects.	2.28	1.260	4.06	1.119	3.92	1.217	3.66	1.227

Findings in Table 2 for the experimental school show that there were positive changes in mean scores from pre-test to post-test. In order to justify if the changes in mean scores were statistically significant, a paired sample t-test was conducted to assess student's motivation towards assessment activities in experimental school. The results indicated that there was an increase in mean scores from pre-test ($\bar{x} = 3.85$, $SD = 5.177$) to post-test ($\bar{x} = 4.72$, $SD = 5.494$). This increase in the mean scores was statistically significant at $p = .00$ with a large effect size ($e^2 = .14$). In control school as indicated in Table 2, the findings show that there were positive changes in the mean scores from pre-test to post-test for five attributes of motivation towards assessment activities, however, was not statistically significant at $p = 0.518$.

8.0 Discussion

The findings of this study revealed that students were more motivated to learn the selected topics as a result of using T/L materials that were used during implementation of PBL. There was an increase in motivation level that was statistically significant at $p = .00$ with a large effect size ($e^2 = 0.13$). This increase in motivation among students was the result of using PBL that required students to use various sources of information towards finding solutions for the identified problems. When using PBL in the step called *earching for information* normally students used various resources found in the school environment such as books, videos, charts, manila sheets and others. The uses of T/L materials are limited to the methods employed in teaching and learning process. When one adopts the use of traditional teaching methods the possibility of using the T/L materials that are relevant and readily available is doubtful (Edori, 2014; Jeong & Hmelo-Silver, 2010; Shabiralyani et al., 2015). This is evidenced from this study that students were not motivated with the materials used to an extent that at post-test the level of motivation was not statistically significant at $p = .51$. Furthermore, students become bored if the materials used are not attractive and are not diverse like using the same textbook in teaching and learning. Literature indicates that the use of T/L materials that are diverse and readily available motivates students to learn more the subjects and perform better in their examinations (Ajoke, 2017; Busingye & Najjuma, 2015; Bušljeta, 2013; Kochhar, 2012; Putra & Dewi, 2018). The results by Uenishi (2019) showed that students were motivated as a result of using T/L materials, had strong feeling of the importance of English learning and had strong awareness of developing English ability after studying each unit.

The need for T/L materials has been an agenda from the curriculum policy up to implementation stage. For instance, in Tanzania both the SEDP I (2004-2009) and SEDP II (2010-2015) emphasised on improvement of the T/L materials in secondary schools. Each school was planned to have laboratories with relevant equipment required for experiments for Chemistry, Biology and Physics. Also, each school was to have libraries with sufficient resources such as books. These facilities have been successful though the materials are not enough. The Basic Education Statistics of Tanzania indicates that there were 2,998, 3,220 and 2,886 laboratories for Biology, Chemistry and Physics respectively for Form I-IV (BEST, 2019). It also shows that there were 1,165, 444, 1,060,348, and 1,079,545 Biology, Chemistry and Physics textbooks respectively for Form I-IV while there were 145,334 laptops and 63061 desktops in secondary schools. One of the huddles for teachers and students is that in spite of the presence of the materials they are not used instead they are stored in shelves and store rooms. There are various textbooks that are present in schools especially for science subjects but if you ask teachers and students why are they not using them? The reason is that they use one book that is approved by Tanzania Institute of Education (TIE) so there is no need of using supplementary books and other available materials. The findings of this study contribute on the importance of using the available materials so as to motivate students in learning Biology subjects and other science subjects. It is worthless if the government will continue supplying materials in schools while they are not used. The government is making effort in supplying electricity in schools even in rural areas aiming at simplifying the use of ICT that is very useful in teaching and learning science subjects including Biology. This study calls for education stakeholders especially teachers to use teaching methods that will direct students to use various T/L materials present in schools in order to increase students' motivation like what the PBL has yielded in this study.

Regarding assessment activities, the findings of this study revealed that the use of assessment methods in PBL increased the level of motivation to students. The results indicate that students are motivated when they used self-assessment, peer assessment, written report and performance assessment. There is a statistically significant increase in the level of motivation as a result of using PBL at $p = .00$ with a large effect size ($e^2 = .14$). Using traditional methods calls for traditional assessment methods that do not motivate students as indicated in the findings of this study. In learner-centred approach the needs and interests of individual learners are given high considerations. Literature indicates that the use of learner-

centred assessment increases motivation to students (Kasuga, 2012; Kitta & Tilya, 2010; Mkimbili, 2018; Mkimbili & Kitta, 2019) while the use of traditional assessments has little contribution to motivation (Jamieson et al., 2017; Van der Vleuten & Schuwirth, 2019). For example, a study by Kasuga (2012) shows that teachers used traditional methods of assessment while implementing the LCA in Biology such as tests and assignments that hindered students' motivation in learning process. He further found that even the traditional methods such as tests and quizzes which dominated the classrooms were not used frequently enough in Biology. Learner-centred assessments such as report, portfolio, self-assessment, peer assessment and performance assessment were not used at all (Mkimbili, 2018; Mkimbili & Kitta, 2018). The use of learner-centred methods ensures integration of assessment in the teaching and learning process.

A key feature of learner-centred approach is that assessment is integrated in the daily teaching and learning process. In order to keep up with the changing needs of students especially in implementing the CBC and to effectively inform instruction, teachers must use a variety of assessment methods which are authentic. Traditional forms of assessment such as quizzes, standardised tests, and multiple-choice tests, have been most often used for determining student progress and assigning grades. Although traditional forms of assessment have value, research has shown that if they are misused or poorly designed, they may have detrimental effects on students' learning motivation.

9.0 Conclusion and Recommendation

Based on the findings of this study, it can be concluded that the use of PBL increased students' motivation because it embraces the use of various T/L materials and assessment activities as compared to traditional methods such as lecture method. The use of traditional teaching methods has less value to students' motivation due to less emphasis in using T/L materials and assessment activities in teaching Biology subject. The study recommends a continuous use of learner-centred approaches like PBL in learning Biology in secondary schools so as to increase students' learning motivation.

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Enhancing Chemistry Students' Retention of Organic Chemistry through Intervention with Cooperative Learning in Rwanda

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Abstract

This study was exploring the potency of the Cooperative Learning (CL) approach in enhancing the knowledge retention of students in organic chemistry. The study employed a quasi-experimental design with two groups; students under the treatment group were taught using CL while those in the comparison group were taught by Conventional Teaching Methods (CTM). Two hundred and fifty-seven (257) senior secondary five (S5) chemistry students (99 males and 128 females) purposively sampled with the inclusion criteria of day schools from the target population in two districts of Rwanda, constituted intact classes that participated in the study. Data was collected using the Chemistry Achievement Pre-test (CAPE), the Chemistry Achievement Test (CAT), and the Chemistry Achievement Retention Test (CART) instruments with a coefficient alpha of .824. Comparison of means, standard deviation, and percentages were employed for data analysis at 0.05 alpha level. The results revealed that the students who were taught organic chemistry with the use of CL performed significantly higher than those who were taught the same subject with conventional teaching methods (P value=0.000<0.05). By this P -value, the null hypothesis that there is no significant difference in the retention mean scores of students taught organic chemistry with CL and those taught using CTM in the CART is therefore rejected. It was suggested among others that chemistry educators should implement a cooperative learning approach to effectively and efficiently teach organic chemistry to

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promote conceptual learning that enhances students' learning retention over rote memorisation.

Keywords: day secondary schools, cooperative learning, Chemistry education, knowledge retention, Organic Chemistry

1.0 Introduction

Organic chemistry is important because it is the study of life and all of the chemical reactions related to life although some take it as a challenging subject that discourages learners and associate it with low retention of the learned materials. Chemistry is the subdivision of science that deals with the identification and transformation of the constituents of which material is composed, whereas organic chemistry focuses on carbon-based compounds (Cooper et al., 2019). Organic chemistry involves the study of structures, reactions, and properties of organic compounds which in the human body include proteins, carbohydrates, and other macromolecules that are essential in maintaining life. Organic chemistry teaches students the chemical composition of organic compounds, their reactions, and much more (O'Dwyer & Childs, 2015). It involves more than memorising relevant information, but instead the development of the conceptual understanding of the structures and reactions. Knowledge retention in organic chemistry allows students to pursue careers as chemists, physicians, pharmacists, and chemistry educators among other jobs in the medical field (Taylor et al., 2017).

Organic chemistry courses cover a wide range of topics that require conceptual understanding and knowledge retention which might be related to students' perception that the course is difficult (O'Dwyer & Childs, 2015). Organic chemistry is considered a difficult subject within the branch of chemistry, this causes an obstruction to learners from continuing with studying the subject matter (Salame et al., 2020). Both learners and instructors find it very difficult to absorb and explain some of the materials in an educational setting (Omwirhiren, 2016). This has made learning organic chemistry increasingly difficult over time and the need to address this problem by employing innovative teaching methods that may boost students' understanding and stimulate their interest in learning organic chemistry and retain the learned material for longer.

Students' knowledge retention has become a problem for the educational community and especially in organic chemistry concepts; consequently, an effective program for student retention could be applied to improve learning among learners. Organisations could work to provide students with a significant learning atmosphere, which enables learners to dynamically take part in instruction processes and paves the way for advanced academic and social abilities (Taylor et al., 2017). No two students are alike, to help them succeed at a high level requires innovative thinking and every effort must be made so that they retain the learned materials (Ogunkunle & Henrietta, 2014).

Besides, the choice of the suitable instructional methodology describes good teaching techniques and enables effective learning. Consequently, the instructor would use a variety of instructional methodologies to inspire learners to increase their retention abilities. This is because the approach and method in which the educator gives instructions can inhibit or help the student's capability to use different skills to reflect and solve problems (Ejidike & Oyelana, 2015). Conversely, science teaching, precisely chemistry education, over the years has been taught mostly using old-style methods of delivery, an instruction that does not allow learners to experience other methodologies to learn (Byusa et al., 2020). The use of the old-style teaching approach in education only allowed students to understand the subject content at the basic level as they frequently memorising the science notions without understanding the tangible meanings, hence, learners do not conceptualise the content very well and fail to retain it for longer (Horowitz et al., 2013).

Furthermore, Çolak (2015) highlighted that there are improved ways of learning that are currently being acknowledged than through the lecture methods of training. Also, many of the lecture methods of imparting knowledge are ineffective for students' ability to achieve and retain substantial concepts. The learning environment through these old-style methods is often passive rather than active. These traditional approaches do not tend to raise students' retention (Raja & Khan, 2018). This might be a course for the reduced knowledge retention in chemistry among students of secondary schools in Rwanda.

To curb the above-mentioned problem; a cooperative learning instructional approach may be employed in teaching and learning organic chemistry. CL is an instructive approach that aims at organising classroom activities into academic

and social experiences; arranging students into a group, structuring positive interdependence, maximising the learning and satisfaction that affect working on a high-performance team. A huge growing body of research approves CL to be effective in teaching and learning organic chemistry (Canelas et al., 2017; Gülşen & Gökhan, 2013; Taylor et al., 2017; Tran et al., 2014).

A CL group generally comprises four to six students which enables everyone to contribute to a clear planned task depending on the size of the class. Scholars within small CL groups are more motivated to share ideas and resources and to distribute the work when suitable to complete the task; also students benefit academically and socially (Cornelius-Ukpepi et al., 2016). According to Pateşan et al. (2016), CL develops higher-order thinking skills among students, improves their interpersonal relations, their motivation, and also, their peer relations motivated by the increase of their retention abilities.

Comparative to students taught by an instructor-centered lecture who take individual assignments, with competitive grading; students taught by CL tend to show higher knowledge retention, greater perseverance through improvement, a high-level of thinking critically and reasoning with a deeper understanding of learned concepts, focused on the task and less disrupting behavior in class, absence of anxiety and pressure, motivated intrinsically to learn, achieve and retain, increasing the spirit of supporting relationships with classmates, and with constructive attitudes toward the subject areas (Pateşan et al., 2016).

There are many reasons why CL works as well as it does. The awareness that students learn more actively than by simply listening has long been recognised by psychologists and effective science-educators and CL is by its nature an active methodology (Ghufron & Ermawati, 2018). In addition to the above, CL enhances learning in numerous ways. In case weak students work in a cooperative learning group, they keep going without working individually and tend to give up when getting stuck (Korkmaz & Tay, 2016). Also, strong students while explaining and providing clarification on the given task to their colleagues; sometimes find gaps in their understanding and fill them in.

The uniqueness of chemistry makes it occupy a pride of place in the technological and scientific progress of any nation. Unfortunately, chemistry is widely perceived as non-concrete and challenging by both students and educators and as a result,

the majority of scholars essentially engage in rote learning (Mahdi, 2014). Besides, the prevailing instruction methods do not actively engage students in the learning progress (Raja & Khan, 2018), and that could be the reason for students' difficulty in meaningful learning and internalisation of chemical concepts. Despite efforts of chemistry educators and education policymakers to improve students' learning outcomes, students are still showing weaknesses in meaningful understanding and internalisation of chemical notions, leading to low performance in the job market (Musengimana et al., 2021; World Bank, 2018).

Byusa et al. (2020) observed that Rwandan teachers still rely heavily on didactic methods and teach science as a body of knowledge needed only to be memorised for success in examinations and which the students often forget shortly afterwards. Also, the challenging and abstract nature of learning some notions is so stable and coherent internally that the conventional teaching methods have little effect on them. Since the goal of instruction is to improve educational practices that will facilitate learning and reduce rote memorisation, chemistry instruction should deliberately stress effective knowledge transfer to the learner most efficiently and purposefully (Ejidike & Oyelana, 2015; Sibomana et al., 2021a).

Moreover, teachers need to create a suitable learning environment by employing strategies that encourage active student participation in identifying issues, concepts, and relationships which will be far more effective than the traditional practices whereby students are passive receivers of information with no cognitive participation in the learning progression (Sibomana et al., 2021a). Furthermore, the most important derivatives of learning are knowledge retention and application to real-life situations outside the classroom by applying chemistry for the sustainable development of Rwanda, Africa, and the world in general (Gurib-Fakim & Eloff, 2013). According to Ejidike and Oyelana (2015), to effectively learn a concept, learners may carry out cognitive procedures that construct relationships among elements of the information in the concept to promote conceptual learning over rote memorisation.

The mentioned processes take time and require that students interact with colleagues, materials, and resources over time through hands-on and minds-on with a cooperative learning approach (Cornelius-Ukpepi et al., 2016). Due to the very dynamic nature of science and to catch up with the new world order of

scientific and technological innovations, there may be a drastic change in the method of presentation and delivery of individual concepts in chemistry classrooms and laboratories (Adebayo & Judith, 2014); this could be achieved through the use of innovative and student-centered approaches in handling abstract and difficult concepts. It has therefore become a pedagogical necessity to search for an innovative, student-centered approach such as cooperative learning which could scaffold the training and confirm that specific aspects of notions are meaningful, internalised, and retained. Thus, cooperative learning could actively involve the learners in the learning process, and perhaps make the learning more meaningful and enjoyable.

In Rwanda, different factors were reported to be affecting students' achievement in mathematics and science-related subjects among secondary school students particularly day school students known as Twelve Year-Basic Education (12YBE) (Sibomana et al., 2021c). This underachievement and low retention of the learned materials is a problem from the socio-economic point of view since it leads to the wastage of economic and human resources. Similarly, it causes emotional unrest and psychological tension to students (Higher Education Council, 2014). Students' underachievement and low retention cause problems not only for them by feeling boredom, alienation, and disconnection with schooling but also for their parents who may lose confidence in their children's schooling and these problems are linked to the ineffective teaching methods (traditional lecture method) which do not enhance students' academic achievement and retention (Byusa et al., 2020; Ntawiha et al., 2020).

A study by Sibomana et al. (2021b), revealed that cooperative learning did not show a statistically upgraded retention and that was due to the nature of the test used that promoted only lower-order thinking and recall; then recommended a study where the Chemistry Achievement Retention Test (CART) include higher-order thinking skills and use questions that require free responses to measure knowledge retention via cooperative learning. Catering for the above and since in the modern era, science educators are making intense changes in curriculum and instructions, this study as a continuance of this practice aimed at investigating the effects of cooperative learning on students' academic retention in the Rwandan secondary schools with the following research hypothesis:

Ho: There is no significant difference in retention mean scores of students exposed to cooperative learning instructional strategies and those taught with conventional teaching methods in chemistry.

2.0 Research Methodology

The study was conducted under social constructivism theory by initiating learning by scaffolding and employed a pre-test, post-test control group and quasi-experimental design. The sample constituted two hundred and fifty-seven (257) senior five (S5) chemistry students (99 males and 158 females) from ten public secondary day schools known as Twelve-Year Basic Education (12YBE) which have chemistry as one of the core subjects in the advanced level of secondary school. The cluster random sampling was used to choose the sample size with the inclusion criteria of day schools into non-equivalent intact classes and randomly assigned each one to the experimental and control groups. A Chemistry Achievement Retention Test (CART) instrument designed by the researcher constituted of 35 questions about organic chemistry in senior five of secondary schools; the questionnaire has two sections; the first was composed of 10 multiple-choice items with four options (from A to D), one of which is the corrected answer, and the remaining three options are incorrect answers where students were asked to select the correct option by ticking the letter bearing it; the second section was composed of 25 questions that assess higher-order thinking skills and require free responses.

Thereafter, items were condensed into the lower and higher levels of the cognitive domain. Twenty-eight percent (28%) of items were at the lower level while seventy-two percent (72%) were at a higher level of the cognitive domain. The instrument was face and content validated by a team of subject experts from the University of Rwanda, College of Education (UR-CE). In a pilot study, the Chemistry Achievement Test (CAT) was administered in two schools from the non-participating schools and it yielded a reliability coefficient of .824.

Experimental Procedure

The unit of research and innovation granted ethical clearance at the University of Rwanda, College of Education (UR-CE) before data collection, and this one served to request authorisation to conduct data in the districts. The CAPE instrument was administered to the two groups as a pre-test to correct for initial differences in ability and ensure homogeneity in entry behaviour. The

experimental group was taught organic chemistry using cooperative learning (CL) by trained teachers who have been trained by the researcher for this purpose while students from the control group were taught using conventional teaching methods (CTM).

Teachers from the experimental group were trained on the effective use of CL focusing on the five most basic pillars of cooperative learning; individual accountability, positive interdependence, face-to-face promote interaction, group processing, and interpersonal and small group skills while their colleagues from the control group were using CTM where most of the time they were explaining and give notes to students and gave tasks to students in unstructured groups. Teachers were giving group tasks to students in case they want to rush to finish the content and did not give enough time to students to present their works.

The researcher made a follow-up of the teaching process and provided advice to experimental group teachers in case needed to be. The treatment took place concurrently in the sampled schools and lasted for twelve weeks while teaching three units of organic chemistry (alkanes; alkenes and alkynes; alkyl halides). Each lesson lasted 40 minutes and chemistry was taught seven periods a week. After treatment, the Chemistry Achievement Test (CAT) was administered and three weeks after the Chemistry Achievement Retest Test (CART) was done in all groups; after realising that this test did not show a statistically upgraded retention since it promoted only lower-order thinking and recall, we improved it by adding many questions (72%) that assess higher-order thinking and remained with 28% assessing lower-order thinking then re-administered the test two weeks after to check the students' level of the retention of the learned concepts. The data collected were analysed using SPSS version 23.00 and the hypothesis was tested at 0.05 level of significance.

3.0 Results

The results of the analysis are presented in Tables 1 to 3 as follows:

Table 1: Mean Scores and Standard Deviations of Groups in the CAPO, CAT and CART

Test	Group	N	Mean	SD	Std. Error	t-cal	P-value
CAPO	Experimental	128	44.33	7.79	.68	1.843	.238
	Control	129	45.42	6.92	.60		
CAT	Experimental	128	73.95	5.68	.50	15.9	0.000
	Control	129	62.2	6.15	.54		
CART	Experimental	128	71.24	5.10	.45	19.13	0.000
	Control	129	57.86	6.05	.53		

Table 2: Gain Scores of Students' Retention of Organic Chemistry Based on the Instructional Approaches

Group	Approach	N	Pre-test		Retention		Main gain score	
			Mean	SD	Mean	SD	Gain	Gain %
Experimental	CL	128	44.33	7.79	71.24	5.10	26.91	23.28
Control	CTM	129	45.42	6.92	57.86	6.05	12.44	12.04

The results in Tables 1 and 2 indicated that the retention mean gain score of students exposed to CL was 26.91 (23.28%) while the students taught with CTM obtained the retention mean gain score of 12.44 (12.04%). This shows that students exposed to CL had the highest level of retention mean gain in organic chemistry.

Table 3: Two Sample T-Test on Retention of Students Exposed to CL and CTM in the Teaching of Organic Chemistry

Teaching method	N	Mean	SD	Std. Error	t-cal	t-table	Df	P-value	Interpretation
CL	128	71.24	5.1	5.1	19.13	1.96	255	0.000	Significant
CTM	129	62.2	6.15	6.05					

The t-test as indicated in table 2, revealed that the students who were taught organic chemistry with the use of CL performed significantly higher than those taught the same subject with conventional teaching methods (P value=0.000<0.05). By this P-value, the null hypothesis that there is no significant

difference in the retention mean scores of students taught organic chemistry with CL and those taught using CTM in the test of retention is therefore rejected.

4.0 Discussion

The results of the t-test analysis on Chemistry Achievement Retention Test (CART) showed a significant difference in mean scores (Mean = 71.24; SD = 5.1) between students taught organic chemistry using cooperative learning in the experimental group and those taught the same topics using conventional teaching methods (Mean = 62.2; SD = 6.15). The results showed that the experimental group which had engaged in learning together produced higher overall improvement in scores on the CART than their colleagues in the control group (P value = 0.000 < 0.05). In this study, students in the cooperative learning group (experimental group), which involved higher participation in the process of learning, had greater long-term retention on CART than students in the comparison group because they were equipped with skills in terms of learning from each other's and elaborating ideas on the concept taught in the learning process. These findings validate the results of some earlier studies; Gupta and Hartwell (2019); Tran et al. (2014); Udu (2018); which indicate that cooperative learning promotes greater long-term retention of the learned materials and that the learning activities are based on divided learning tasks, learning by scaffolding, and learning in a socially conducive environment along with the student's involvement in the learning process, contributed to their gains in the retention on the CART in the experimental group. Students from the control group might have got low knowledge retention as they do their works alone without sharing with their peers while in the experimental group, students are part of the learning process and had time for individual study, then discuss the subject with their group mates in-depth and recapped the subject to present it; this is in accordance of King et al. (2019) who revealed that organic chemistry is not a subject that can be learned passively. It has also been found that learners with disabilities and learning difficulties in day schools face problems due to the lack of accessible instructional materials to assess the same curriculum as their colleagues.

5.0 Conclusion

Cooperative learning promoted higher levels of knowledge retention, a factor that evidenced the effectiveness of cooperative learning as an alternative instructional approach in the current wave of educational reform by enhancing students' knowledge retention among upper secondary schools in Rwanda. The cooperative

learning instructional approach (CL) was most effective in enhancing knowledge retention of organic chemistry while conventional teaching methods (CTM) were least effective. Furthermore, the cooperative learning approach boosted learners' spirit of cooperation, enabled learners to share their ideas with colleagues and work on their own, and finally develop self-assurance of being partners instead of co-competitors.

5.1 Recommendations

- i. Chemistry teachers and other science educators should adopt a cooperative learning approach in teaching organic chemistry and other difficult concepts since it stimulates learners' social interaction and lifelong learning that leads to students' knowledge retention.
- ii. Teachers could use the competences (classroom practice and behaviour at school) to assess their current level of performance, identify strengths and weaknesses, and plan to do and review improvements; this could guide them in the choice of the kind of CL model to use for instruction that enhances learners' knowledge retention.
- iii. Strengthening the inclusion and safeguarding in day schools through sharing of experience and best practices on how some day and boarding schools are supporting learners with disability and learning difficulties, how schools are working to ensure all children are protected, and how the school community is aware of inclusion and safeguarding.
- iv. Future studies should apply cooperative learning with many participants and in boarding schools to generate more evidence on its effects in the Rwandan secondary schools.

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Inquiry-Based Learning in Tanzania: Chemistry Teachers' Knowledge and Perceptions

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Abstract

The aim of the study was to explore chemistry teachers' knowledge and perceptions of Inquiry-Based Learning (IBL) in Ordinary level secondary schools in Iringa Municipality. The study had two objectives: (i) exploring chemistry teachers' understanding of inquiry-based learning in teaching and learning of chemistry in secondary schools and (ii) examining chemistry teachers' perceptions of the IBL and how it influences classroom practices. The study employed qualitative research approach and a case study design. Six secondary schools were selected for the study. A total of eight chemistry teachers were involved in the study. Data were collected using interviews and observation and analysed using thematic analysis. Findings revealed that chemistry teachers had different knowledge and perceptions of what IBL meant. In the first place, IBL was perceived as the inquiry-based learning implying a process of teaching where student is learning by doing. Secondly, IBL was perceived as a participatory method similar to discussion and demonstration. The findings revealed further that different contextual implementation of the IBL in line with the design of learning activities was attributed to teachers' beliefs towards the approach itself. Based on the findings the study concludes that; firstly, chemistry teachers differed in understanding of the meaning of inquiry-based learning which in turn reflected different interpretations and implementations in classrooms. Secondly, limited range of classroom activities were designed and prepared by chemistry teachers for students to learn by inquiry and therefore lower levels of guided and confirmation inquiry were implemented. The study recommends that in order to improve effective chemistry learning using IBL, chemistry teachers should share knowledge through established community of practices within the school settings to enable them transform their intellectual thinking and have a sense of self efficacy.

Keywords: Inquiry-based learning, professional development, teachers' perceptions

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1.0 Background

Inquiry-Based Learning (IBL) in science education learning has been a focus of most of the nations all over the world with the purpose of producing scientifically literate citizens (Kalolo, 2015; Silm et al., 2017). For the last two decades, scholars have been advocating for IBL to play an important role in science education (Costas, Olia & Eliza, 2018). In addition, the educational standards in the disciplines have increasingly emphasised the importance of IBL. For example, the National Research Council (2007) of Tanzania requires student to engage in the major practices that scientists employ as they investigate and build models and theories about the world (Levy et al., 2013). The argument is that IBL situates the learning of facts, concepts, and theories in authentic learning activities that involve students in disciplinary thinking. IBL is becoming more popular as scholars argue that it provides a diverse way for students to learn through problem based, projects and design based (Bodzin & Beerer, 2003; Branch, Alberta & Oberg, 2004). IBL has also internationally been recommended as an effective method to achieve learning goals for students in all levels of education (Zweers et al., 2019). In that regard, students must have personal experience with scientific inquiry and engage its practices in all fundamental aspects of science (Eltanahy & Forawi, 2019). IBL is a student-centred way of learning where students develop their own questions to examine, engage in self-directed inquiry that can involve diagnosing problems, formulating hypotheses, identifying variables, collecting data, documenting their work, interpreting and communicating results, as well as collaborate with each other (Silm et al., 2017). In addition, IBL engages students in investigations that place a great emphasis on posing questions, gathering and analysing data, and constructing evidence-based arguments with the teacher facilitating the learning process (Silver, Duncan & Chinn, 2007). IBL is more effective in terms of student achievement compared to more traditional, expository approaches of teaching and its aim is to stimulate students to adopt a critical inquiring mind, creativity, innovation, independent learning, collaboration and problem-solving aptitudes which are essential skills for individual survival in the 21st century (Dorier & Garcia, 2013). Given its perceived nature, IBL emphasises students-centred learning approach, which is inquiry-based therefore, it is at the forefront in promoting students learning (Barrow, 2006). In addition, the use of IBL has been found to be of beneficial for enhancing students' intrinsic motivation in which it accelerates the ability of students to learn (Eltanahy & Forawi, 2019). This is even affirmed by the previous researches across different domains, such as mathematics and sciences. Such studies suggest that strong

factual knowledge, as well as insight into disciplinary methods and reasoning processes are both crucial in developing a meaningful understanding of subject matter and the ability to solve problems (Voet & Wever, 2018).

Inquiry-Based Learning (IBL) has proved to be more effective in learning through the use of essential questions to frame out units, and well-structured activities that guide students' science learning, elicit their engagement, deepen their understanding and increase their achievement (Abdi, 2014). O'Brien, Persinger and Sahami (2015) found that IBL in particular helps to increase critical thinking, collaboration, and communication among the students in their learning. In Turkey, Kızılaslan, Mustapha and Yaşar (2012) observed that IBL enhances students' critical thinking abilities and help students to act as scientist through using scientific method while learning. Dorier and Garcia (2013) argued that implementation of IBL is useful in addressing the learners' activity, engagement and working cooperatively with peers.

Evidence from literature shows that inquiry teaching and learning of science in classroom is highly influenced by teachers' knowledge and perceptions of what inquiry-based entails. Consequently, that bringing directs implications in the design of classroom activities for learning. For examples, Voet and Wever (2018) argued that teachers' implementations of IBL appear to be solely determined by the knowledge they hold and their conceptions towards IBL which is strongly connected to the context in which they work. Research has further demonstrated that teachers' actions in classroom are largely in line with their beliefs, or tactic assumptions about their work in class (Ruben, 2009). In essence, beliefs are personal judgments, which make them more affective, evaluative and changeable in nature compared to knowledge they possess. These beliefs act as filters that ultimately screen, define, distort, or reshape teachers' decision making (Voet & Wever, 2018). Similarly, Eltanahy and Forawi (2019) argued that teachers' perceptions regarding the application of the inquiry instruction for teaching and learning science are vital in creating paradigm shift from traditional teaching and rely on IBL.

Previous researches have demonstrated that there are many factors that positively influence inquiry-based learning namely; teachers perceptions in adapting the main inquiry components when developing students' skills and learning outcomes, readiness for engaging themselves in learning in order to gain scientific

skills, science textbooks with content rich in theories, laws and experiments as well as science curriculum that include main areas of inquiry instruction in enhancing its implementation (Eltanahy & Forawi, 2019).

In the UK for example, Gerard, Linn and Matuk (2016) asserted that teachers' prior experience and beliefs affect the degree to which they can promote inquiry-based learning. This involves customising technology use in classroom, designing students-centred instructions and assessment activities embedded within the students' cognitive capabilities. Silm et al. (2017) argued that for an effective implementation of IBL, teachers must have refined pedagogical content knowledge for IBL encompassing proper knowledge orientations congruous with inquiry, effective learning strategies for implementing inquiry, well designed inquiry-based learning materials, and better techniques for assessing inquiry learning outcomes. A study based on Trends in International Mathematics and Science Study (TIMSS, 2007) indicated that teacher's level of experience is one possible predictor of utilising inquiry-based methods in classrooms. (Silm et al., 2017) supported that teaching experience positively related to beliefs in using traditional teaching approaches but not to beliefs in inquiry-based learning as modern ways to teaching and learning required for promoting inquiry thinking among learners.

In Indonesia, Andrini (2016) pointed out that IBL plays a significant role in helping students develop intellectually disciplined thinking skills by providing questions and get answers on the basis of curiosity as well as developing all potentials for students including the emotional and skills development. Thus, IBL can be applied as a successful learning approach in order to increase students' interest in science and understanding of the given concepts. IBL develops creativity of students and encourages the development of specific skills and interests as well (Hajric, Kajevic & Nuic, 2014).

In India, a recently study by Singh and Kaushik (2020) showed that students taught by IBL develop broad sense of thinking and they actively perform in the classroom. The use of IBL supports the 5E learning model by including students in Engagement, Exploration, Explanation, Elaboration and Evaluation in a more improved progress form compared to those taught by traditional method (Maro, 2013).

In Tanzania, Mkimbili and Ødegaard, (2020); Maro (2013) insisted that the use of inquiry learning in Biology subject encourages students' engagements in lessons and the overall learning process become activity oriented. Moreover, Tilya (2010) supported that the use of inquiry in experimentation in Physics subject provide learners with opportunity to try out, measure, calibrate and design procedures through which practical activities can be enhanced. Thus, the effective use of IBL creates intrinsic motivation for learners to take part in lesson and participate in knowledge creation.

Although previous studies have provided glimpses on how effective inquiry-based learning influences students' learning of science subjects, little knowledge is available in Tanzania context particularly to chemistry teachers regarding their knowledge and perceptions of IBL. Chemistry as one among the science subjects has broad integrated knowledge that requires teachers' possession of good understanding of the inquiry learning in order to help learners interact with content and instructional activities essentials for enhancing skills acquisition. However, it has been found that chemistry teachers do not apply the inquiry learning in their classrooms as much as expected due to lack of understanding and knowledge of inquiry among them and thus being the major impediment for not using IBL (Mafumiko, 2006). This is evidenced by Crawford (2013) who asserted that unclear definition of inquiry among teachers causes improper plan for teaching. This is coupled by insufficient materials and other laboratory equipment leading to inhibition of the inquiry learning cultures in schools (Luvanga, 2017; Mkimbili, Dijana & Ødegaard, 2017). This not only affect curriculum interpretation and implementation in terms of resources preparations, teaching and assessment but also it minimises students' motivation to learn science subjects due to inadequate diverse inquiry-oriented classroom activities that make them interact and actively participate in lessons. Moreover, insufficient opportunities for professional development among science teachers is the acceleration factor invisible effective practices of inquiry that can profile students with opportunity to acquire skills and become literary scientific citizens (Luvanga & Mkimbili, 2020). Indeed, none of previous studies analysed the teachers' perceptions about the scientific inquiry instruction. It is noteworthy that teachers' knowledge and perceptions of inquiry learning may enhance or constrain their pedagogical practices which in turn determine students learning outcomes. Therefore, this study was designed to address two research questions:

- i. How do teachers understand the inquiry-based learning as used in the teaching and learning of chemistry in secondary schools?
- ii. How their perceptions on the inquiry-based learning influences their classroom practices?

2.0 Theoretical Framework

The study subscribes to constructivism learning theory in understanding how teachers' knowledge and perceptions of inquiry-based learning influences their instructional practices. Constructivism learning views is a common educational reform agenda towards education in which students actively and collaboratively constructs meaning while working on authentic problems situated in real-life contexts (Walker & Shore, 2015). The theory generally advocates for learner centred learning and has its roots in Piaget's cognitive processes, Brunner's active learning ideas and Vygotsky's social learning theory. Piaget as a proponent of cognitive learning sees that an individual builds personal interpretations of the information based on their personal experiences (Ertmer & Newby, 2013).

Constructivism theory towards inquiry learning provides a view that emphasises on the active role of learner's in creating understanding and making sense of the information (Kalpana, 2014). That is, inquiry-based learning when effectively implemented in classroom, can provide both students and teachers with opportunities to search for evidence-based knowledge on what they experience. Staples (2007) argued that human learning is responsive to a context interpreted by participants and therefore, inquiry learning is influenced by teacher's general knowledge and attitudes towards the approach itself and consequently serving as a determination factor on how should classroom learning be organised, materials for teaching be designed and assessment be performed in line with learning approach and activities designed for students. Since the central principle of constructivism is to make learning an active process, teachers require deep understanding of the inquiry-based learning to make learners active and participate in knowledge creation (Crawford, 2007; Svinicki, 2004). Thus, inquiry as a way to promote natural curiosity suggests teachers in an inquiry classroom to design learning activities for students to explore and discover knowledge in a social setting which greatly is determined by teachers' beliefs towards the approach itself. Therefore, investigation of chemistry teachers' prior knowledge, perceptions and general understanding of the inquiry-based learning reflecting

constructivism world view was worthwhile. This is because teachers' knowledge and their perspectives serve a basis of knowledge construction among learners and in guiding them to reach their potentials.

3.0 Methodology

3.1 Research Approach, Design and Data Collection Methods

The study used a case study design under qualitative research approach to explore chemistry teachers' knowledge and their perceptions of inquiry-based learning in their natural context of classroom. Through this approach, the researcher attempted to capture chemistry teachers' general knowledge on the meaning of the inquiry-based learning and how their perceptions influence their teaching and attaching the meaning to their views. The use of case study design was deemed important as it helped the researcher to develop a deeper insight and better exploration of how teachers' knowledge and perceptions towards the use of inquiry-based learning was relevant in the teaching and learning of chemistry subject in the context of Tanzania. Yin (2009), asserts that case study design provides opportunities for gathering evidence of information from diverse sources and thus promoting triangulation of findings on the basis of research objectives. In that regard, case study design enabled the researcher to obtain contextual in-depth views about chemistry teachers' knowledge and perceptions in shift with inquiry-based learning understanding as far as teaching and learning is concerned. Interview and observation were the data collection tools. Interview is useful in assessing peoples' perceptions, meanings and definitions of situation as well as construction of reality (Punch, 2009). Participant observation was also used to assess teachers' instructional practices in relation to inquiry-based learning. Observational guide was used as the basis for focused observation by looking on how teachers' knowledge influences implementation of the inquiry-based learning in classroom context particularly the design of classroom activities for learners to maximise interaction. Generally, the choice of data collection tools for gathering first-hand information in line with the interpretation of findings made after the analysis was valid.

3.2 Sample and Sampling Procedures

In this study, six secondary schools and eight chemistry teachers were involved. The selection of schools was based on criteria of both private and government owned schools focusing on those schools that are long established and being

centres for professional development among science teachers by virtual of having well-constructed science laboratory and adequate laboratory facilities. The study used purposive sampling technique. The technique enabled the researcher to identify participants' views on their general understanding of the teaching and learning process of chemistry using inquiry-based learning. In addition, purposive sampling technique was used to obtain the sample of teachers. Specifically, chemistry teachers teaching Form Three and Form Four or both classes were selected. Experience in teaching of chemistry subject was considered as selection criteria for teachers to participate in the study in schools which had more than two teachers for the chemistry subject.

3.3 Data Analysis Procedures

In the study, data were analysed through thematic analysis. Thematic analysis involved discovering themes and concepts embedded throughout the research instrument that matched with the themes indicated in the research objectives (Terry et al., 2017). Data collected through interviews were identified according to commonalities, relationships and differences. The researcher read and re-read the data to obtain common emerging issues from the information collected and used them as the basis for creating themes that matched with theoretical themes indicated in the research objectives. A theme in this perspective was defined as an idea that many data items gave considerable attention for (Nowell et al., 2017). Furthermore, some participants' arguments were presented through direct verbatim quotations. Interviews were transcribed to find the meaning attached to them in relation to research objectives in creating evidences regarding teachers' knowledge of inquiry-based learning and their beliefs towards the approach until the saturation point was reached. In addition, data gathered through classroom observation during teaching and learning of selected chemistry topics were used to triangulate information from teachers' interview. Thus, the researcher established the link between teachers' implementation of inquiry-based learning and their knowledge on the approach in the design of activities which in turn captured the main focus of the research questions.

3.4 Ethical Considerations

The study adhered to ethical issues by following procedure required which included soliciting research permit from respective authorities; from both the University of Dar es Salaam and to the Regional Administrative Secretary (RAS). Confidentiality was observed where by the participants were informed during

researchers' introduction for interview that the information, they provide will remain useful for research purpose only. In addition, no names of participants or school were mentioned and rather, arbitrary coding of using alphabetical letters to represent sampled schools and teachers as per number. Also, the researcher sought a verbal consent of the informants to take part in the study as well as acknowledging the source.

4.0 Findings and Discussion

Findings for the study were generated with focus to the two research questions. Following interviews with chemistry teachers, it was revealed that teachers' understanding of inquiry-based learning was in two categories, that is, inquiry-based learning as a process of learning by doing and as a participatory method for learning. Findings for each of the mentioned categories are presented and discussed in the following sections.

4.1 Inquiry-Based Learning as a Process of Learning by Doing

Findings from interviews revealed that inquiry-based learning is understood as a process of students' involvement in different teaching and learning activities independently or through collaboration as well as engaging themselves in problem solving. Interviews held with chemistry teachers in six secondary schools revealed that 37.5% of teachers viewed inquiry-based learning as a process of learning through students' involvement in lessons by engaging in learning activities prepared for the attainment of lesson objectives. As a result of this involvement in lessons, students are expected to acquire ability for problem solving in daily life. For example, the teacher from school C said that:

Inquiry-based learning is a kind of teaching whereby more emphasis is on students doing lesson activities for them to learn. Students should also be able to apply the knowledge and skills acquired in solving real life problems (Interview, T4 at school C).

In addition, teacher (T7) from school E expanded the concept of inquiry-based learning as:

Inquiry-based learning is a way of teaching that involves students in learning activities for finding solution about an issue or concept. It

occurs by students trying out their own ideas before a teacher could provide any assistance for the answer (Interview, T7 at school E).

Another teacher (T1) from school A reiterated:

Inquiry-based learning is viewed as a process of involving students in the learning through carrying out classroom activities. As a chemistry teacher I used to provide activities for learners but it depends on availability of chemicals and apparatus (Interview, T1 at school A).

The teachers' views from these excerpts indicate how teachers' knowledge on the meaning of the inquiry-based learning differ from one teacher to another, consequently, might influence the way they plan for the lesson differently which also could result into different learning outcomes for the lessons. This is also evidenced with another chemistry teacher who attached the meaning of the inquiry-based learning with concept of improvisation by arguing:

Inquiry-based learning is an approach used by teacher and learners to find different teaching and learning materials for particular lesson and use to support teachers in explaining lesson concepts (Interview, T6 at school D).

Findings from classroom observations revealed that students' engagements in lesson were in low extent depending on the kind of tasks teachers prepared during the teaching and learning process. For example, the chemistry teachers (T1, T2, T3 and T8) from schools A, B, C and F respectively prepared their lesson activities depending on how they perceived the content of instruction of which promotion of higher order thinking among students was rather challenging. For instance, the lesson was observed at school A on acids and bases, in which teacher (T1) exposed students to the activities of identifying substances containing acids and bases using lemons, mangoes, citrus fruits and wood ash as well as using litmus paper to detect its colour change. Similar observation was noted at school B, C, and F as summarised in Table 1.1.

Table 1.1 Students Involvement in Chemistry Learning Activities

School	Teacher	Form	Sub-Topic	Students' Activities
A	T1	III	Acids and bases	Carried out activities to identify natural substances containing acids and bases.
B	T2	IV	Effects of surface area on rate of chemical reactions	<ol style="list-style-type: none">i. Reduced particle size of calcium carbonate (CaCO_3) using mortar and pestle by grinding the sample.ii. Performed laboratory activities using two different sample sizes of marble chips to react with concentrated hydrochloric acid (HCl).iii. Collected carbon dioxide (CO_2) using gas jar.
C	T3	III	Acids and bases	Carried out a chemical test on effect of acids and bases on litmus paper.
F	T8	III	Indicator	Performed activities that involved making Methyl Orange (MO) indicator using the locally available coloured flower.

The finding from Table 1.1 indicates chemistry content and a series of students' learning activities prepared by teachers using a variety of materials and chemicals. For example, teachers T1 from school A and T3 from school C both taught acids and bases by exposing their students in different activities using different materials depending on how each of them perceived the content and its better way of delivery to students. That is, T1 used materials such as lemons, mangoes and wood ashes whereby students squeezed the mango and lemons juices to test for acids presence and base character in wood ash. On the other hand, teacher T3 from school C used laboratory acids and bases whereby students in small groups carried out the chemical test in small portions by using litmus papers and explain the changes.

These findings suggest that students' involvement in lessons during the teaching and learning are pre-determined by teachers' perception and knowledge on the approach in planning a range of activities for classroom interaction. As a result of students' involvement in the learning activities, intended learning outcomes that

focus on competences and skills attainment as per current syllabus are developed among them. In addition, teachers perceiving inquiry as learning by doing influenced classroom practices because students' activities (Table 1.1) put more emphasis on students' engagement in learning. It is noteworthy that these learning activities were not sufficient enough to develop students to the highest level of inquiry because they were guided by teachers on procedures to be followed. In a full inquiry-based learning, students are required to demonstrate the evidence for their own learning, which was not the case in the observed classroom.

The use of lesson activities for learning is very important. Activity-based learning plays an important role in promoting inquiry skills which are essential in learning science and can promote collaboration and interactivity between students and teachers and among students themselves (Agyei & Voogt, 2016). According to National Resource Centre (2007), effective inquiry learning involves activities-oriented lessons for which students get involved in diverse range of tasks to be explored. Smith (2008) had similar view that inquiry-based learning involves learners in tasks as a meaningful way to learn. These findings concurred with those of Branch and Bell (2008) who revealed that teaching by using teachers' prescribed procedures and activities enhances confirmation inquiry among students. Teachers' prior conceptions of what inquiry-based learning means have great influence on the choice of learning activities that can engage and challenge students thinking (Couture et al., 2013).

4.2 Inquiry Based Learning as a Participatory Method

Findings from teachers' interviews showed that (50%) of teachers had closely related understanding on the meaning of inquiry-based learning as one of the participatory methods. For example, teacher (T2) from school B reported:

Inquiry-based learning is a student-centred learning. Teaching by inquiry-based learning means that students should not depend more on the teacher but on themselves (Interview, T2 at school B).

In addition, teacher (T6) from school D defined the inquiry-based learning by providing examples of teaching and learning approaches claimed to be participatory methods. He said that:

I understand inquiry-based learning to be similar to other participatory methods for teaching such as discussion or experimentation. I use these approaches to involve students in my lessons (Interview, T6 from school D).

These definitions resemble that of Msonde (2011) who described participatory methods as learner –centred approaches that involve shift of power as well as learning responsibilities from the teacher to the learner by giving them the opportunity to use their prior knowledge in the learning process.

On the other hand, chemistry teacher (T5) from school D failed to provide clear definition of inquiry-based learning. The teacher admitted: I don't know about inquiry learning and is the first time I hear from you about this approach (Interview, T5 at school D).

These findings suggest that T5 was not well informed of the conception of inquiry-based learning. This not only questions the quality of chemistry teaching and learning process in terms of pedagogical knowledge but also the status of teacher education curriculum in favour of teaching approaches for science teaching and learning.

Further investigation of the same teachers' lesson plans and classroom observation revealed that the teacher indicated and used approaches that are more participatory and in a little way engaged students in activities during the lesson. For example, the teacher used demonstration and experimentation methods that engaged students in testing for acidity and alkalinity by using mango juice and wood ash. This is what the T5 said on addition question regarding commonly approaches used for teaching;

I always used demonstration if I want to show how a certain practical can be conducted but not all the time. I also use experiments especially when the examination is near so that students can get important concept on different practicals (Interview, T5 at school D).

Furthermore, findings from classroom observation revealed that teachers used participatory methods in teaching and learning at different degrees. For example,

in teacher T1 lesson on acids and bases, in school A, the teacher used discussion and experimentation although a lecture method was also observed during the introduction of the lesson. The summary of the T1 lesson is presented in the Extract 1.

The lesson presented in extract 1 shows that the teacher used discussion, demonstration and experimentation as dominant approaches during the lesson whereby questions and answers approach was used to introduce the lesson. On the other hand, lecture approach was used to summarise the lesson. Activities performed involved carrying out chemical testing for acids and bases using litmus papers.

From the findings, it can be deduced that perception of inquiry-based learning as one of participatory methods influenced chemistry teachers' practices in using student-centred approaches. In most cases, this intended to place students at the centre of the learning during the teaching and learning process. Largely it enables teachers to design learning activities that assist students in learning from lower levels of inquiry (confirmation inquiry) to higher (unguided inquiry) depending on how lessons and activities were structured.

These findings are in line with findings by Mafumiko (2006) and Tilya (2003) who contended that the use of experimentation in chemistry promote students' ability to clarify abstract concepts and promote a sense of inquiry learning in attaining essentials skills for problems solving and transfer of knowledge to different contexts. Similar findings were reported by Maro (2013) that using instructional approaches that actively engaged students in learning, increases conceptual understanding of the abstract concept as well as students' ability to explain scientific phenomena. Moreover, Mtitu (2014) found that participatory methods engaged students collaboratively to generate information which can help them to acquire skills necessary for survival in the modern world of science and technology.

Extract 1: A Lesson on Acids, Bases and Salts

Topic: Acids, bases and salts

Sub-Topic: Acids and bases

Specific Objective: To investigate the natural sources of acids and bases

L/ Resources: Lemons, citrus fruits, wood ash, bicarbonate of soda and indicator

Lesson development

Stage	Teaching Activities	Learning Activities
Introduction	Using questions and answers, students were asked to define the term acids and bases	Students defined the term acid and base by connecting with the concept of hydrogen ion (H^+) and hydroxyl ion (OH^-)
New knowledge	Teacher demonstrated how to ionise chemical compound to obtain H^+ and OH^- Teacher showed how to test acids and bases using indicator	Students observed and practiced to ionise compounds through chemical equation Students observed and performed experiment in order to test acid and base
Application	Students were guided in small groups to state effect of acids and bases on litmus papers	Students in groups participated in discussion and stated the effect of acids and bases on indicator
Reflection	The teachers provided a brief of the lesson using lecture method	Students took notes
Consolidation	Students were given summary of the lesson and finally question for home work.	Copied the assignment

5.0 Conclusions and Recommendations

The study found that chemistry teachers' knowledge and their perceptions on the IBL vary significantly, which in turn influence diverse ways of teaching and learning. Teachers perceived IBL as a process of learning by doing of which the kind of activities done by students had little link to the intellectual development of inquiry skills among learners. In addition, IBL was perceived by chemistry teachers as a participatory method that reflects learner centred learning of which its classroom implementation had little student conceptual change in developing the inquiry skills. Thus, chemistry teachers' perceptions greatly influenced the design of classroom learning activities and their pedagogical orientation towards the IBL. Based on the findings the study concludes that teachers' instructional practices are highly determined by their understanding of what IBL entails to them and the belief they hold toward IBL. The study recommends a need for chemistry teachers to be acquainted with relevant knowledge of the approach

through professional development (PD). The PD will improve teachers' understanding of IBL and be able to translate practices of inquiry into classroom. Also, teachers should develop community of practices to share their understanding of IBL in accordance to the context of teaching and learning.

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