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P. O. Box 20679, Dar es Salaam, Tanzania Tel: +255-022-2150838.

Email: jaet@iae.ac.tz Website: www.iae.ac.tz

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All Correspondence should be addressed to:

Managing Editor, Journal of Adult Education,

Institute of Adult Education,

P. O. Box 20679, Dar es Salaam,

TANZANIA

Tel: +255 22 2150838. Email: jaet@iae.ac.tz and, a copy to
managingeditor75@gmail.com

Editorial Note

Welcome all to the Journal of Adult Education in Tanzania (JAET), Volume 25, Issue 2 for December 2023. The latest issue presents a rich tapestry of research and insights into the multifaceted landscape of adult education within Tanzanian context and across borders. In this edition, we delve into various aspects of adult learning, from innovative approaches to online course design to the challenges encountered by specific learner demographics.

Adapting to the new normal: Innovations in online learning: The COVID-19 pandemic has reshaped the educational landscape globally, prompting educators to explore innovative approaches to engage learners in online and hybrid environments. The case study presented in **“Implementing Foundations of Quality through Online and Hybrid Course Design”** by **Florence Williams and Leah Tonette Gaines** sheds light on how educators across the world have navigated this shift. By employing qualitative methods and emphasizing learner-centred approaches, the study offers valuable insights into effective instructional design and fostering student engagement in the digital realm.

Empowering instructors for effective online instruction: Instructors play a pivotal role in shaping the online learning experience for students. **“Instructors’ Conceptions of the Efficacy and Motives for Online Instruction in Open and Distance Learning Mode”** by **Philipo Lonati Sanga** underscores the importance of continuous professional development for educators. The findings underscore the need for institutions to invest in comprehensive training programmes tailored to the specific needs of online instructors, thereby enhancing the quality of distance education delivery.

Navigating challenges in research and student support: Research and support services are integral components of adult education programmes. The studies **“Challenges Facing ODL Students when Conducting Research in Tanzania”** by **Kija Steven Magembe** and **“Challenges Facing Teenage Mothers Re-Admitted to Non-Formal Education System in Tanzania”** by **Zawadi P. Mmassy** shed light on the obstacles encountered by learners in their academic journey. From the logistical hurdles of conducting research to the socio-economic barriers faced by marginalized populations, these studies provide valuable insights for policymakers and practitioners striving to create inclusive and supportive learning environments.

Looking Ahead: Fostering Growth and Inclusivity: As we reflect on the diverse array of topics covered in this issue, it becomes evident that adult education is a dynamic field undergoing constant evolution. By embracing innovative pedagogical approaches, investing in instructor development, and addressing the unique needs of diverse learner groups, we can foster a culture of lifelong learning and empowerment. JAET remains committed to advancing scholarly discourse and driving positive change in the realm of adult education.

We extend our sincere gratitude to the authors, reviewers, and readers who have contributed to the success of this issue. Together, let us continue to explore new frontiers in adult education and work towards a brighter future for learners across Tanzania and beyond.

Dr. Sempeho I. Siafu

Chief Editor



Implementing Foundations of Quality through Online and Hybrid Course Design: A Study-Away Course Case Study

Florence Williams

*Centre for Distributed Learning | Division of Digital Learning, University of
Central Florida*

Email: florence.williams@ucf.edu

Leah Tonette Gaines

Office of Interdisciplinary Studies, University of Central Florida

Email: leah.gaines@ucf.edu

Abstract

The far reaching social, political, and economic COVID-19 pandemic profoundly impacted students, leading to significant changes in the online learning landscape. Disengagement in e-classrooms due to external distractions prompted educators, even those experienced in diverse course formats, to seek innovative ways to foster engagement. In this case-based qualitative research on course design quality, a student-facing higher education instructor and a faculty-assisting instructional designer employed qualitative methods to explore quality components and transform a study-away course. Key steps included effective instruction, intentional design, inclusive environments, learner-centred approaches, engaging activities, and community focus. The findings revealed that the recursive ADDIE (Analysis, Design, Development, Implementation, and Evaluation) process facilitated reflection and meaningful change within these foundations of quality. We propose a learner-centric model where students are architects of their development, and faculty function as facilitators. These adaptable methods span disciplines and formats, informing future education research and practice.

Keywords: *study-away course, course improvement, higher education, instructional design, quality*

Introduction

Online and mixed mode instruction have increased dramatically post-COVID-19 with more students accessing their education in these formats. This transition has been rocky for some, as online/hybrid instruction and learning happen very differently than traditional in-person courses. Even for those seasoned online instructors and learners, the heightened disruptions of our pandemic and post-pandemic society have affected the ways in which information is disseminated and consumed (Neuwirth, Jović, & Mukherji, 2021; Devkota, 2021). For example, stress, anxiety, and other factors have infiltrated the online classroom with the learners who experience it (Quan, Lu, Zhen, & Zhou, 2023). Students became disengaged (Devkota, 2021; Wang, Zhang, Pu, Li, Chen, & Li, 2022), and outside factors such as job loss and changes in the economy detracted student's learning (Bird, Castleman, & Lohner, 2022). In turn, many educators have had to find new ways to share knowledge virtually and create engaging e-learning spaces that motivate learners.

Purpose and Scope

The study away is a research course that encourages students to travel throughout the United States and immerse in the diverse cultures offered within the country. The authors of this work have found that multiple strategies work best while developing an online and hybrid study-away course (Williams, 2021). This paper shares some of the practices that were implemented to create a quality online and hybrid study-away course. The paper also uses theoretical and empirical research to support the findings and identify their usefulness across the domains of quality. The available works helped guide us in practices and pedagogies suggested by practitioners in the field of education.

Rather than espousing a preferential approach that may clash with institutional policies and external factors, the authors invite an eclectic strategy for the course design process that builds on the recursive nature of the Analysis, Design, Development, Implementation, and Evaluation (ADDIE) model of instructional design (Castro & Tumibay, 2021). This model was applied in this course design by setting clear goals (Analysis), planning learner-focused activities and content (Design), creating the course materials (Development), delivering the course to students (Implementation), and then assessing the effectiveness of the course and making necessary improvements (Evaluation). The decision derives from the principle that there is no perfect solution for meeting instructional design needs. This nonlinear approach with recursive steps and integration practices supports

philosophical, cognitive, and conceptual design needs with targeted learner success. The overarching goal is to foster a satisfying collaboration that maintains excitement and curiosity for practitioners at each step of the quality design process.

While online learning is not new, its exponential growth in the past three years has elicited questions about the quality of online courses and programmes. Paudel (2021) and Allen (2023) highlight that online education, accelerated by the Covid-19 pandemic, has become a viable alternative. Paudel finds success in hybrid models, while Allen views the pandemic as a catalyst that propels online programmes to prominence. Industry-specific quality design rubrics have been developed to help practitioners and institutions identify and designate quality courses. Several universities have developed home-grown criteria to guide the quality process. For example, within the University of Central Florida's Centre for Distributed Learning, quality course design examines four distinct measures as part of its quality initiative: (1) course overview and introduction, (2) course content, (3) assessment and interaction, and (4) accessibility and universal design (University of Central Florida Quality Rubric (2017)). These criteria align with established course design instruments such as Quality Matters and should be consistently included to improve the quality of online courses. These elements, which encompass course design, student engagement, and alignment with educational principles, play a crucial role during course delivery. This study investigates how design features impact online course quality and, consequently, student success based on existing literature.

Many different activities fit into the definition of quality learning design. The ideas that make an online course quality can be incorporated into hybrid delivery especially when the bulk of the context is delivered online asynchronously. The online content sets the tone for the hybrid section and thus drives the decision for engagement in the hybrid section. The literature is replete with examples of how faculty and instructional designers may work together to design high-quality courses that are recognized and respected while giving students agency over their learning (Kelly & Zakrajsek, 2023; Jaggars and Xu, 2016; Martin et al., 2019). Students' engagement in online and mixed-mode courses allows them to be co-creators of the curriculum (Hajian, 2019; McDonald et al., 2020; Morrison et al., 2019) having a say in how learning is developed through foundations of quality practices. The key to fulfilling the requirements outlined in the quality rubric resides in the development of a course that responds to learner needs (O'Keefe et

al., 2020; Riggs, 2020; Sanga, 2020; Sneed, 2016). This could happen by leveraging foundations of quality design including:

1. effective instruction,
2. intentional design,
3. inclusive and accessible content,
4. curricular steered by the learner,
5. active, interactive, and engaging coursework, and
6. projects that are focused on community.

Taken together, these components of design support the notion that quality online and hybrid courses are (1) designed with the learner in mind (Moore et al., 2021) and (2) require instructor guidance and learner engagement (Poort et al., 2022; O’Keefe et al., 2020; Li et al., 2020). Course design that models the alignment with course elements such as measurable goals, appropriate content, and authentic assessment using Bloom’s revised taxonomy (Sneed, 2016) facilitates instructional clarity and students’ ability to connect with the content and get added information (Kelly & Zakrajasek, 2023; Martin et al. 2029; Jaggars& Xu, 2016). Sneed (2016) proposes that designers connect the characteristics of Bloom’s revised taxonomy for creating online learning activities that are in accordance with students’ needs. These suggestions support the selection of the theoretical course design model discussed in this paper.

Theoretical Framework

In keeping with the idea of design, the authors also identify the role of theory in course design and instructional technology, emphasizing the active and social nature of learning and the instructor’s facilitative role. The conceptual model for quality design pulls ideas from several foundational principles and best design practices that guide learning. This paper aligns with the Constructivist Learning Theory, in providing a theoretical framework for course design and instructional technology proposed by Williams (2021). Gaines (2024) believes constructivism emphasizes the active and constructive nature of learning, the importance of social and cultural factors, and the role of the instructor in facilitating the learning process. Taken together, the option of knowledge construction helped focus the design to satisfy the research’s focus. Sanga (2020) posits that by applying the key concepts of active learning, meaningful learning, social and cultural context, and reflection and metacognition, educators can create engaging and effective learning

environments. In support of this theoretical frame, Hajian (2019) suggests that these intersections promote student success and lifelong learning.

Methods

Strengthening the Course using Quality Principles: Purpose and Questions

Current thinking over the years has caused some instructional design researchers to develop their own terminology to reflect the nature and distinction of quality more effectively. Whereas others still borrow terminology from face-to-face teaching practice and in-person delivery, in this paper, the authors share how they have used the foundations of quality to transform an online and hybrid study-away course. Specifically, the authors used a small case-based design with flexible hypothesis-generating questions and a process-tracing approach postulated by Alpi & Evans, (2019) that uses observations for data collection. This means that the research is bound within one course that has online and hybrid components and characteristics that allow the foundations of quality to be implemented. The case-based method was used to facilitate self-directed online learning and validate the foundations of quality within the course context. The authors analysed the data by describing and synthesizing the existing evidence and highlighting the value of the online and hybrid modes so practitioners can make informed choices on principles they wish to implement.

Discussing this process, the authors answered the following questions:

1. What are the most essential items for course design quality?
2. How were aspects of quality design implemented in a hybrid and online course?
3. How can instructors design/redesign courses for quality using the ADDIE model as a lens?

As a student-facing classroom instructor, the second author attempts to strengthen the courses semesterly. One way, in which this was accomplished was to have the courses reviewed by a designated instructional designer, the first author of this work, who assesses courses for quality organization and delivery. A quality rubric is used to evaluate the courses against a set of established standards to ensure effective course design, delivery, and learner engagement. Specifically, the first author has been instrumental in helping to strengthen the second author's study-away course, which is offered in both hybrid and online modalities, and is available to undergraduate students enrolled at a Central Florida Research I institution. The

course being the bounded case, yielded the purposive sample for this study. This sampling technique helped to deepen the understanding of the studied phenomena. Most of the students who enrol in the course are Interdisciplinary Studies majors and are interested in high impact learning practices, conducting research, and learning about the histories, cultures, and experiences of diverse communities. With the multiple sections of this study-away course, the second author has led students to St. Augustine, Florida; New Orleans, Louisiana; and San Juan, Puerto Rico.

The study-away course is offered in a hybrid format, combining asynchronous online work throughout the semester with an optional one-week in-person component during the study-away period. This period involves a series of site visits, which are integral to the course content. For students unable to physically travel, these site visits are video recorded and made available online, ensuring all students can fully participate in the study-away experience. The data collected over these visits is analysed using identified patterns, categories, and relationships. The unique and flexible modality of this course requires a thoughtful approach to course delivery. The authors aim to ensure this through a combination of strategies, including the use of technology to facilitate remote learning and the provision of alternative learning experiences for those unable to attend in-person.

The ADDIE Model and Foundations of Quality

The ADDIE model was used as a guide to evaluate and prepare the upper-division interdisciplinary study-away online/hybrid course. ADDIE provided an outline to design the online/hybrid course for student motivation and preparation for conducting research in the course. Relying on a constructivist theoretical frame of student-centred discovery (Amineh and Asl, 2015), social learning through collaboration (Gweon, 2021), and constructionism to provide learners with meaningful challenges. The authors selected a combination of relevant principles for designing the course. Using the iterative steps of ADDIE, they guided students' learning and cognitive development through collaboration, construction, and discovery. The authors discuss the results of the approach and their implications for student engagement in subsequent sections.

Results and Discussion

In this section, the authors explicate the study's outcomes, focusing on the essential components that contribute to course design quality. The investigation addresses three key research questions, which are inherently interconnected. The quality design foundations exhibit significant overlap in the existing literature. By

examining these foundational aspects, the study reveals effective strategies for enhancing course quality and improving students' learning experiences. Each subsection will identify and define a specific quality foundation which forms the base of the research. Additionally, the authors utilize the process-tracing approach to indicate how the second author applied these quality foundations in their online and hybrid study-away course.

Components of a Quality Online Course

RQ 1: What are the most crucial elements for course design quality?

To respond to research question one, the authors examined how the foundations of quality might encourage learner engagement and motivation. The steps of this approach include: effective instruction (for example, frequent contact between the teacher and the learner); intentional design (for example, active learning or collaboration opportunities and learner-focused content); inclusivity and accessibility (for example, the design and content recognize learner diversity and address variable accessibility requirements); learner steered (for example, learner's choice for engagement or content co-creation); engaging (for example, multiple opportunities to engage with course content and to self-assess); and, community focused (for example, the content provides meaningful challenges and real-world connections). The authors found that the foundations of quality facilitate practical application by showing learners how their research skills apply to everyday life through meaningful retrieval and application.

The foundations of quality play a pivotal role in shaping effective course design. Educators should design courses that encourage regular communication between instructors and learners. Frequent contact fosters engagement and provides personalized support based on the needs of the learner. For this to happen, instructors should also ensure that instructions, expectations, and learning objectives are communicated clearly. Clarity in the course design enhances learner understanding and motivation. It is also valuable to incorporate activities that require learners to actively engage with the content. This could include discussions, problem-solving tasks, or group projects. This content should be created to meet the prior learning needs and interests of the learner and pique their curiosity.

A comprehensive framework for implementing the foundations of quality in course design are presented in Table 1.

Table 1***Foundations of Quality: Design Thinking and Application***

Foundation	Content	Engagement	Assessment
Effective Instruction	Instructor outline	Active participation	Regular feedback
Intentional Design	Scenarios	Group projects	Case based learning
Inclusivity & Accessibility	Inclusive language	Accommodations	Assessment variability
Learner Steered	Content co-creation	Group selection	Choice of research areas
Active, Interactive, & Engaging	Multiple content review options	Opportunities for practice	Self-assessment ^a
Community Focused	Meaningful challenges	Real-world connections	Problem solving based on concepts

Note. The table presents the findings based on foundations of quality through design thinking and application and summarizes design and facilitation concepts.

^a Assessment refers to the process of evaluating student's self-analysis or their level of understanding on a specific topic or content.

A summary of the key findings from observing the foundations of quality across three curricula elements: content, engagement, and assessment, are presented in Table 1. These serve as a quick reference guide for instructors and instructional designers who are looking to improve the quality of their courses and promote student success. By applying the design principles of content, engagement, and assessment strategies in their courses, educators can enhance the learning experience and create effective learning environments that meet the needs of diverse learners.

RQ 2: How were aspects of quality design implemented in a hybrid and online course?

To answer research question 2, the authors reviewed how the quality foundations of effective instruction and, inclusive and accessible design principles were implemented in an online and hybrid course. Their primary objective was to identify effective instructional techniques by reviewing relevant research. By doing so, they aimed to assist faculty in adopting strategies they might not otherwise consider independently. For example, Morrison et al., (2019) suggest that strategies such as active learning and changes in teaching techniques to problem-based learning can improve student outcomes. They contend that working together, instructional designers and faculty identify learning problems and determine how instruction can solve them. Similarly, Williams (2024) postulates that such “...accessibility refers to acknowledging the importance of cultural and social identity, removing barriers to ensure equal access, and adapting teaching strategies for effective virtual engagement (p.144). Hajian (2019) puts forward the principle of relying on reflexive behaviours or automatic responses for consideration. Morrison et al (2019) and Hajian (2019) suggest that faculty consider the instructional strategies that result in optimal knowledge transfer and experiential connections for the learner. This selection process encourages higher-order thinking and problem-solving that applies to the completion of similar activities.

Effective Instruction

Effective instructional design is the process of solving skill and knowledge competency gaps that result in improvements in course quality and greater learning gains (Morrison et al., 2019). In online and hybrid courses, effective design offers content that is relevant to the participants and meets stated learning benchmarks. Effective instruction aligns with design decisions that involve learner and content considerations. Effective instruction incorporates meaningful strategies that encourage deep learning and motivates engagement. O’Keefe et al. (2020) suggest that high-quality online and hybrid courses are “designed to provide immersive, adaptive, and other innovative learning experiences” (p. 7).

Effective instruction can be implemented through modelling or providing opportunities for practice. When students first enrol in the study-away course, the second author models exactly what a research project for the course looks like. This is done by providing examples of past student submissions, and published research papers. Students can view the examples as illustrations of what would be expected of them. This is especially perfect for students who have never conducted research or completed a research project. Also, it is likely that students could make some mistakes with their submissions, and a bit of grace should be provided to them such

as allowing students to resubmit assignments (Jarvie-Eggart, et al., 2022; Tila & Levy, 2020). One example of this is providing students the opportunity to revise and resubmit their research questions. Often, students will submit a research question(s) that is not appropriate or unable to be answered within the span of the semester. Appropriate feedback and instruction are provided to the student to better draft research questions that can be resubmitted for full credit. Their new research question(s) will then reflect the changes made, and their grade will be updated.

Inclusive and Accessible

To address learner's variability and support, the use of assistive technology online courses should be inclusive and accessible using the Universal Design for Learning (UDL) framework (Coombs, 2015; Gronseth, 2018). To be inclusive and accessible the design should promote an equitable, diverse, and inclusive environment for the students. The UDL component makes the content accessible for students who need accommodations while improving its use for all learners. Kelly and Zakrajsek (2023), encourage faculty to include content that has meaning for students from multiple backgrounds, ensuring that diverse ideas and perspectives are included. Williams (2024) recommends that instructors acknowledge and celebrate diverse cultural practices by incorporating universal learning design. They contend that educators should develop and apply innovative strategies to promote inclusivity and eliminate cultural rigidity within academic environments. These approaches ensure that all students benefit from intentional instructional design while respecting their unique backgrounds and perspectives. While the content aligns with curriculum goals, learners must be able to steer their engagement with the content in such a way as to align with effective factors such as attention and motivation. Students must desire to manage their learning and autonomy (Wong, 2023).

Oleson (2023) issues a challenge to educators to put themselves into the place of the learner as they consider designing learning principles. Oleson believes that a social justice position of reflection and self-assessment will help content designers to be more humane in their design considerations and decisions. Oleson poses questions for faculty and designers to help in their reflection on their course design: "How do you design the course? What materials do you use? What are your methods of instruction?" (p. 2004). Kelly and Zakrajsek (2023) insist that we must be mindful of the psychological and social needs of the learner as they might differ in how they want to interact with others and connect with the content. Student's experiences and background impact their learning, motivation, and overall course

satisfaction and experience. It is important to design a course that intentionally integrates inclusive practices and strategies. Case-based or problem-based learning may provide a structure for experience sharing. Students of all backgrounds should feel welcome in the class and have autonomy over their learning.

The second author ensures that the study-away course is designed to be inclusive and accessible in multiple ways. The goal is to enable all students to engage with the course's pedagogical practices and benefit from inclusive education, as recommended by Wakuru, Kisanga, and Vuzo (2022). To manage this process reliably, the second author support students who are unable to travel. When they led the course to St. Augustine and New Orleans, they had some students who were unable to physically travel with the class. Fakunle, (2021) and Whatley, & Stitch, (2021) believe that inability to travel for study-away opportunities could be due to financial costs, familial or work responsibilities, or other issues. To accommodate those students, the second author video recorded every site visit and made those recordings available on the Canvas Instructure online learning management system for all students to view (Kazi, 2019). This ensured all students would be involved in every aspect of their study away, not only those who could physically travel.

Also, the second author provided access to virtual sessions for students who did not physically travel away. When Wi-Fi permitted, the second author would encourage students to join the class via the Zoom online video conference platform. This was especially true for museum visits, where the museum offered Wi-Fi and allowed the second author to invite students to join the tour virtually. The virtual sessions provided space for all students to enjoy site visits simultaneously, regardless of their locations. Last, the second author linked all resources to the Canvas learning management system, where all students could access them. During the study away portion of the course, the students who travelled would be provided with many resources and information from tour guides, curators, and other locals. The second author would then link these resources to the learning management system, to facilitate student's access.

RQ 3: How can instructors design/redesign courses for quality using the ADDIE model as a lens?

In response to research question 3, the study found that the recursive ADDIE process—comprising analysis, design, development, implementation, and evaluation—supports reflection and facilitates change. Leveraging a set of best practices, which includes effective instruction, learner-steered, and active, interactive, engaging activities, significantly improves students' research skills

while maintaining their focus. These quality foundations, combined with a community-focused approach, allow students to recognize how their research abilities translate into practical real-life scenarios. The success of these techniques is evident through student practice and continuous improvement within the quality foundations framework.

Intentional Design

Kelly and Zakrajsek (2023) describe intentional design as applying evidenced-based strategies and promoting practices that facilitate student's learning. They contend that instructional design and faculty collaboration should provide learning strategies that can be implemented or adapted quickly to augment learning innovations. Martin et al. (2019) hypothesizes that adopting best practices and standards for online courses helps to create a culture of intentionality. While no single approach or model seems superior for all online learning situations, based on the guidelines provided by Kelly and Zakrajsek (2023) the authors believe the use of intentional design processes to guide the design and development of online courses is an effective practice.

Jaggars and Xu (2016) suggest that "...the effectiveness of online learning may vary according to how the online course is designed and taught" (p. 280). Martin et al. (2019) posits that the larger purpose of a course within a programme and for the profession are important considerations for the design. They further found that "following a systematic approach to content, backwards design, course organization, meeting learner's needs, and student's interaction" (p. 42) was highly recommended by faculty. Overall intentional design creates pathways for all students to achieve educational goals through authentic learning practices, accessible content, and thoughtfully designed experiences.

Some of the ways that intentional design has been implemented in the online study-away course include analysing the students' learning, creating content that aligns with the discipline, and incorporating collaborative engagement opportunities. To analyse the students' learning, the second author meets each student where they are to get them to the goals and learning outcomes of the course which align with the dictates of Willoughby, (2005). For example, the second author's study-away course is a research-intensive high impact course. This designation is given to courses that provide research and professional development opportunities. Some undergraduate students come to the course with no prior research experience, while others come to the course having done research already. The second author supports students by better understanding students' level of comfort with the research

process, and intentionally shapes assignments based on where the students are in their research journey.

The second author also creates content that aligns with the discipline of Interdisciplinary Studies. The research requirements encourage students to create common ground between the perspectives and insights of two or more disciplines (Repko, Szostak, & Buchberger, 2019). If a student is interested in studying the impacts of environmental racism on Afro Puerto Ricans in Puerto Rico, in this interdisciplinary course, the student would be able to answer their research questions using both the insights of Environmental Studies and Africana Studies. In other words, the second author leaves space for students to navigate their research through the lens of multiple disciplines and integrate the insights of those disciplines to solve complex problems. Lastly, collaborative engagement opportunities are created using student research groups. In the course, students can conduct research alone or in a group of up to three of their peers. In the groups, they work as a team with similar research interests where they collaborate through the research process for the entire semester.

Steered by the Learner

Online environments provide unique ways for engagement to be steered by the learner as they engage with content, peers, and instructors. “The importance of learner engagement does not change when students move from in-person to online learning environments, but the online environment changes the ways that students need to engage in learning activities and how others support them” (Moore et al., 2021, p. 162). Positive student outcomes are primarily influenced by the student's motivation to engage with the content, the instructor, and their peers.

To allow the students to steer their learning the second author invited the undergraduates to apply their areas of interest to the course as advised by (Dabrowski & Marshall, 2018). While all the students researched the histories, cultures, and/or experiences of a specific group of people (for example, Black communities in New Orleans), each student chose an aspect of that group that matched their strengths. For example, one student, who was knowledgeable about Haiti, decided to research Haitian influences in New Orleans culture and history. Another student in the same class, who had a background in art researched African American art in New Orleans. Both students' ideas were appropriate to the course and encouraged each student to drive their learning in the class.

Hanewicz, Platt, and Arendt, (2017). believe that assessment variability also provides space for students to steer their own learning. In doing so, students choose how they submit assignments. The students can submit some assignment responses in a video format, a written response, or graphically (such as a flowchart). This allows students to display their strengths and abilities while motivating them to complete the assignments in ways they are most comfortable with.

Active, Interactive, and Engaging

Student-engagement, motivation, and trust are three pillars of learning that are critical considerations for online course delivery (Poort et al. 2022). Effective course design encourages learner participation, fosters authenticity, and promotes trust within the learning community. O’Keefe et al. (2020) consider it important to provide students multiple opportunities to demonstrate their learning. They believe real-world applications, within course tasks, add value for both teachers and students since they encourage content application and maintain the learner’s curiosity. With learner-engagement and choice, students can adapt their management of the content concomitant with a greater emphasis on personalization of instruction.

The community of inquiry framework supports learner’s engagement by creating opportunities for task selection and feedback based on the affordances of the learning management system and strategies for interaction (Li et al. 2020; Martin et al., 2019). Engagement is one of the most critical elements for online teaching and learning success. Kelly and Zakrajsek (2023) believe that effective online environments should encourage regular and effective contact, not just to meet policy requirements but to support better learning outcomes. Faculty and subject matter experts are well-qualified and often trained in both teaching methods and the use of technology for teaching. To maintain consistent engagement, students should know the appropriate methods of working (teamwork, project management) and how their engagement will align with the assessment methods. Instruction that focuses more on active learner engagement and interactive content promotes deep thinking and reflection. It is important to consider how low-stakes and high-stakes assessments connect to course objectives (O’Keefe et.al, 2020). Systematic evaluation can lead to continuous improvement and is a great part of the quality process. Williams (2021) suggests that teacher’s readiness plays a significant role in classroom success based on the strategic selection and engagement processes. Williams believes that students engage readily with interactive course materials when they have clear guidelines and expectations.

The second author has encouraged students to be active, interactive, and engaged through walking tours, guest speakers, and discussion through a mobile app (GroupMe). The in-person walking tours allowed students to move around and get direct experience while learning. Some examples include walking tours during the study-away in New Orleans with outings to Congo Square, Louis Armstrong Park, and the historic Tremé Neighbourhood. The students could see the sites they were learning about and walk in the spaces they had read about. Because these walking tours were recorded and placed on Canvas for all to access, students who could not attend the tours were also able to engage with the video. Similarly engaging, guest speakers who specialize in a specific area can share their knowledge with the class (Leor, 2015). Students could interact with the speakers by asking questions, inquiring about additional readings, and learning about folklore and life study resources from the places they visit. For example, the second author had a historian who specialized in New Orleans history and culture speaks with the students about Black history in Tremé, and Black Mardi Gras. Students in person and online could engage with the guest speaker's lectures and discussions as part of the assessment process. Last, the second author incorporated engagement with students via a mobile application (GroupMe) for social group messaging. The students used their devices as endorsed by Mariki (2018) to speak in an e-language in which they were most comfortable. This includes the use of emojis, hearting or liking comments, and receiving speedy responses from their peers.

Focused on Community

Learning is a social activity in which a sense of community facilitates student interaction and satisfaction. Berry (2019) defines community as "... feelings of membership and closeness within a social group" (p. 164). Berry considers shared goals and collaboration as critical to maintaining the community with academic and social support. In other words, whether students perform well in a course or are more likely to stay enrolled could be influenced by the social aspects of that course. Turk et al. (2022) re-examines the community of inquiry model made popular by Garrison, Anderson, and Archer in 2000. They believe the creation of a learning community and engagement are strong predictors of relatedness and autonomy. In facilitating online discourse, faculty must, therefore, help students to understand the importance of their role in the process.

Williams (2015) examines the effects on learning investment through a practice-oriented perspective of quality amidst changes occurring within institutions. The study also contemplates how the process of increased monitoring and

accountability works towards quality improvement. Sanga (2020) makes the case for the three pillars method of design that supports the development of deep learning, intellectual skills, and professional skills in a community environment. The idea behind the three pillars design method is that for it to be successful, learners must be engaged in the process through active learning strategies. Hajian (2019) introduces the idea of the situated learning environment where knowledge is constructed with learners as active participants of a highly connected community in which knowledge and culture are integrated. Li et al. (2020) also found that students who are motivated to learn will be more active in the online discussion boards and will feel more connected to the learning community. Instructor's guidance and a framework for interaction with students as partners in the process can lead to improved learner's interaction and outcomes.

The study-away course to Puerto Rico focused on Afro Puerto Rican people, cultures, histories, and experiences. To create a sense of community among students and immerse them in Afro-Puerto Rican communities, the authors integrated various activities into the course syllabus. It was crucial for students to learn about this group from their perspectives and engage directly with them (Gaines, 2024; Sims & Stephens, 2011). In doing so, students attended an interactive group lecture provided by an Afro-Puerto Rican community leader who heads a cultural centre in the historically Black neighbourhood of Loíza. At this cultural institution, the students collectively learned the Afro-Puerto group dance of Bomba. As a class, the students worked together to learn cultural dance. They did not only learn from the community, but they also volunteered with the community. Thus, advancing the notion that experiential learning through mandatory volunteering enhances students' understanding and skills as they apply theoretical knowledge in real-world contexts. (Ng'umbi, 2022). By immersing themselves in the community they were studying, students learned directly from it, genuinely highlighting Afro-Puerto Rican culture. Additionally, this approach fostered community building among the students.

The results and discussion explain how the Foundations of Quality (effective instruction, intentional design, inclusive and accessible content, curricular steered by the learner, active, interactive, and engaging coursework, and projects that are focused on community) are used to improve students' research skills and track their progress. These foundations are carefully woven into the course design and delivery to promote learner engagement and motivation. When used in focused design, the foundations of quality help to facilitate a positive learning atmosphere. The detailed

explanation of each foundation emphasizes its specific role in enhancing the student's overall learning experience. These quality foundations help to present the conclusions that can be made from the paper as a whole and prepare practitioners to apply the principles in their practice.

Conclusion and Recommendations

There is much to be drawn from this work. The larger meaning here is to partner and collaborate for successful classes that will best benefit the students. The overarching goal is to foster partnerships and collaborations that lead to successful classes, benefiting the students. While a multitude of suggestions are presented here, it is not necessary—or even advisable—to implement them all at once. Instead, consider your specific context: the subject matter, the learning environment, and the unique needs of your students. Prioritize recommendations that align closely with these factors. You might start by implementing one or two suggestions each semester, carefully observing their impact, and adjusting, as necessary. This approach allows for gradual, meaningful improvement tailored to your unique teaching context. We hope that this work will be beneficial for faculty across the disciplines and those who instruct in-person, online, and hybrid courses. As such, the implications of our research will be explored further in later sections and future research.

The elements and suggestions provided throughout this work are interdisciplinary in nature and are applicable in many settings. Regardless of the area of study, the coursework can incorporate effective instruction, centre intentional design, be inclusive and accessible, steered by the learner, community-focused and active, interactive, and engaging. These practices can be implemented in various methods, such as synchronously and asynchronously online, and inside the classroom or during travel.

This paper shares case-based qualitative research methodology, limited to one study-away course. The resulting research explored the process that two faculty members used to shape an online/hybrid course. While the data may be positive, future studies could consider the process of multiple faculty members, at the same or different institutions, and how the application of the quality principles may work in different environments or using quantitative research methodology.

Because of the qualitative nature of the research, only specific variables were considered for quality. Future studies could explore additional quality items from the literature. For example, learner demographics, motivation, and blended learning

modalities. This exploration into online and hybrid education underscores the importance of an integrated approach, which understands online and hybrid instruction as an interconnected landscape. This environment prioritizes the relationships between learners, content, instructors, peers, and the community. The outlined foundations of quality serve as a bridge between traditional and innovative strategies, fostering an engaging narrative that facilitates meaningful learning experiences.

The proposed roadmap, enriched by the foundations of quality provides a comprehensive guide for educators across disciplines. It encourages faculty, especially those new to online/hybrid learning, to engage in practices that contribute to the growing body of research on course quality. This can include modelling, making use of universal design, and including community partners.

The study's findings suggest that using effective teaching methods and student-focused activities can make learning more engaging and useful for students. It also shows that these methods can be continuously improved based on feedback and performance. Furthermore, the study highlights the importance of creating an inclusive and accessible learning environment. These implications provide insights into potential challenges for implementing these methods and how to overcome them. These findings could lead to more effective and engaging experiences for both the faculty and the learners. This work, therefore, serves as a testament to the potential of online and blended education when implemented with intentionality, inclusivity, and a focus on learner engagement. The study focuses on qualitative contexts and experiences that are not generalizable. However, we believe the findings can be replicated in other settings as the insights gained can inform understanding of similar situations or phenomena. For example, future studies might explore specific metrics or assessment methods to measure the impact of applying and evaluating foundations of quality. It is our hope that these insights will inspire continued innovation and exploration in online and blended learning. That is, faculty will make use of foundations of quality across the disciplines.

References

- Allen, M. (2023). From survival to success: UF Online's birth and rise to preeminence In B. Bouchey, E Gratz & S Kurland & (Eds.), *From Grassroots to the highly orchestrated: Online Leaders share their Stories of the evolving online landscape in higher education*. (pp. 107-124). OLC (Online Learning Consortium) Press.

- Alpi, K. M., & Evans, J. J. (2019). Distinguishing case study as a research method from case reports as a publication type. *Journal of the Medical Library Association*, 107(1), 1-5. <https://doi.org/10.5195/jmla.2019.615>
- Amineh, R. J., & Asl, H. D. (2015). Review of constructivism and social constructivism. *Journal of social sciences, literature, and languages*, 1(1), 9-16.
- Berry, S. (2019). Teaching to connect: Community-building strategies for the virtual classroom. *Online Learning*, 23(1), 164-183. <https://doi.org/10.24059/olj.v23i1.1425>
- Bird, K. A., Castleman, B. L., & Lohner, G. (2022). Negative impacts from the shift to online learning during the COVID-19 crisis: evidence from a statewide community college system. *Aera Open*, 8, 23328584221081220. <https://doi.org/10.26300/gx68-rq13>
- Castro, M. D. B., & Tumibay, G. M. (2021). A literature review: Efficacy of online learning courses for higher education institutions using meta-analysis. *Education and Information Technologies*, 26, 1367-1385. <https://doi.org/10.1007/s10639-019-10027-z>
- Centre for Distributed Learning. (2017). *Quality Rubric*. Centre for Distributed Learning. University of Central Florida.
- Coombs, N. (2015). Make online teaching accessible with inclusive course design. *Disability Compliance for Higher Education*, 20(11), 1-5.
- Dabrowski, J., & Marshall, T. R. (2018). Motivation and engagement in student assignments: The role of choice and relevancy. *Equity in Motion*. Education Trust.
- Devkota, K. R. (2021). Inequalities reinforced through online and distance education in the age of COVID-19: The case of higher education in Nepal. *International Review of Education*, 67(1-2), 145-165. <https://doi.org/10.1007/s11159-021-09886-x>
- Drysdale, J. (2019). The collaborative mapping model: Relationship-centred instructional design for higher education. *Online Learning*, 23(3), 56-71. <https://doi.org/10.24059/olj.v23i3.2058>

- Fakunle, O. (2021). Developing a framework for international students' rationales for studying abroad, beyond economic factors. *Policy Futures in Education*, 19(6), 671-690. <https://doi.org/10.1177/1478210320965066>
- Gaines, L.T. (2024). Serving African American Students at a Hispanic-Serving Institution: Black Centred Action Instruction as a Pedagogical Practice of a Black Studies Educator. *Journal of Underrepresented & Minority Progress*.
- Garrison, D. R., Anderson, T., & Archer, W. (2001). Critical thinking, cognitive presence, and computer conferencing in distance education. *American Journal of distance education*, 15(1), 7-23.
- Gronseth, S. (2018). Inclusive design for online and blended courses: Connecting web content accessibility guidelines and universal design for learning. *Educational Renaissance*, 7, 14-22.
- Gweon, H. (2021). Inferential social learning: Cognitive foundations of human social learning and teaching. *Trends in Cognitive Sciences*, 25(10), 896-910.
- Hajian, S. (2019). Transfer of learning and teaching: A review of transfer theories and effective instructional practices. *The International Academic Forum Journal of education*, 7(1), 93-111.
- Hanewicz, C., Platt, A., & Arendt, A. (2017). Creating a learner-centred teaching environment using student choice in assignments. *Distance Education*, 38(3), 273-287. <https://doi.org/10.1080/01587919.2017.1369349>
- Jaggars, S. S., & Xu, D. (2016). How do online course design features influence student performance? *Computers & Education*, 95, 270-284.
- Jarvie-Eggart, M. E., Singer, A. M., Seigel, M., Raber, M., Freeman, T. M., Hamlin, B., ... & Meyer, M. R. (2022). Weaving academic grace into the fabric of online courses and faculty training: First-year engineering student advice for online faculty during the COVID-19 pandemic and faculty responses. *Studies in Engineering Education*, 3(1), 99.
- Kazi, M. J. (2019). Multimedia and adult education: Key principles for effective learning. *Journal of Adult Education in Tanzania*, 22(1).
- Kelly, K., & Zakrajsek, T. D. (2023). *Advancing online teaching: Creating equity-based digital learning environments*. Taylor & Francis.

- Leor, K. (2015). Guest speakers: A great way to commit to education. *Journal on Best Teaching Practices*, 2(2), 21-23.
- Li, J., Wong, S. C., Yang, X., & Bell, A. (2020). Using feedback to promote student participation in online learning programs: Evidence from a quasi-experimental study. *Educational Technology Research and Development*, 68, 485-510. <https://doi.org/10.1007/s11423-019-09709-9>
- Mariki, B. E. (2018). The use of electronic technology by facilitators at the Institute of Adult Education (IAE), Tanzania. *Journal of Adult Education in Tanzania*, 21(1).
- Martin, F., Ritzhaupt, A., Kumar, S., & Budhrani, K. (2019). Award-winning faculty online teaching practices: Course design, assessment and evaluation, and facilitation. *The Internet and Higher Education*, 42, 34-43. <https://doi.org/10.1016/j.iheduc.2019.04.001>
- McDonald, A., McGowan, H., Dollinger, M., Naylor, R., & Khosravi, H. (2021). Repositioning students as co-creators of curriculum for online learning resources. *Australasian Journal of Educational Technology*, 37(6), 102-118. <https://doi.org/10.14742/ajet.6735>
- Moore, S., Trust, T., Lockee, B. B., Bond, M. A., & Hodges, C. (2021). One year later... and counting: Reflections on emergency remote teaching and online learning. *EDUCAUSE Review*. <http://hdl.handle.net/10919/107501>
- Morrison, G. R., Ross, S. J., Morrison, J. R., & Kalman, H. K. (2019). *Designing effective instruction*. John Wiley & Sons.
- Neuwirth, L. S., Jović, S., & Mukherji, B. R. (2021). Reimagining higher education during and post-COVID-19: Challenges and opportunities. *Journal of Adult and Continuing Education*, 27(2), 141-156. <https://doi.org/10.1177/1477971420947738>
- Ng'umbi Michael, W. (2022). How mandatory volunteering prepares future volunteers in adult literacy: Mandatory volunteering; experiential learning, adult literacy, case study, Tanzania. *Journal of Adult Education in Tanzania*, 24(1).
- O'Keefe, L., Rafferty, J., Gunder, A., & Vignare, K. (2020). *Delivering high-quality instruction online in response to COVID-19: Faculty playbook*. Online Learning Consortium.

- Oleson, K. C. (2023). *Promoting inclusive classroom dynamics in higher education: A research-based pedagogical guide for faculty*. Taylor & Francis.
- Paudel, P. (2021). Online education: Benefits, challenges, and strategies during and after COVID-19 in higher education. *International Journal on Studies in Education*, 3(2).
- Poort, I., Jansen, E., & Hofman, A. (2022). Does the group matter? Effects of trust, cultural diversity, and group formation on engagement in group work in higher education. *Higher Education Research & Development*, 41(2), 511-526. <https://doi.org/10.1080/07294360.2020.1839024>
- Quan, L., Lu, W., Zhen, R., & Zhou, X. (2023). Post-traumatic stress disorders, anxiety, and depression in college students during the COVID-19 pandemic: a cross-sectional study. *BMC psychiatry*, 23(1), 228. <https://doi.org/10.1186/s12888-023-04660-9>
- Repko, A. F., Szostak, R., & Buchberger, M. P. (2019). *Introduction to interdisciplinary studies*. Sage Publications.
- Riggs, S. (2020). *Thrive online: A new approach to building expertise and confidence as an online educator*. Stylus Publishing, LLC.
- Sanga, M. W. (2020). Redesigning for twenty-first century learning: Analysing the process of transforming student learning using the three pillars method. *Journal of Formative Design in Learning*, 4(2), 65-73. <https://doi.org/10.1007/s41686-020-00043-5>
- Sims, M., & Stephens, M. (2011). *Living folklore: An introduction to the study of people and their traditions*. University Press of Colorado.
- Sneed, O. (2016). Integrating technology with Bloom's Taxonomy. *ASU Teach Online*. Retrieved June 27, 2023, from <https://teachonline.asu.edu/2016/05/integrating-technology-blooms-taxonomy/>.
- Tila, D., & Levy, D. (2020). Revising online assignments and the impact on student performance at a community college. *Community College Journal of Research and Practice*, 44(3), 163-180. <https://doi.org/10.1080/10668926.2018.1564089>
- Turk, M., Heddy, B. C., & Danielson, R. W. (2022). Teaching and social presences supporting basic needs satisfaction in online learning environments: How

- can presences and basic needs happily meet online? *Computers & Education*, 180, 104432. <https://doi.org/10.1016/j.compedu.2022.104432>
- Wakuru, M., Kisanga, S. E., & Vuzo, M. (2022). Primary school teachers' pedagogical practices and inclusive education: A case of pupils with moderate deafblindness in Tanzania. *Journal of Adult Education*, 24(1).
- Wang, X., Zhang, N., Pu, C., Li, Y., Chen, H., & Li, M. (2022). Anxiety, depression, and PTSD among college students in the post-COVID-19 era: a cross-sectional study. *Brain Sciences*, 12(11), 1553. <https://doi.org/10.3390/brainsci12111553>
- Whatley, M., & Stich, A. E. (2021). From exclusive to inclusive: A mixed-methods investigation of study abroad participation and practices. *The Journal of Higher Education*, 92(1), 140-167. <https://doi.org/10.1080/00221546.2020.1768778>
- Williams, F. (2015). The nexus between stakeholder engagement and instructional quality: The case of the UWI open campus's awareness and professional development towards a quality support framework. *Journal of Learning for Development*, 2(2). <https://doi.org/10.56059/jl4d.v2i2.97>
- Williams, F. (2021). Flexible learning design: A turning point for resilient adult education. *Journal of Adult Education in Tanzania*, 23(1).
- Williams, F. (2024). [Applying Culturally Responsive Strategies to Promote Engagement and Student Success in Online Courses](#). In L. Gray & S. Dunn (Eds.), *Humanizing Online Teaching and Learning in Higher Education* (pp. 140-161). IGI Global.
- Willoughby, J. (2005). Differentiating instruction: Meeting students where they are. *Teaching Today*.
- Wong, R. (2023). When no one can go to school: does online learning meet students' basic learning needs? *Interactive Learning Environments*, 31(1), 434-450. <https://doi.org/10.1080/10494820.2020.1789672>



Instructors' Conceptions of the Efficacy and Motives for Online Instruction in Open and Distance Learning Mode

Philipo Lonati Sanga

Institute of Adult Education, Dar es Salaam - Tanzania

Email: philipolonati@gmail.com

Abstract

This paper employs the Community of Inquiry Theoretical Framework to examine the instructors' conceptions of training efficacy and motives for online instruction in open and distance learning mode at the Open University of Tanzania (OUT). Using a hermeneutic phenomenology research design, data were collected from 25 instructors at the Open University of Tanzania through in-depth interviews, which were corroborated with questionnaires. Findings from the study indicated that, generally, continuous professional development significantly impacts how instructors teach in the online environment. Although most participants rated training as an effective strategy for online instruction, the programmes lacked regularity and fell short of more relevant training programmes. More specifically, findings indicated that the training package missed some essential contents required by instructors. A wide range of motives for conducting online training is elaborated. This paper recommends that institutions invest in relevant regular training programs for online instructors and ensure comprehensive training packages.

Keywords: *distance learning, online instruction, online learning, open and distance learning, open learning*

Introduction

Although the growth and expansion of higher education have been a serious concern of the government of Tanzania since its independence in 1961, more efforts have been focused on establishing and promoting conventional campus-based universities. As time has passed since independence, Tanzania recognised campus universities' incompetence in meeting the increasing demand for higher education

(Sanga, 2013) through conventional mode of delivery. It has not been easy to satisfy the country's higher learning needs by building campuses and expanding other related infrastructural facilities. Distance education, via single mode and dual modes, has been seen as one of the many crucial ways to meet this rapidly growing demand for higher education. Distance education offers opportunities to reduce the knowledge gap between nations and counter the effects of the brain drain. Despite the country's efforts to provide distance education, there remains a myriad of challenges to distance education, mainly related to the quality of education and its delivery modes, the reputation of the graduates, and limited resources. Such a context compelled the government of Tanzania to consider establishing various distance education systems, notably the Open University of Tanzania (OUT).

The Context of the Open University of Tanzania

The Open University of Tanzania (OUT) was established by the Act of Parliament No.17 of 1992, which became operational on 1st March 1993 by the publication of Notice No. 55 in the Official Government Gazette as an independent, autonomous, and fully fledged single-mode institution authorised to award its degrees and certificates via distance mode of delivery. The first batch of students was admitted in January 1994 (OUT, 2011). This Act was later repealed and replaced by the University Act No. 7 of 2005. The OUT was reregistered and reaccredited by the Tanzania Commission for Universities (TCU) in 2006 (Mbwette& Kazungu, 2011).

By 1990, Tanzania had only two conventional universities: the University of Dar es Salaam and the Sokoine University of Agriculture. The recommendation to establish an open university came as a strategy to increase enrolment in higher education, targeting those who had missed the chance and were now engaged in various life-sustaining activities in both public and private sectors. The university was to deliver its programmes by distance learning approaches, making it unnecessary for learners to reside on campus (OUT, 2018). The target students of OUT included employed staff who could not study in conventional universities due to their career commitments; women who could not leave their families; aspiring people in remote rural areas; school leavers who had the minimum entry requirements but could not be admitted into conventional public universities due to capacity limitation. Others include people with various disabilities; and poor people who had qualifications but could not meet the high tuition fees charged by the conventional universities.

Currently, OUT operates through 27 regional centres spread throughout Tanzania's Mainland and four coordination centres in Zanzibar, Pemba, Kahama and Tunduru.

Each centre serves as a coordination and administrative centre headed by a director. Since its inception, OUT has been using print-based study materials as a dominant course delivery mode, which is the case in most open and distance learning universities in Africa. With the advancements in Information and Communications Technology (ICT), OUT has shifted its course delivery mode from print-based materials to online instruction. From the 2016/2017 academic year, the university declared all undergraduate degree programmes to be taught online, except for a few specified programmes (OUT, 2018). The motives for this declaration were associated with improving the quality of both teaching and learning, increasing the enrolment and active number of students per year, increasing supervised self-learning on the part of students, improving the quality of graduates and reducing the average cost of academic delivery (OUT, 2016).

Online Instruction at OUT

Instructors use Moodle to facilitate course delivery using Learning Management System (LMS) tools such as discussion forums, assignments, chat forums and online lectures through Zoom (OUT, 2021). Teaching and learning activities include recorded online lectures, which are in the form of video, audio, or both, then uploaded and made viewable on Moodle, real-time lectures using video conference on the Zoom Cloud meeting application, online discussion and online assignments, quizzes, chat forums and whiteboards (Lawi, 2021).

Online instruction requires competent online instructors who have undergone training in teaching in an online environment. Literature indicates that as online study modes continue to expand, there is increasing cognisance of the need for competent online instructors. Developing institutional competence for online instruction requires a careful approach to training online instructors and a workload investment in staff training and development (Gregory & Lodge, 2015). The ability to effectively communicate, manage technology, and deliver and assess content becomes especially important in intensive online environments, where there is less time to familiarise oneself with new tools and the operating environments (Roddy et al., 2017). The monitoring of student progress, identification, and follow-up of related issues are also critical duties for instructors to minimise the possibility of student detachment from the learning process. In order to best support student learning, retention and degree completion online, instructors should be equipped with skills related to course management, instruction, instructional design and student engagement in the online setting (Andrews & Hu, 2021). According to Vang et al. (2020), online instructors begin online teaching with little or no specific

training. Further, there is little evidence regarding instructors' effectiveness in executing their online instruction roles.

Purpose and Objectives

Based on the preceding background, this paper is an explanatory case study that examines the instructors' conceptions of the efficacy and motives for online instruction. More specifically, the paper: Examines the instructors' conceptions of the efficacy of online instruction and analyses the instructors' perceived motives for online instruction.

Community of Inquiry Theoretical Framework

The Community of Inquiry framework (Figure 1) supports guided inquiry by identifying teaching activities. It provides guidance based on theory and practice, content, and processes for blended learning (Cleveland-Innes & Wilton, 2018). In keeping with the original three presences of the Community of Inquiry framework—*social presence*, *cognitive presence* and *teaching presence*, blended learning creates opportunities for self-reflection, active cognitive processing, interaction and peer teaching. In addition, expert guidance from teachers at the right time encourages engagement and shared application activities, highlighting the importance of creating communities of inquiry in the classroom, whether face-to-face, online or blended.

Accurate framework measurement allows for a more detailed examination of cognitive presence. This is important, as none of the presences stands alone. Cognitive presence emerges from four distinct but overlapping components of practical inquiry: triggering events, exploration, integration and resolution. Establishing deep and meaningful learning requires activity in all four components. However, Akyol and Garrison (2011) report evidence that cognitive presence requires a balance among cognitive, social and teaching presence. Direct instruction and facilitation of cognitive activity, beyond just explaining content, are vital roles for teachers using this framework. Rather than 'teacher presence,' teaching presence is so named to allow for a teaching function for teachers and students in a Community of Inquiry framework. While the teacher, or instructor, plays a leadership role, teaching presence allows for and fosters peer teaching among students. Recent studies clarify the importance of teaching presence in generating satisfying student learning experiences.

In addition to these three presences, emotional presence has been suggested (Stenbom et al., 2016). Emotional presence is defined as the outward expression of

emotion, affect, and feeling by individuals and among individuals in a community of inquiry as they relate to and interact with the learning technology, course content, students and instructor. Exploratory factor analysis suggests emotional presence may stand alone as a separate element in this framework.

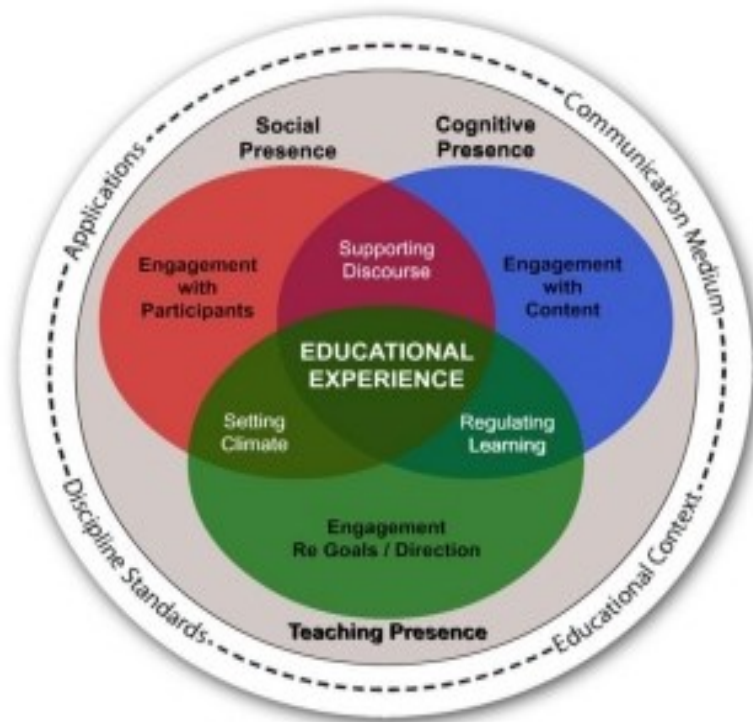


Figure 1: The Community of Inquiry Framework

Adopted from Cleveland-Innes and Wilton (2018); Garrison et al. (2000).

The Concept of Online Instruction

Most higher education institutions consider online education as part of their strategic growth to maximise learning opportunities and reach more students. Nonetheless, the transition from face-to-face or traditional distance education to a virtual environment necessitates new ways of teaching (Redmond, 2011). Instructors must change their pedagogical approaches from face-to-face or traditional distance education to online teaching. This requires instructors' knowledge and skills to facilitate teaching in an online environment. Online teaching uses the internet to provide instructional materials and facilitate interactions between teachers and students and, in some cases, among students. Online teaching can be entirely online, with all instructions taking place through the internet, or online elements can be combined with face-to-face distance

education in what is known as blended learning (Oliver & Stalling, 2014). Thus, online instruction takes place partially or entirely over the Internet.

The literature identifies two online teaching types: synchronous and asynchronous modes (Amiti, 2020; Kipling et al., 2023). Teaching in a synchronous environment takes place via an electronic mode, a live mode that includes voice, video, or text chat rooms. Further, it allows teacher-student and student-student interaction in real-time. Synchronous communication technology includes Google Meet, Skype, Adobe Connect, Microsoft Teams, Cisco Webex and Zoom (Wang et al., 2022). Synchronous mode involves tools such as live charts, audio and video conferencing, data and application sharing, shared whiteboard, virtual hand rising, joint view of multimedia presentations, and online slide shows to approximate face-to-face teaching strategies such as delivering lectures and holding meetings with groups of students. Both synchronous and asynchronous modes are essential in online instruction delivery to students and instructors. For instructors, teaching can be done anytime and anywhere (Amiti, 2020).

Asynchronous mode provides students with readily available materials in the form of audio/video lectures, handouts, articles and PowerPoint presentations. Studies in asynchronous mode are provided through Learning Management Systems (LMS) such as Blackboard, Moodle, WebCT and Desire2Learn. The asynchronous mode involves tools such as e-mail, threaded discussion, news groups, bulletin boards and file attachments (Amiti, 2020; Kipling et al., 2023; Ni She et al., 2019). Asynchronous communication tools have the limitation of lacking immediacy, spontaneity and visual cues. Online instructors can simultaneously reflect upon their instructional techniques and curricular design by providing frequent, timely, and constructive feedback on students' assignments and interactive communicative features such as discussion boards. Consequently, increased reflective thinking may lead to greater instructor engagement in teaching and learning, professional success and academic curiosity (Bohan & Perrotta, 2020). However, the growth of online teaching has not been without challenges; for instance, online teaching has been constantly criticised for its apparent lack of quality control; it has also been said that online learning deprives students of some of the benefits of being in a classroom such as physical teacher-student interaction. Other challenges are unreliable internet connection, costs associated with purchasing the mobile devices and bandwidth, instructors' lack of appropriate skills for teaching online and unreliable electricity supply. Also, there is a lack of motivation among instructors to innovate and support the development and teaching of online courses. Lack of

motivation poses a potential barrier to teaching, as many instructors who teach traditional classes may not be interested in teaching online (Kebritchiet al., 2017).

The Rationale for Training Online Instructors

Teaching online differs from teaching face-to-face in classrooms, where instructors observe learners' reactions in real-time, offer immediate clarifications on complex topics, personally get to know learners and communicate face-to-face. This is completely different online, where instructors must manage the environment, guide learners, and deliver content (Adnan et al., 2017). For some instructors, when they change the teaching place, they feel that their identities are under threat. Many instructors see their professional identity as tied to their past face-to-face teaching, where they had a high level of expertise. Redefining professional identity and teaching practices takes time. Without training, many instructors try replicating the existing course design and pedagogical practices when moving from face-to-face to online teaching (Redmond, 2011). Instructors face challenges in three phases of online education: design, delivery, and follow-up. In the design phase, instructors must consider how students learn and what to include, ensuring the class materials are exciting and engaging. Some suggested resources are media, lecture notes, and other sources that can add to the class materials.

One challenge with delivery is that many instructors cannot translate the materials into the online medium. The follow-up phase involves storing the information, accessing it later, and disseminating materials. In addition to the misunderstanding about transferring materials from one medium to another, instructors may feel a disconnection between the curriculum and design team's design and the actual delivery of class content (Kebritch et al., 2017). Instructors should be provided with capacity-building opportunities to develop knowledge, skills, and innovative teaching and assessment methods that can increase student engagement and attention to online classes (Leng et al., 2020). Training and orientation programmes about online learning, including lessons on online teaching and learning tools and strategies, need to be offered regularly so that students, instructors and staff can have the opportunity to advance their knowledge and understanding of the different aspects and nuances of online teaching (Heng & Sol, 2020).

Methodology

The efficacy of training and motives for online instruction were examined by instructors teaching courses online. Thus, a hermeneutic phenomenology design was used because the study aimed to engage research participants in expressing

their teaching experiences online. Literature confirms that hermeneutic phenomenology is suitable for understanding the context of people's 'lived experiences and the meanings of their experiences' (Alase, 2017). It also captures participant's narrative accounts, reflecting how they interpret and express their experiences through in-depth interviews. Twenty-five (25) instructors who have been more actively involved in online teaching for at least ten years were purposefully selected and interviewed. A questionnaire was administered to 25 instructors to corroborate their interview responses. This study employed Interpretative Phenomenology Analysis (IPA). IPA provided the best opportunity to understand the innermost deliberations of research participants 'lived experiences'. Smith and Nizza (2022) advocate that IPA researchers focus on the lived experiences of individuals and how they make sense of them within the context of their personal and social worlds, with a particular emphasis on personal sense-making. However, IPA is also guided by hermeneutics, a theory that acknowledges the subjectivity of interpretation. This means IPA researchers seek to relay intimate details of people's experiences and acknowledge that their experiences and biases may impact their interpretations. Hence, the research method goes beyond just summarising what people express rather it tries to discern what the experience is like from that person's unique perspective (Smith & Nizza, 2022).

Findings and Discussions

Efficacy of Training Programme Content for Online Instructors

The study on the efficacy of training and motives for online teaching may necessitate understanding the relevance of training content for online instructors in the first place. To this end, instructors were asked to rate *Yes* or *No* against the items regarding contents that were covered during training programmes for instructors. The 'Yes' responses are presented in Table 1.

Table 1***Programme Content for Training Online Instructors***

Item	Percentage
Developing suitable materials for online learners	11%
Uploading lecture notes, links, recorded lectures, assignments and quizzes in Moodle	98%
Conducting discussion on forums	96%
Setting quizzes for online learners	100%
Recording lectures	0%
Principles of online teaching	11%
Grading assignments and giving feedback to students	100%
Strategies for student feedback	98%
Strategies for student interaction	67%
Teaching in real-time online lectures using Zoom	96%
Conducting oral examinations in an online environment	88%
Creating Zoom link for online lectures	50%

The findings above revealed that training conducted at the Open University of Tanzania included how to: grade assignments and give feedback to students; set quizzes for online learners and; upload lecture notes, links, recorded lectures, assignments, and quizzes in Moodle. Other items include strategies for student feedback; conducting discussions on the forum; teaching in real-time online lectures using zoom; and conducting oral examinations in an online environment. Complementing the questionnaire findings, data from instructors' interviews revealed that some of the contents uploaded in Moodle missed important parts, as pointed out by one instructor:

Although we have adopted online teaching and that lecture notes should be uploaded to Moodle following the principles of ODL materials, we still have a gap regarding how to write ODL materials. Some instructors have just uploaded books without study guides. When online teaching was introduced at OUT, I was on study leave, but when I was back, I was just given a course to teach without any training, and it was such a tough time for me.... I contacted the faculty technician, who assisted me with some technical issues. I still face challenges marking online assignments and posting issues on the web page.

The instructor's responses above suggest that no training for instructors on developing ODL materials has been offered. Also, regular training is lacking to raise students' and instructors' awareness of online teaching and learning. This lack

of relevant and regular training for instructors and students who were teaching and learning in an online environment, respectively, had a bearing on the implementation of teaching through online mode. For instance, the understanding of what would be expected of instructors implementing online teaching was low, thus negatively affecting student learning. Andrews and Hu (2021) reported that there is also a lack of common standards for the format and content of professional training for online instructors. Training activities for online instructors often include workshops, one-to-one training, short sessions, and one-time training. Professional training should support online instructors in developing technology skills and learning about pedagogy and andragogy for effective instruction.

Motives for Conducting Online Instruction

Online instruction as a mechanism for flexibility and convenience in teaching and learning

Instructors expressed that online teaching allowed them to teach wherever they were. Further, online teaching provides an opportunity to meet students worldwide. Many instructors valued this ubiquitous environment, as one of them candidly revealed:

I enjoy teaching via online mode; I can travel and still have a session irrespective of where I am. I can be at home but run a session. This can be done any time when uploading study materials and replying to students' webmail. I can be a father, husband, student and lecturer while teaching. For example, I travelled for training to Mwanza, but in the evening, I had a Zoom session. The lesson was successfully taught while I was in the hotel, and I managed to see students from Arusha, Bukoba, Dar es Salaam, Dodoma, Mtwara and Zanzibar.

From the excerpt above, most interviewees shared their positive experiences about the many advantages of online teaching in terms of flexibility, convenience, freedom, and learner diversity. This implies that online instruction at the Open University of Tanzania allows instructors to conduct lessons from anywhere and anytime. Also, it allows students to study anywhere and at any time. Similarly, Naidu (2017) alludes that, in flexible learning, the learning and teaching process is increasingly freed from the limitations of the time, place, and pace of study. It is convenient since it allows one to study anywhere provided that they have internet. That said, online courses are available anytime, making it flexible to both students

and instructors. However, these advantages should not disregard the importance of being self-disciplined within higher education standards and expectations.

Online instruction as an opportunity for real-time online lectures

The Open University of Tanzania offers real-time online lectures like any conventional university for all courses using video conferences based on the Zoom cloud meeting application. Students are encouraged to observe the provided teaching timetable and join the online classes to interact with lecturers and fellow students. The lectures started from 1430 to 1915 hours (all times are +3 UTC). The Zoom joining links were accessed on their Moodle accounts. There was a one-hour lecture for each knowledge area (KI-K6) every month from December to May each year. However, there was another schedule that started from April to September. Typically, each knowledge area comprises more than two topics of the course syllabus. One course instructor reflected:

I teach via Zoom class and share slides on the screen where students can take notes, ask questions, and chat on the web page. It is like traditional classroom training, only that it is done with the aid of the Internet, and students from countries like Ghana, Senegal, and Namibia have been able to participate virtually. This is not possible when using print-based materials.

Thus, zoom classes are employed to enhance the synchronous mode of teaching and learning. A synchronous learning environment includes real-time sharing of knowledge and learning and immediate access to the instructor for asking questions and receiving answers. Teaching through Zoom minimized students' isolation and allowed them to attend the classroom irrespective of their location. This is supported by Amity (2020), that in an online teaching environment, the teacher and the students meet online on a specific online platform for teaching and communicating about a lesson. Direct interaction with teachers and students in real-time is much like a traditional face-to-face classroom, somewhat better, as the distance is no longer a barrier and by connectivity via the internet, no time is wasted in travelling.

Instant feedback and answers can help students resolve any problem they encounter in learning. Facial expressions and tones of voice can aid them in having the human feel a broader spectrum and lead to global interaction without much cost. These findings concur with the ideas from the Theory of Connectivism, where learning occurs when knowledge is shared, stored, and manipulated to create new

knowledge (Siemens, 2008). However, this type of environment requires a fixed meeting date and time, which contradicts the promise of learning *anytime, anywhere* that principles of traditional distance education promote. Some of the challenges inherent in real-time online lectures can be the need for the availability of students at a given time and the necessary availability of a good bandwidth and internet. Participants can feel frustrated and thwarted due to technical problems. Also, the challenge of a fixed timetable disrupts the principle of flexibility in ODL, which forces all instructors and students to be present during live sessions. In these circumstances, teaching an online live session is flexible regarding place but not time. Lack of flexibility in terms of time affects students' decision to enroll at the Open University of Tanzania as it is not the same as traditional distance education, which is flexible both in time and place.

Online instruction for the acquisition of individual access to materials and information

Most instructors conceptualized online instruction as improving teaching and learning by enhancing the accessibility of materials and information in Moodle. Instructors recalled that one of their roles is to develop materials and upload them in Moodle, which students can access anytime and anywhere. They also added that they record lectures and upload them to Moodle. An instructor narrated:

Online instruction is like face-to-face teaching, but the difference is that it is done with the aid of the Internet, and there is improvement in teaching compared to traditional distance education. In traditional distance education, materials are developed and distributed to learners via regional centres, which usually take a long time to reach students. With online teaching, a student can access materials in Moodle at any time from any place. I upload lecture notes, PPTs, reference books, and course outlines with online teaching. Also, students can access course information at any time and from any place provided they have paid tuition fees for the first instalment and students' direct costs.

Therefore, Moodle has improved students' access to materials such that they can download materials, save them on their devices, and read them at their convenience. Students can use smartphones, iPads, and computers wherever they are. Online teaching helps to access a wide variety of current and available online resources. Further, the web is used for individual access to learning materials and information. Similarly, Manea et al. (2021) add that online instruction through Moodle helps

instructors create and save teaching materials easily and use it as a collaborative online platform for instructors and students to learn together.

Moreover, Moodle helps students view information on the webpage regarding assignments, quizzes, discussion forums, timetables for Zoom lectures, and calendars. It also provides access to Zoom link information. Online teaching helps to simplify the accessibility of materials and information; learners must pay the first instalment of tuition fees with all its direct costs in order to access the materials and other information. This affects the implementation of online teaching because all students who have not paid tuition fees cannot start accessing information and learning. Gonzalez (2010) proposed that instructors conceptualise online instruction by focusing on the provision of information, which included two conceptions of e-learning as a medium to provide information and as a medium for occasional communication.

Online instruction for the promotion of individual assessment

Most interviewees considered online instruction to improve teaching and learning through online assignments called tutor-marked assignments (TAM) and quizzes known as computer-marked assignments (CMA). Like any other type of assessment, online assessment is used primarily to measure cognitive abilities, demonstrating what has been learned after a particular educational event, such as the end of an instructional unit or chapter. At the moment, at the Open University of Tanzania, online assignments are used for formative assessment to determine if learning is happening, to what extent, and if changes need to be made. On-going feedback needs to be given as soon as possible after the task is completed to improve teaching and learning for both students and instructors. Course instructors prepare online assignments for each knowledge area marked either online on Moodle or offline by the instructor.

In TMA, a student attempts two essay questions, each carrying 15%, making up 30%. However, the researcher experienced that when teaching through tutor-marked assignments where an instructor needs to grade and put comments, they realised that cheating through copying work of one another and plagiarism were the major problems reported by all instructors. Instructors preferred pencil and paper tests. One instructor provided an experience by reporting that:

We teach through an online assignment, which helps students to read and consult various literature, but students are just copying materials on the internet as it is without paraphrasing or citing the sources; if I subject their

works to Turnitin software, all students will fail or be discontinued from studies. Three students uploaded work of the same content. I decided to mark only one work, and I did not submit marks to the head of the department.... I was waiting for one among them to come to ask for the missing marks and ask them who the owner of the work is, but I have waited for this reaction for a year in vain. I prefer pencil and paper tests.

The transcript above suggests that cheating and plagiarism were significant problems reported by instructors who disliked the use of online assignments. This finding does not concur with the findings of Balen (2015) in South Africa, who found that instructors' perception was that online assessment is better than pencil and paper assessment. This implies that instructors accepted the online teaching mode. The variations may be due to the good ICT infrastructures; it can also be added that in any innovation, there are early adopters who are the first group of people who accept innovation and can work within the technological arena.

Instructors also reported quiz that staff from the Faculty of Business Management used both TMA and CMA to assess their students. Two staff from the Faculty of Education used CMA only to assess their students, and one instructor from the Faculty of Science, Technology and Environment Studies reported that he used CMA to assess students. CMAs consist of objective questions such as multiple choice, true/false, and short answer questions. The Directorate of Examinations Syndicate (DES) allows the department to decide the modality of assessing students to use CMA or TMA. Three instructors preferred quizzes because they are easy to mark for large classes. One instructor explained:

I am in a course with 2000 students, and marking two questions and providing constructive comments is becoming very difficult. It consumes time, so I opted for CMA, which is automatically marked by a computer. However, the issue of using quizzes in assessing students in our environment is questionable, particularly when controlling cheating. A group can discuss the quiz and provide answers, so a lecturer can mark a quiz that a particular student has not done.

Based on the transcript above, marking students' online assignments needs more time. Thus, instructors with many students do not prefer using TMA; they prefer using CMA, which is automatically marked by computer, but precautions have to be taken on plagiarism and cheating. Balen (2015) found that all the lecturers were optimistic about the advantages in terms of less marking time (65%) and a reduced marking load (88.3%). Although online formative assessment can help all students,

it produces predominantly good results with low achievers by focusing on specific glitches in their work and providing them with a clear comprehension of the mistakes and how to correct them (Balen, 2015). Technology allows the lecturers to monitor learners continuously regarding reading, participation in discussion forums, and even the time spent on virtual learning platforms. Digital technology makes it possible to monitor how long students devote to readings and videos, where they get electronic resources, and how quickly they master key concepts.

Online instruction for the promotion of collaborative learning

Online discussion is a collaborative tool to facilitate communication and knowledge construction. Students can view content and contribute to an online discussion anytime or anywhere on their gadgets, such as laptops/tablets/smartphones with an internet connection or offline using the OUT mobile App. While online discussion intends to promote collaborative learning, instructors award marks depending on the participation of each individual. The marks awarded are needed for official use, including forming part of students' continuous assessments and determining the final grade for some courses or programmes. Instructors reported that with the presence of online discussion, teaching is improved since students have an opportunity to share their views and read comments from their colleagues as reported by one instructor:

The online discussion allows students to share their views on the topic by saying what they understand. Sometimes, the discussion becomes very hot, but it can be done live through WhatsApp subject groups, subject telegram groups, and Moodle, where we can have a topic, and students can contribute at their convenience. However, online discussion is rarely used. As far as I can remember, I conducted online discussions in Moodle while introducing the course and very few students participated.

As mentioned above, online discussion helps students share ideas, but it is rarely used at the Open University of Tanzania. Additionally, students are not allowed to initiate the discussion in Moodle except in WhatsApp groups. This finding implies that although OUT has decided to use online discussion for teaching, it is rarely used among instructors and students. Also, because online discussion is not marked, instructors are reluctant to use it, and students rarely participate in it. Literature suggests that, in peer-led discussions, most students feel more motivated when the forum owner acknowledges their postings. Woods and Bliss (2016) added that many students feel discouraged after they find that others have already posted similar ideas to what they wanted to post. In these cases, it could be helpful for

instructors to employ a feature of the course management system in which the students cannot see their colleagues' posts before they answer the initial discussion question. However, this study found that sometimes students would see what others have posted and still think differently. The posts of fellow students and instructors may add important information, such as more contextual examples or clarifications. This is similar to what Payne et al. (2022) advocate: As higher education shifts to online, decision-makers must acknowledge the importance of relationship-building between students and instructors. Relationships among students, on the one hand, and between students and instructors, on the other hand, are crucial in cultivating collaborative learning and life in general.

Online instruction for stimulation of innovation

Instructors revealed that teaching through online mode is a kind of innovation that the institution has adopted to cope with the global demands where most conventional and open and distance learning institutions are embracing online instruction as a strategy to expand access to learning opportunities. Instructors exposed that innovations must follow all stages of any innovation in the institution; some innovations may fail while others succeed. The innovations that succeed are allocated enough funds for training and capacity building of employees, sufficient funds for resources and preparation of policy that support the new invention and raise awareness of staff. One instructor illustrated:

Online teaching is a kind of innovation the institution has adopted to improve teaching and learning at OUT. Usually, any institution changes to cope with the market demand, and nowadays, people possess smartphones that can be used for academic purposes such as sharing materials, conducting discussions, viewing recorded lectures, doing assignments, and saving lecture notes.

Online instruction is an innovation in which there are different people with different levels to adopt it, and the institution should be aware of this so that it does not regard people as hesitators but rather as late adopters. Also, the institution should invest enough funds in innovations, such as training and buying enough equipment to facilitate the innovation. According to Rogers (2003), innovators are venturesome people interested in technical aspects and risk-takers. Early Adopters are respected and considered change agents with the most significant degree of opinion about new ideas. They examine the innovation and its benefits, are willing to try it out and provide help and advice to other adopters. The early majority are deliberate and more concerned with professionalism. They are willing to adopt the

innovation once the majorities in society have adopted it. The late majority is sceptical, believes less in new ideas, and always makes sure that people are ready to solve their problems before adoption. Laggards are most likely to stick to the old and traditional ways. They are very critical towards adopting new ideas, and the innovation is accepted only if it becomes traditional. By understanding this, institutions need to be aware that sometimes, it is not that people hesitate to instruct online. However, they are either simply laggards or a group of the late majority. Similarly, people adopt the innovation based on its relative advantage, compatibility, complexity, trialability and observability (Penjor & Zander, 2016).

Conclusion and Recommendations

To create awareness and enhance pedagogical skills, higher learning institutions should make necessary arrangements to provide their instructors with the required professional development training opportunities such as team training, mentoring, seminars, field trips, tours, and e-learning. Instructors mentioned that training through Zoom and face-to-face modes were the only approaches employed to train instructors at the Open University of Tanzania. Nevertheless, training through these approaches was either not conducted frequently or missing some crucial content, such as how to create short video clips for introduction and develop materials suitable for online students. Such content must equip instructors with appropriate online instruction knowledge and skills. The repercussion of inadequate training may be revealed through instructors' negative attitudes towards online instruction and low participation of instructors in Moodle activities. Additionally, some instructors failed even to attend the real-time lectures.

Internet access and the associated costs, coupled with other issues such as available time and spaces for online study, propinquity and accessibility of technological support, and digital literacy, are among the critical factors that impact the online instructor's experience (Payne et al., 2022). Instructors' confidence and experience also influence the ease of online instruction. Older and cheaper technology, intermittent internet infrastructure, and time and space constraints can lead to struggles and compromises, such as the inability to facilitate synchronous discussions. It is thus imperative for higher learning institutions to ensure online instructors' access to reliable and affordable internet so that they can execute their responsibilities whenever and wherever they are.

While the recommendation for higher learning institutions to conduct regular training of online instructors is accentuated, it is significant to underscore the need to focus on contents related to issues such as pedagogical skills of teaching through

online mode, principles of online instruction, online assessment and evaluation, classroom management, and teaching and learning theories. It is also sensible to consider awarding certificates to instructors who successfully attend such relevant training programmes to demonstrate appreciation for their efforts and dedication. Finally, the study points out the need to consider reviewing the existing examination regulations in order to take care of the online teaching and learning contexts.

References

- Adnan, M. Kaleliglu, F & Gulbar, Y. (2017). Assessment of multinational online faculty development programme on online teaching. Reflections of candidate e-tutors. *Turkish Online Journal of Distance Education*, 18(1), 22-38.
- Akyol, Z., & Garrison, D. R. (2011). Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to learning. *British Journal of Educational Technology*, 42(2), 233–250.
- Amiti, F. (2020). Synchronous and asynchronous e-learning. *European Journal of Open Education and E-learning Studies*, 5 (2). 60-70.
- Andrews, M & Hu, X. (2021). A descriptive profile of online faculty training practices in the Illinois community college system. *The Journal of Educators Online*, 18(3), 1–12.
- Balen Z. (2015). Online formative assessment in higher education: Its pros and cons. *The Electronic Journal of e-Learning*, 13 (4), 228-236.
- Cleveland-Innes, M. & Wilton, D. (2018). *Guide to Blended Learning*. Commonwealth of Learning: British Columbia.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *Internet and Higher Education*, 2(2–3), 87–105.
- González, C. (2010). What do university teachers think eLearning is good for in their teaching? *Studies in Higher Education*, 35(1), 61-78.
- Gregory, M. S. J., & Lodge, J. M. (2015). Academic workload: the silent barrier to the implementation of technology-enhanced learning strategies in higher education. *Distance Educ.* 36, 210–230.

- Heng, K., & Sol, K. (2020, December 08). Online learning during COVID-19: Key challenges and suggestions to enhance effectiveness. *Cambodian Education Forum*. <https://cambodianeducationforum.wordpress.com>
- Kebritch, M. Lipschuetz, A. & Santiago, L (2017). Issues and Challenges for Teaching Successful Online Courses in Higher Education: A Literature. *Review Journal of Educational Technology Systems*, 46(1)4-29
- Kipling, R.P., Stiles, W.A.V., de Andrade-Lima, M., MacKintosh, N., Roberts, M.W., Williams, C.L., Wootton-Beard, P.C. & Watson Jones, S.J. (2023). Interaction in online postgraduate learning: what makes a good forum? *Distance Education*, 44:1, 162-189.
- Lawi, Y. (2021). Information on teaching and learning at the Open University of Tanzania: Orientation Speech from University Teaching and Learning Services Unit for 2021/2022 Academic year.
- Leng, P. Khieng, S. & Water, T. (2020, June 27). Going digital – The second phase of HE transformation. *University World News*. Accessed from <https://www.universityworldnews.com/post.php?story=20200623154410596>
- Manea, V.I. & Macavei, T. Pribeanu, C. (2021). Perceived benefits of online lectures during the pandemic: A case study in engineering education. *Pro Edu. International Journal of Educational Sciences*. 4(3)35-41.
- Mbwette, T. S. A. and Kazungu, K. G. M. (2011). Seventeen years of delivery of open and distance education by the Open University of Tanzania (OUT) in East Africa and Beyond. Paper presented at ACDE Conference and General Assembly.
- Naidu, S. (2017). How flexible is flexible learning, who is to decide and what are its implications? *Distance Education*, 38, 269- 272.
- Ni She, C., Farrell, O., Costello, E. & Bruntom, J. (2019). *Teaching online is different: critical conceptions from the literature*. Dublin City University.
- Oliver, K.M. & Stalling, D. T. (2014). Preparing teachers for emerging blended learning environments. *Journal of Information Technology for Teacher Education* 22(1):57-81.
- Payne, A.L., Stone, C, & Bennett, R. (2022). Conceptualising and building trust to enhance the engagement and achievement of under-served students. *The*

- Penjor, S. & Zander, P.O. (2016). Predicting virtual learning environment adoption: A case study. *Turkish Online Journal of Educational Technology*, 15(1), 69-81. <https://www.learntechlib.org/p/194693/>.
- Perrotta, K. A., & Bohan, C. H. (2020). A reflective study of online faculty teaching experiences in higher education. *Journal of Effective Teaching in Higher Education*, 3(1), 50-66.
- Redmond, P. (2011). From face-to-face teaching to online teaching: Pedagogical transitions. In G. Williams, P. Statham, N. Brown & B. Cleland (Eds.), *Changing Demands, Changing Directions*. Proceedings ascilite Hobart 2011. (Pp.1050-1060).
- Roddy, C. Amiet, D, L. Chung, J. Holt, C. Shaw, L. McKenzie, S. Garivaldis, F. Lodge, J.M. & Matthew, M.E. (2017) Applying Best Practice Online Learning, Teaching, and Support to intensive online environments: An integrative Review. *Front Educ*, 2(59)1-10.
- Rogers, E.M. (2003). *Diffusion of innovations*. Free Press.
- Sanga, P.L. (2013). [Attitudes of the Open University of Tanzania \(OUT\) Students towards Distance Education](#). *HURIA*, 14 (1), 22-36.
- Siemens, G. (2008). Learning and knowing in networks: Changing roles for educators and designers. Article presented to ITFORUM. Retrieved from <http://itforum.coe.uga.edu/Paper105/Siemens.pdf>
- Smith, J. & Nizza, I. E. (2022). *Essentials of interpretative phenomenological analysis*. American Psychological Association. <https://doi.org/10.1037/0000259-000>
- Stenbom, S., Cleveland-Innes, S. & Hrastinski, M. (2016). Emotional Presence in a Relationship of Inquiry: The Case of One-to-One Online Math Coaching. *Online Learning*, 20 (1).
- The Open University of Tanzania [OUT] (2011). *OUT Prospectus 2010/2011*. Open University of Tanzania.
- The Open University of Tanzania [OUT] (2016). *New coursework assessment through blended mode*, OUT.

- The Open University of Tanzania [OUT] (2018). *Rolling Strategic Plan 2004/2009*, OUT.
- The Open University of Tanzania [OUT] (2021) *Facts and Figures*, OUT.
- Vang, K. Martin, F. & Wang, C (2020). Examining community college faculty perceptions of their preparedness to teach online. *Journal of Applied Research in the Community College*, 27(1), 45-63.
- Wang, C. X., Houdyshell, M. & Plescia, M. (2022). Synchronous Communication Technology for Remote Academic Advising at a State University. [*Journal of Educational Research and Practice* 12\(1\)](#).
- Woods, K., & Bliss, K. (2016). Facilitating successful online discussions. *The Journal of Effective Teaching*, 16(2), 76-92.



Challenges Facing ODL Students when Conducting Research in Tanzania: A Case of Institute of Adult Education Regional Centres

Kija Steven Magembe

Institute of Adult Education, Morogoro Campus

Email: stevenkmagembe2001@gmail.com

Abstract

This study examined challenges that Open and Distance Learning (ODL) students face when conducting research in the Institute of Adult Education Regional Centres, Tanzania. A quantitative research approach with descriptive cross-sectional survey design were used in this study. The sample of this study involved ODL diploma students who were in their final stage of the research project in 2018. Simple random sampling technique was employed to select a sample of 80 students. Data were collected through questionnaires. A validated instrument with a test-retest reliability coefficient of 0.84 was used to elicit responses from respondents. The instrument was validated to ensure its accuracy, relevance, and effectiveness in measuring what it intended to measure. Data were analysed using descriptive statistics using SPSS version 20.0 software. The study found out that challenges faced by students when conducting research were of three categories: student-related challenges, supervisor-related challenges and institutional-related challenges. This study recommends that there is a need for regular workshops for research supervision to supervisors, motivating supervisors to attend and present papers at local and international conferences. Students should start planning in early enough on how to carry out the research studies. Meanwhile, adopting a COSTA model of supervision should be made as it provides a structured framework for effective supervision, facilitation, clearer communication, goal alignment and strategic planning.

Keywords: *Challenges, students, ODL, research, Tanzania*

Introduction

Studying through open and distance learning ODL mode remains one of the most convenient modes of study in Tanzania. The mode focuses on opening access to education and training provision, freeing students from the constraints of time and place and availing them an opportunity to access a form of education that is flexible for individual beneficiaries (Isik et al, 2010). The research conducted by Valdes, Comendador, Sanz, and Catan (2018) highlights the significance of ODL in the context of the fourth industrial revolution, which is characterized by the digitalization of fusion technology. Essentially, the findings suggest that ODL can play a crucial role in equipping future generations with the necessary skills and knowledge required in this rapidly evolving technological landscape by leveraging technological advancements. Such technologies include digitalization of ODL platforms that have the potential to offer flexible and accessible education opportunities that cater for the demands of the fourth industrial revolution. This implies that such educational approaches can effectively address the changing needs of learners and the workforce, ensuring that individuals are adequately prepared for the challenges and opportunities presented by the digitalization of fusion technology. The influence of digitalization on the world of work is considered to have drastic social and economic consequences (Brennan & Kreis, 2014). ODL has the potential to provide future generations with the appropriate skills and knowledge through technological advancement (Valdes, Comendador, Sanz, and Catan, 2018). Conventional education did not lead to sustainable education for all, and ODL is seen as the most cost-effective, cost-efficient way of solving many of the endemic problems in education and training, especially in Tanzania. The research by Özgür and Koçak (2016) emphasizes the importance of aligning ODL initiatives with the socioeconomic and cultural backgrounds of students for their success. They argue that for ODL to be effective, it must be tailored to accommodate the diverse needs and contexts of learners. This involves fostering active and participatory learning experiences that engage students and promote their involvement in the educational process. Trines (2018) also emphasizes that although ODL is a cost-effective way of mass education, limited availability and access to modern technology can be a serious obstacle in developing countries.

Despite the expanding growth of ODL and its benefits, students who enrol with ODL have been seen to face many challenges related to individual, institutional and instructional (Cosmas & Mbwette, 2009; Mbukusa, 2009). Generally, students who are enrolled in ODL programmes encounter numerous challenges. These

challenges, as identified by Cross (1981), fall into three main categories: situational, institutional and dispositional. According to Cross, situational challenges include job and home responsibilities that reduce time for study. Institutional related challenges include poor logistics system or a lack of appropriate advising (Kruger & Casey, 2000). Furthermore, challenges experienced by students studying through ODL when conducting research sometimes leads to the student's research study being delayed and in worst scenario leading them into not graduating on time (Gunawardana & Mclsaac, 2004). In order to attract ODL students, higher learning institutions must grasp the challenges these students encounter during their research endeavours and provide the right support. While a considerable body of research exists globally on the challenges of ODL, a notable gap exists regarding the specific challenges faced by ODL students conducting research in Tanzania. In an attempt to fill this gap, the purpose of this study was to explore challenges facing students when conducting research in ODL in Morogoro, Dar es Salaam, Lindi and Iringa regional centres, and to propose a possible solution that can be implemented within ODL environment to support students continuously. The study was guided by the following objectives: to find out the challenges that ODL students face when conducting research; to examine the effect of research challenges on student's completion rates and to find out possible solutions to address the challenges confronting ODL students when conducting research.

Prior research sheds light on the challenges faced by undergraduate students in conducting research, spanning various geographical locations such as Saudi Arabia, Zimbabwe, New York, Kenya, and the United Kingdom. For instance, Alshehry (2014) highlighted time constraints, scarce resources, and lack of research skills among female undergraduate students at Najran University in Saudi Arabia. Similarly, Mapolisa and Mafa (2016) identified challenges stemming from students, supervisors, and institutions at Zimbabwe Open University, including time management, limited access to resources, and emotional stress. These findings are consistent with studies by Pearce (2005), Nzama (2013), Nyawaranda (2005), Manchishi et al (2018), Alsied and Ibrahim (2017), and Thondhlana et al. (2011), which underscore challenges such as lack of research materials, delays from supervisors, and institutional-related issues affecting ODL students' research work across different contexts.

While the literature review has provided valuable insights into the challenges faced by undergraduate students in conducting research across diverse geographical

locations such as Saudi Arabia, Zimbabwe, New York, Kenya, and the United Kingdom, a deeper synthesis of these findings is necessary to discern common themes or differences. By connecting the different studies, we can gain a more comprehensive understanding of the challenges encountered by students in various educational contexts and draw implications for the field of research education. For instance, despite the cultural and institutional differences across these locations, there may be recurring challenges such as limited access to resources, inadequate research skills training, and difficulties in balancing academic and personal commitments. However, it is also crucial to acknowledge potential variations in the nature and extent of these challenges based on factors such as socioeconomic status, institutional support systems and educational policies. By examining both commonalities and differences, researchers can identify effective strategies and interventions to support diploma students in their research endeavours, regardless of their geographical location. Furthermore, a comparative analysis of the challenges and support mechanisms across different countries and educational systems can contribute to the development of global best practices in research education.

Theoretical Framework

In order to delve deeper into the challenges faced by ODL students in conducting research within the Tanzanian context, this study was guided by Transactional Distance Theory, as proposed by Moore (1991). The theory offers a comprehensive lens through which to view and understand the interplay between learner autonomy, interaction and structure in the context of distance education. By adopting this theoretical framework, this study aims to elucidate the specific challenges encountered by ODL students in Tanzania and explore how these challenges intersect with the broader theoretical constructs of transactional distance.

The theory posits that distance is not simply a geographical separation of learners and teachers, but most importantly is a pedagogical concept. It is a concept describing the universe of the teacher-learner relationship that exists when learners and instructors are separated by space and time. With this separation, there is a psychological and communication space to be crossed to facilitate teaching and learning. The supervision of students in ODL environment is by its nature psychological and communication related. Student transactional distance connotes interplay among the environment, the individual, and the patterns of behaviours in a situation (Moore, 1997). According to Moore (1997) transactional distance is pedagogical, not geographic, and necessitates “special organizations and teaching

procedures” (p. 22). The nature of the transaction developed between students and teachers in a distance education environment is governed by three factors: dialogue, structure and learner autonomy.

Dialogue refers to positive interactions. It is “purposeful, constructive and valued by each party,” involving “active listeners” as well as “contributors” in the interaction (Moore, 1993, p. 24). Structure refers to “the extent to which an education programme can accommodate or be responsive to each learner’s individual needs” (p. 26). Learner autonomy or self-direction is the extent that the learner and not the teachers determine the goals, learning experiences and evaluation decisions. The specific determinants of dialogue and structure include educational philosophy and characteristics of teachers or designers; the personalities of teachers and learners; the subject matter; the interactive nature of the communications media and the constraints imposed by educational institutions.

The theory is the most appropriate because research supervision in an ODL environment is affected by dialogue, structure and learner autonomy that normally affect teaching and learning transactions at a distance in line with the aforementioned three factors. Research supervision requires student and supervisor dialogue as they go through the research process. This includes even at a time, learners engaging in some collaborative dialogue with their supervisors. There is also a need for establishing a properly structured supervision process to enable smooth interaction between students and supervisors. The issue of learner autonomy is also very important in research supervision because distance learners need to have a certain level of self-motivation and self-drive to be successful in their studies, including carrying out research. Students can not only wholly depend on their supervisors to take all the responsibility of ensuring that they work on their research projects.

Methodology

The study adopted a descriptive cross-sectional survey design, and a quantitative research approach was used in this study. The target population was ODL diploma students who were in their final stage of the research project in 2018. ODL students at the Institute of Adult Education (IAE) are spread throughout the country, which is composed of 26 regions, therefore only four regional centres (Iringa, Lindi, Dar es Salaam and Morogoro) were randomly selected.

In this study, a simple random sampling technique was employed to select participants from each of the four regional centres. To ensure representativeness, a

systematic approach was followed. Firstly, a list of all finalist diploma students enrolled at each regional centre was obtained from the IAE records. Subsequently, a random number generator was used to assign a unique identification number to each student on the list. Then, the required sample size of 80 students from the four regional centres was selected by randomly choosing identification numbers from the generated list. This process was conducted independently for each regional centre to avoid bias and ensure that each student had an equal chance of being included. By employing this systematic approach, the study aimed to obtain a sample that accurately reflected the diversity and characteristics of the diploma student population at the IAE.

A self-administered structured questionnaire was used to collect the data from the students. The questionnaire had 15 items measured on a 5-point Likert-type scale. The scale had three dimensions, namely, student-related with 7-items, supervisor-related with 3-items and institution-related dimension with 5-items. The self-administered structured questionnaire consisting of 15 items was developed through a rigorous process to ensure content validity and reliability. Initially, a comprehensive review of existing literature on the challenges faced by diploma students in conducting research was conducted to identify key themes and areas of inquiry.

Following the initial development phase, a pilot test of the questionnaire was conducted with a small sample of diploma students at the IAE in Dar es Salaam region to assess clarity, comprehensibility and relevance of the items. Feedback from the pilot test was used to further refine the wording and structure of the questionnaire items. In terms of validation, the questionnaire underwent content validation by a panel of experts in the field of research education and questionnaire development. This involved evaluating the relevance, clarity, and appropriateness of each item to ensure that the questionnaire effectively measured the intended constructs. The descriptive statistics using SPSS Version 20.0 was used to analyse the collected quantitative data.

Results

Challenges facing ODL Students in Conducting Research

The first objective sought to identify the challenges experienced by ODL students in conducting research. The identified challenges were categorized into three groups; student-related, supervisor-related and institutional-related challenges as presented hereunder:

Student-related challenges

Students indicated that inadequacy of library resources (47.5%), lack of scientific academic writing skills (43.8%), lack of adequate skills in review of literature, data analysis and interpretation of findings (45%), poor writing skills (42.5%), family, job and other social responsibilities (40%), computer illiteracy (40%), difficulties in referencing (38.8%) and lack of income (35%) as challenges of great concern that they faced in conducting their research (Table 1).

Table 1

Learner-related challenges facing ODL learners when conducting research

Challenges	Responses (N=80)									
	SD		D		N		A		SA	
	n	%	n	%	n	%	n	%	n	%
1. Inadequacy of library resources in the region and study centres	6	7.5	4	5	2	2.5	30	37.5	38	47.5
2. Lack of academic writing skills	3	3.8	8	10	5	6.2	29	36.2	35	43.8
3. Lack of skills in review of literature, data analysis and interpretation of findings	3	3.8	5	6.2	10	12.5	26	32.5	36	45
4. Family, job and other social responsibilities	5	6.2	8	10	7	8.8	28	35	32	40
5. Computer illiteracy	4	5	9	11.2	6	7.5	29	36.2	32	40
6. Difficulties in referencing	5	6.2	8	10	9	11.2	27	33.8	31	38.8
7. Lack of income	4	5.0	16	20.0	12	15.0	20	25.0	28	35.0

Note: SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree, n=number of respondents and %= percentage

Source: Survey data (2018).

Supervisor-related challenges

The findings presented in Table 2 indicate supervisor-related challenges being faced by ODL students in conducting their research projects. Few meetings with

the students (43.8%), delay in giving feedback to students (40%) and lack of adequate skills in research supervision (58.8%).

Table 2

Supervisor-related Challenges

Challenges	Responses (N=80)									
	SD		D		N		A		SA	
	n	%	n	%	n	%	n	%	n	%
1. Few meetings with the students	5	6.2	11	13.8	12	15.0	17	21.2	35	43.8
2. Delay in giving feedback to students	8	10.0	4	5.0	13	16.3	23	28.8	32	40.0
3. Lack of adequate skills in research supervision	4	5.0	7	8.8	6	7.5	16	20.0	47	58.8

Note: SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree, n=number of respondents and %= percentage

Source: Survey data (2018)

Institutional-related Challenges

The findings indicated in Table 3 portray that 39 (48.8%,) of the ODL students perceived library resources to be inadequately available, inadequate relevant functioning ICT equipment to support research work 40 (50%), lack of research workshops to ODL students 35 (43.8%) little time allocated for doing research-based project 35 (43.8%), inadequacy of research course contents 20 (25%) and 35 (43.8%) of the students stated that the time allocated for doing research is not enough as some of the institutional-related challenges that ODL students faced in the course of writing their research works.

Table 3***Institution-related Challenges that ODL Students experience in Conducting Research (n=80)***

Challenges	Responses (N=80)									
	SD		D		N		A		SA	
	n	%	n	%	n	%	n	%	n	%
1. Library resources are inadequately available	4	5	7	8.8	3	3.8	27	33.8	39	48.8
2. Inadequate relevant functioning ICT equipment to support research work	3	3.8	4	5	6	7.5	27	33.8	40	50
3. Lack of research workshops to ODL students	2	2.5	8	10	6	7.5	29	36.2	35	43.8
4. Time allocated for doing research is not enough	2	2.5	6	7.5	7	8.8	30	37.5	35	43.8
5. Inadequacy of research course contents	12	15.0	11	13.8	8	10.0	29	36.2	20	25.0

Note: SD=Strongly Disagree, D=Disagree, N=Neutral, A=Agree, SA=Strongly Agree, n=number of respondents and %=percentage

Source: Survey data (2018).

Effect of research challenges on student's completion rates

The second objective sought to examine the effect of research challenges on student's completion rates. A regression model is presented in Table 4 to show the effect of research challenges on student's completion rates.

Table 4***Regression output for the effect of research challenges variables on rate of completion***

Model	Unstandardized Coefficients		Standardized Coefficients	t-statistic	Sig.
	beta	StdErr.	beta		
(Constant)	3.569	0.359		8.366	.000
STUDRCH	-1.024	0.214	-0.479	-4.779	.000
SUPERCH	-2.024	0.244	-0.456	-4.789	.000
INSTRCH	-0.038	0.043	-0.384	0.377	.036

a: Predictors: (Constant), Student-related challenges (STUDRCH), Supervisor-related challenges (SUPERCH) and Institution-related challenges (INSTRCH)

b: Dependent variables: Student's completion rates

Significance test at 0.05 indicated that student-related challenges ($p=.000$); supervisor-related challenges ($p=.000$) and institution-related challenges ($p=.036$) all are statistically significant. The β coefficient of student-related challenges is 0.479, that of supervisor-related challenges is 0.456 and that of institutional-related challenges is .384. The β coefficient tells us that one unit change in student-related challenges contributes to 4.79% change in student's completion rates, one unit change in supervisor-related challenges contributes to 4.56% change in student's completion rates and one unit change in institutional-related challenges contributes to 3.84% change in student's completion rates.

The ANOVA results indicated in Table 5 revealed that the regression model was significant at $F=8.794$ with p -value equal to .000 which is lower than the cut-off p -value of .005. This implies that the null hypothesis was rejected meaning that, research challenges have a significant effect on student's completion rates. The null hypothesis under the study was stated as follows:

H_0 : Research challenges (student-related, supervisor-related and institution-related challenges) have no significant effect on ODL student's completion rates.

Table 5*ANOVA Table*

Model	Sum of Squares	df	Mean square	F-value	Sig.
Regression	14.302	2	7.510	8.794	
Residual	65.758	77	0.854		.000
Total	80.060	79			

a: Predictors: (Constant), student-related challenges (STUDRCH), supervisor-related challenges (SUPERCH) and institution-related challenges (INSTRCH)

b: Dependent variables: students' completion rates

Strategies to Address Challenges Facing ODL students in Conducting Research

The third objective sought to determine strategies from students' perspectives that could be used to address the challenges that students encounter when conducting research. The findings in Table 6 provide ways that can be used to address the challenges that students encounter when conducting research.

Table 6***Strategies to Address the Challenges Facing ODL Students in Conducting Research (N=80)***

Challenges	Suggested solution	Mean	SD
Student-related challenges	To be trained on how to balance time for family and academic issues	4.52	1.40
	To be provided with scientific academic writing skills	3.75	1.10
	To be trained on data analysis and interpretation of findings	4.32	0.82
	To be trained on computer literacy	4.11	0.31
Supervisor-related challenges	Supervisors should attend research workshop regularly	5.78	1.56
	Provide opportunities for supervisors and students to carry out collaborative research works	5.10	1.91
	Supervisors should be trained on how to supervise adult learners	3.83	1.45
Institutional-related challenges	Provision of high investment in ICT infrastructure	4.63	1.20
	Regular workshops on research supervision to supervisors	4.02	1.04
	Supervisors to attend and present papers at local and international conferences	3.54	1.21

Note: SA for (strongly agree) = 5, A (agree) = 4, U (undecided) = 3, D (disagree) = 2 and SD (strongly disagree) = 1

Source: Survey data (2018)

To be trained on how to balance time for family and academic issues (Mean =4.52; SD=1.40), to be provided with scientific academic writing skills (Mean =3.75; SD=1.1), to be trained on data analysis and interpretation of findings (Mean =4.32; SD=0.82), to be trained on computer literacy (Mean =4.11; SD=0.31). Supervisors should attend research workshop regularly (Mean =5.78; SD=1.56), provide opportunities to supervisors and students to carry out collaborative research work (Mean =5.10, SD=1.91) and supervisors should be trained on how to supervise adult learners (Mean = 3.83, SD=1.45) and provision of high investment in ICT infrastructure (Mean =4.63, SD=1.20). Additionally, the institutional-related challenges strategies were provision of high investment in ICT infrastructure (Mean

=4.63, SD=1.20), Regular workshops on research supervision to supervisors (Mean =4.02, SD=1.04) and supervisors to attend and present papers at local and international conferences (Mean =3.54, SD=1.21).

Discussions

The primary research challenges for students typically fall into three categories: student-related challenges, supervisor-related challenges and institution-related challenges.

Student-related challenges

Findings have indicated that generally, most of the students indicated that inadequacy of library resources, lack of scientific academic writing skills, lack of adequate skills in review of literature, data analysis and interpretation of findings, as challenges of great concern that the ODL students experienced in conducting their research. Access to relevant literature was another problem that students encounter while writing academic reports. On that note, they agreed with Anderson et al (2006) who pointed out that library is a very limited resource for students carrying out research. Also, he added that there is a lack of up-to-date resources in the library needed for research. So, students waste their time looking for the books and at the end they find nothing. Advocating the students' difficulties in research writing, scholars found similar difficulties faced by students (Lestari, 2020; Safitri et al., 2021). The research writing difficulties were related to the students' understanding of research skills and composition skills of the reports, such as introduction, literature review, methods, findings and discussion. It is assumed that research skills are vital to navigating the research paths and determining the research gap.

Furthermore, lack of funds let the students down in photocopying recent journals, studies and e-resources. Research students had to strike a balance between financing their education and sending their children to school, as well as looking after their families. These students had to buy and provide basic needs (food, shelter and clothes) for their families. These commitments competed with their need to successfully complete research-based projects. Two other students exhorted that lack of time and money was a deterrent to their ability to successfully carry out research-based projects because not everyone had access to library and internet resources in the absence of money. Time would be a very hard resource to get if one is engaged on a full-time job that has its equally competing demands. De Vos (2015) cited in Murray (2007) states that writing of scientific research is time

consuming and thus, learners are called upon to manage their time strictly. Thus, it is argued that as much as ODL students did not have ample time, distance students too have limited time, an issue which has to be adequately addressed.

ODL also presents new challenges in information dissemination, especially in developing countries. Mossberger et al. (2003) observes that technical competence needed in order to have effective access to contemporary ICT is a challenge to distance learners. Technical competence refers to the skills needed to operate the hardware and software of ICT, including the skills of using networked systems to access and share information. Lack of these skills is a critical challenge as learner may fail to use the various physical, digital and human resources involved ICT. The use of electronic media is therefore likely to exclude the majority of distance learners. This concurs with several other studies in developing countries that established that ODL students in developing countries are challenged with both lack of experience in the application of technology and absence of these technologies (Mbukusa, 2009). A study by Mnyanyi and Mbwette (2009) had similar findings, where Open University of Tanzania (OUT) learners claimed they were victims of ICT illiteracy as to some of them; even operating a computer was problematic. On the hand, the infrastructure system that facilitates the smooth operation of ICT is still poor in Tanzania.

Supervisor-related challenges

Findings have indicated that, delay in giving feedback to students was also a challenge. There are various suggestions in the literature on what good-quality feedback entails. Feedback is said to be affective, cognitive, corrective, developmental (Hattie & Temperly, 2011), informative (Hattie & Temperly, 2011), and motivational (Mensah, 2009). Furthermore, feedback delivers high-quality information to students about their learning (Nicol & Macfarlane-Dick, 2006). According to Ali et al (2016), supervisions factors that determine successful supervision included: leadership' (ability to lead the supervision process . . .), 'knowledge' (knowledge of a research topic) and 'support' (ability to support students in acquiring appropriate research skills . . .) respectively" (pp. 233-236).

Although supervisors are supposed to be key players in the supervision process, Mapasela and Wilkinson (2005) found that many of them are not equipped by their institutions to nurture this relationship. Mapasela and Wilkinson argue that some supervisors have little training on the process of supervision. Chiappetta-Swanson and Watt (2011) describes the prevalent situation as "muddling through". Unfortunately, this situation negatively affects the progress of the students.

Cardilini et al (2021) lamented that supervisors have the responsibility to give guidance and feedback on critical thinking, written communication, and relevant discipline knowledge to students. Students' expectations are that more guidance on developing their academic independence, their collaboration skills, and maintaining motivation should be provided by supervisors.

According to Lessing and Schulze (2002), a supervisor has to establish a balance among multiple factors like supporting students, having expertise in research, providing positive criticism and bringing creativity. He/she needs to work on various fronts to bring quality research work by providing guidance to the students in a way that leads to innovative ideas while keeping in mind the timelines and rules established by the institution.

It is important to define the parameters of supervision, as this aligns the research outcomes to the factors of Moore's theory of Transactional Distance (Moore, 1991), which outline the importance of the structure factor. The presence of structure will facilitate an easier dialogue, which is critical for the back-and-forth communication between the supervisor and student. The presence of these two factors helps in building up confidence in the student, which will lead to more self-direction and motivation needed by the student to take control of his/her learning. According to Delgaty (2018), the genesis of self-directed learning can be attributed to the creation of the conditions that encourage individuals to exercise initiative, reflection and choice. Students must reach this level of thinking when working on research to be able to take control of their research activities.

Institutional-related challenges

Institutional barriers consist of limitations regarding methods institutions use to design, deliver and administer learning activities (MacKeracher et al., 2006). The majority of the ODL students perceived library resources are inadequately available, inadequate relevant functioning ICT equipment to support research work, lack of research workshops to students and the time allocated for doing research-based projects is not enough as some of the most pronounced institutional-related challenges that ODL students experience. The present findings are in tandem with previous research findings by Nyawaranda (2005) & Pearce (2005) who concur that students' capacities to conduct research are constrained by institution-related challenges such as: lack of exposure of supervisors to research skills, lack of internet services, lack of exposure to computers and lack of research material. They however tend to miss out the practice of imposing research topics on the students that militate against students' success in research work (Thondhlana et al, 2011).

The regional centres lack adequately equipped library and ICT facilities to effectively support research work.

Strategies to Address Challenges Facing ODL Students in Conducting Research

The solutions to address the challenges that ODL students encounter when conducting research includes supervisors should attend research workshop regularly and students should carry out collaborative research work with their supervisors or would be supervisors. Supervisors should be trained on how to supervise adult learners and provision of high investment in ICT infrastructure. Supervisors need to be assessed whether they have information and the requisite skills critically to supervise students at a distance. They ought to be trained in specific skills in distance supervision through practical demonstrations. Students also need to start planning early enough on how to carry out the research-based projects. Likewise, the use of COSTA model is emphasized in this study.

The use of COSTA Coaching Model of Supervision as a Strategy to Address Challenges Facing Students in Conducting Research

It has clearly been established that collaborative methods of supervision tend to have better results. The COSTA model promotes collaboration and collegiality through provision of real-time problem solution in a seminar/workshop-based mode where students, sometimes from different universities, come together for a common purpose of understanding research protocols and how these can be applied to their individual studies. The model proposes that students attend these sessions, where the first step is to learn about concepts and research language. This is critical as it introduces them to key terminology that will be used in their research projects. This step is not passed until students demonstrate knowledge and understanding of concepts and their context of usage including content requirements for particular studies. When this is done, then the issue of research question is raised before getting to the topic. The topic comes after carefully selecting a research question. This can't be done without understanding literature review. The advantage of this model is that while using basic principles of coaching, whereby the coachee must find results, it provides support to students in a structured and coherent manner from the coaches/supervisors and fellow students. The model is created on evidence of what the researcher empirically observed when they brought students together from different institutions of learning with a sole purpose of implementing the programme (Costa, 2018). The model focuses on spending time with students

introducing them to concepts that will be critical in their research projects. Table 5 presents a 5-step framework of the model for further perusal.

Table 5

COSTA Coaching Model of Supervision

STEP	DESCRIPTOR	APPLICATION	STAGE SIGNIFICANCE
<p style="text-align: center;">STEP 1 C</p>	<p style="text-align: center;">CONNECTION CONCEPTS</p>	<p>Connection between the supervisor and the student is critical. The suggested method is the GROW Model to determine the preparedness and willingness of the student</p> <p>In-depth introduction to research language and applicable concepts. This cannot be done in one week; it should be a minimum of full three months programme.</p>	<p style="text-align: center;">ESTABLISHMENT OF RESEARCHER'S FOUNDATIONAL SKILLS</p>
<p style="text-align: center;">STEP 2 O</p>	<p style="text-align: center;">OBJECTIVES</p>	<p>This deals with the objective of the project. The student should be able to articulate the following: introduction, background, study objectives, research questions assumptions/hypotheses, the study significance, study limitations and delimitations.</p>	<p style="text-align: center;">RESEARCHER'S INTENTION (RESEARCH PROPOSAL)</p>

A STEPS	ASSESSMENT	Ability to make judgment on the strength and weakness of the study. Provision of a cogent argument in support of study objectives and its benefits to targeted audience. Implications and recommendations.	RESEARCHER'S INTELLECTUAL JUDGEMENT OF RESEARCH OUTPUT
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Source: Costa (2018).

Conclusion and Recommendations

It can be concluded that, ODL students need to work with helpful support supervisors who commit themselves to the progress and success of their students. Supervisors ought to be students' models in conducting their research projects. Evidence in the supervision literature suggests that supervisors become supervisors without any formal training. Therefore, they tend to draw many forms of their own supervisory experiences as graduate students (Halse, 2011), hence the need for structured supervision training. Furthermore, there is a need to note and acknowledge that supervision is about a continual exchange of ideas and supervisors should refrain from looking down upon students, but rather treat them like junior colleagues eager to learn research (Grant, Hackney & Edgar, 2014). This is also in line with the concept of dialogue espoused in Moore's theory of Transactional Distance. Once there is dialogue and structure, it will then be easy for the promotion of student autonomy to be realized for students to eventually be motivated and ready to self-direct in their research initiatives with the need for less driving by the supervisors. This will result in a healthier relationship between the supervisor and the student. This view is supported by Grant, Hackney & Edgar (2014), who argue that the core of research support lies in the relationship between the student and the supervisor. This is the key that facilitates effective supervision and helps to promote a good learning experience for the student.

Inadequate of library resources was viewed as one of the greatest let downs to effective research supervision and writing. Supervisors could be more resourceful by accessing and providing students with relevant reading materials. Also, students need to be coached how to balance their time to enable them to carry out their research projects well. In order to perfect the art of research, supervisors and

students need regular research workshops because not all supervisors in ODL institutions get the opportunity to present conference papers, attend research workshops and get involved in conducting baseline studies. Workshops are avenues to drive candidates towards the main route to successful research work. Commonwealth of Learning (2001) speaks highly on research-related workshops such as e-learning which has the capacity to enhance students' abilities to scale up to dizzy heights. In student-supervisor interaction, whether it is face-to-face or via electronic media, the key to success is the commitment to support students (Holmberg, 2008).

Based on the findings and conclusion of the study, the following recommendations are made:

- i) For effective supervision, the IAE must establish a clear communication channel between students and supervisors, ensuring regular meetings and timely responses to queries. Also, supervisors must be encouraged to be accessible and approachable in providing students with guidance and feedback when needed. Similarly, the IAE must develop guidelines or protocols for supervisory interactions to ensure consistency and effectiveness throughout the supervision process.
- ii) The IAE should set criteria or standards for selecting supervisors based on their experience, expertise and availability. It should also offer professional development opportunities for supervisors to enhance their mentoring and supervisory skills, such as workshops on effective communication and Institute support strategies.
- iii) At the start of research projects, students should be given orientations regarding research methodologies, data analysis techniques and related data analysis software.
- iv) The IAE should adopt collaborative models of supervision such as the COSTA model for research students
- v) Supervisor's supervision activities must be characterized by flexibility, integration, continuous feedback and constructive criticism, in the sense that the supervisor trains the student with investigative competences, in this teaching-learning process, although with specific characteristics.
- vi) Students need to be coached on how to balance their time to enable them to carry out their research well.

vii) Students also need to start planning early enough on how to carry out the research project process.

References

- Ali, P. A. Watson, R., & Dhingra, K. (2016). Postgraduate research students' and their supervisors' attitudes towards supervision. *International Journal of Doctoral Studies*, 11(1), 227-241. <http://www.informingscience.org/Publications/3541>.
- Alshehry, A. T. (2014). Teaching research writing to female undergraduates in Saudi Arabia. *International Journal of Education Learning and Development*, 2(4), 15–25. http://www.eajournals.org/wp-content/uploads/Teaching_Research_Writing-To-Female-Undergraduates-in-Saudi-Arabia.pdf
- Alsied, S. M., & Ibrahim, N. W. (2017). Exploring challenges encountered by EFL Libyan learners in research teaching and writing. *IAFOR Journal of Language Learning*, 3(2), 143-158.
- Anderson, C., Day, K., & MacLaughlin, P. (2006). 'Mastering the dissertation: lecturers' representations of the purposes and processes at master's level dissertation supervision'. *Studies in Higher Education*, 31(2), 149-168. <https://doi.org/10.1080/03075070600572017>.
- Brennan, S., & Kreis, D. (2014). Digitalization and Digitization. <http://culturedigitally.org/2014/09/digitalization-and-digitization>.
- Cardilini, A. P. A., Risely, A., & Richardson, M. F. (2021). Supervising the PhD: identifying common mismatches in expectations between candidate and supervisor to improve research training outcomes. *Higher Education Research and Development*, 41 (3), 613-627. <https://doi.org/10.1080/07294360.2021.1874887>.
- Chiappetta-Swanson, C., & Watt, S. (2011). Good Practice in the Supervision & Mentoring of Postgraduate Students: It Takes an Academy to Raise a Scholar. Hamilton: McMaster University. <http://docplayer.net/17981364-It-takes-an-academy-to-raise-a-scholar.html>.
- Commonwealth of Learning International (2001). Building Capacity to Deliver Distance Education in Nigeria's Federal University System. Report prepared for the World Bank. <http://siteresources.worldbank.org/Nigeriaextn/Resources/capacityde.pdf>.

- Cosmas, B. F., & Mbwette, T. S. (2009). Open and distance learning in developing countries: The past, the present and the future. Open University of Tanzania.
- Costa, K. (2018). A systematic review of challenges in research supervision at South African Universities. *Preprints*, 21-45. <https://doi.org/10.20944/preprints201812.0305.v1>.
- Cross, K. P. (1981). *Adults as learners*. Jossey-Bass.
- De Vos, C. (2015). The Kata Kolok pointing system: Morphemization and syntactic integration. *Topics in Cognitive Science*, 7(1):150-168.
- Delgaty, L. (2018). *Transactional Distance Theory: A Critical View of the Theoretical and Pedagogical Underpinnings of E-Learning*. Interactive multimedia-multimedia production and digital story telling. <https://doi.org/10.5772/intechopen.81357>.
- Grant, K., Hackney, R., & Edgar, D. (2014). Research Supervision: An Agreed View of Metaphors and Conceptual Model. In-SITE 2014. Wollongong, Australia. *International Journal of Doctoral Studies*, 9(1), 43-60.
- Gunawardana, C. N., & Mclsaac, M. S. (2004). *Distance education*. In D. H. Jonassen (Eds.), *Handbook of research for educational communications and technology* (2nd ed., pp.355-396). Mahwah, NJ: Erlbaum.
- Halse, C. (2011). Becoming a supervisor: The Impact of Doctoral Supervision. *Studies in Higher Education* 36(5), 557-570. <https://doi.org/10.1080/03075079.2011.594593>.
- Hattie, J., & Timperley, H. (2007). The power of feedback. *Review of Educational Research*, 77 (1), 81-112.
- Holmberg, B. (2008). *The evolution, principles and practices of distance education*. BIS-Verlag der: Oldenburg. Distance Education: A Reader, University of London Institute of Education.
- Isik, A. H., Rukiye, K., & Gnan, G. (2010). Postgraduate students' attitudes towards distance learning. *Procedia-Social and Behavioural Sciences*, 9, 218-222. <https://doi.org/10.1016/j.sbspro.2010.12.139>
- Kruger, R. A., & Casey, M. A. (2000). *Focus Groups: A practical guide for Applied Research*, 3rd ed. SAGE.

- Lessing, A. & Schulze, S. (2002). "Postgraduate supervision and academic support: students' perceptions", *South African Journal of Higher Education*, 16 (2), 139-149.
- Lestari, D. M. (2020). An Analysis of the Students' Difficulties in Writing Undergraduate Thesis at English Education Study Program of Muhammadiyah University of Bengkulu. *Journal of English Education*, 9(1), 17. <https://doi.org/10.24127/pj.v9i1.2588>.
- MacKeracher, D., Suart, T., & Potter, J. (2006). State of the Field Report: Barriers to Participation in Adult Learning. [http:// www.nald.ca/library/research/sotfr/barriers/barriers.pdf](http://www.nald.ca/library/research/sotfr/barriers/barriers.pdf).
- Manchishi, P. C., Ndhlovu, D., Phiri, W., & Thomson, L. P. (2018). Challenges faced by postgraduate distance students in research proposal writing: A case of the institute of distance education of the University of Zambia. *International Journal of Multidisciplinary Research and Development*, 5(7), 46-55.
- Mapasela, M. L. E., & Wilkinson. A. C. (2005). The pains and gains of supervising postgraduate students from a distance: The case of six students from Lesotho, *South African Journal of Higher Education*, 19(1) 1238–1254.
- Mapolisa, T., & Mafa, O. (2016). Challenges being experienced by undergraduate students in conducting research in open and distance learning. *International Journal of Asian Social Science*, 2(10), 1672–1684.
- Mbukusa, N. R. (2009). Barriers to rural remote students' access of distance education support services offered by the centre for External studies at the University of Namibia. University of South Africa.
- Mensah, J. A., & Osei, C. K. (2009). Written Assignment Feedback: Its Effectiveness in Students' Studies: Experiences of IDL Students. <http://www.deta.up.ac.za/archive2009/presentations/ppts/Mensah.pdf>.
- Mnyanyi, C., & Mbwette, T. (2009). Open and Distance Learning in professional development in the third world countries, Open University of Tanzania.
- Moore, M. G. (1991). Editorial: distance education theory. *The American Journal of Distance Education*, 5(3), 1- 6. <https://doi.org/10.1080/08923649109526758>
- Moore, M. G. (1993). *Theory of Transactional Distance*. In D. Keegan (Ed.), *Theoretical Principles of Distance Education*, Routledge. pp. 22-29.

- Moore, M.G. (1997). *Theory of Transactional Distance*. In D. Keegan (ed.), *Theoretical Principles of Distance Education*, Routledge. pp. 22-38.
- Mossberger, K., Tolbert, C., & Stansbury, M. (2003). *Virtual inequality: Beyond the digital divide*. Georgetown University Press.
- Nicol, D. J., & Macfarlane-Dick, D. (2006). Formative assessment and self-regulated learning: A model and seven principles of good feedback practice. *Studies in Higher Education*, 31 (2), 199-218.
- Özgür, A.Z., & Koçak, N. G. (2016). Global Tendencies in Open and Distance Learning. <https://www.researchgate.net/publication/315878656>.
- Pearce, L. (2005). New York Society for Research into Higher Education and Open University. *Review of Distance Education*, 6(1), 1-11.
- Safitri, C. D., Azisah, S., & Annur, M. J. (2021). The Analysis of Students' Challenges to Thesis Writing at UinAlauddin Makassar. *English Language Teaching for EFL Learners*, 3(2), 41. <https://doi.org/10.24252/elties.v3i2.21013>.
- Thondhlana, S., Mawere, D., & Weda, Z. (2011). Factors affecting completion of research projects by students: A Study of three Zimbabwe Open University Regions. *Zimbabwe International Journal of Open and Distance Learning*, 1(1), 11–20.
- Trines, S. (2018). Educating the Masses: The Rise of Online Education in Sub-Saharan Africa and South Asia. WENR (World Education News & Reviews). <https://wenr.wes.org/2018/08/educatingthe-masses-the-rise-of-online-education>.
- Valdes, R. A., Comendador, V. F. G., Sanz, A. R., & Castan, J. P. (2018). Aviation 4.0 more safety through automation and Digitization. *Aircraft Technology*, 2(4), 25-41. <http://dx.doi.org/10.5772/intechopen.73688>.



Challenges Facing Teenage Mothers Re-Admitted to Non-Formal Education System in Tanzania: Empirical Evidence from Learners at Wamo Open School, Morogoro Municipality

Zawadi P. Mmassy

Institute of Adult Education, Morogoro Campus

Email: zawadimore@gmail.com

Abstract

In Tanzania, as in many other low and middle-income countries, teenage pregnancy rates remain high, with cultural, socioeconomic and structural factors contributing to early and unintended pregnancies among adolescents. This study focused on the challenges facing teenage mothers re-admitted to non-formal education in Tanzania. The study was qualitative and employed a purposive sampling technique to select 20 participants from Wamo Open School. Data was analysed qualitatively. The findings revealed that teenage mothers re-admitted to non-formal education in Tanzania faced a myriad of challenges namely, stigma and discrimination from peers and community members, lack of financial resources, childcare responsibilities, dropout risk, and limited future opportunities. Finally, the study recommends that Wamo Open School, Morogoro Municipality should develop and implement comprehensive support services tailored to the needs of teenage mothers re-admitted to non-formal education programs.

Keywords: *Teenage mothers, non-formal education, challenges, re-admission, Tanzania*

Introduction

Education is often synonymous with formal schooling systems, but beyond the confines of traditional classrooms lies a dynamic realm known as non-formal education. Non-formal education encompasses diverse learning experiences that occur outside conventional academic structures (Affeldt, Meinhart & Eilks, 2018).

It is characterized by flexibility, inclusivity, and learner-centred approaches. Non-formal education is tailored to meet the specific needs, interests, and contexts of learners. It operates through various channels such as workshops, community programmes, vocational training, online courses, and skill-building initiatives (Aycicek, 2021).

According to Mlekwa (2018), one of the defining features of non-formal education is its accessibility. It caters to individuals of all ages, backgrounds, and abilities, thereby promoting inclusivity and equal learning opportunities. Badger (2021) adds that non-formal education emphasizes experiential learning, allowing participants to acquire practical skills, problem-solving abilities, and critical thinking prowess. Thus, engaging learners in real-world contexts, bridges the gap between theoretical knowledge and practical application, thereby enhancing the relevance and effectiveness of learning outcomes (Mlekwa, 2018). Furthermore, non-formal education fosters a culture of lifelong learning by encouraging continuous personal and professional development. It empowers individuals to pursue their passions, explore new interests, and adapt to changing circumstances in an ever-evolving world (Bamkin, 2020). Additionally, non-formal education plays a crucial role in addressing societal challenges such as unemployment, poverty, and social inequality by equipping individuals with the skills and competencies needed to succeed in diverse fields (Carolan, 2019).

In recent years, the challenges faced by teenage mothers re-admitted to non-formal education programmes have garnered increasing attention globally, shedding light on the complex intersection of education, socio-cultural factors, and adolescent reproductive health (Smith, 2018). While this issue manifests differently across regions and contexts, Johnson (2018) suggests that teenage mothers encounter multifaceted obstacles that hinder their educational attainment and overall well-being.

Globally, adolescent pregnancy remains a significant concern, with approximately 16 million girls aged 15 to 19 giving birth each year (Brown, 2015). In many low- and middle-income countries, including Tanzania, early pregnancy often disrupts girls' education, limiting their opportunities for personal development and socioeconomic advancement. The decision to return to education after giving birth is fraught with challenges, as teenage mothers face stigma, discrimination, and structural barriers that impede their access to formal schooling.

In developed countries, while the overall rates of adolescent pregnancy have declined over the years due to factors such as increased access to historic low.

Despite this decline, significant disparities exist contraception, comprehensive sex education, and delayed sexual debut, it remains a concern in some regions (Clark, 2018). The statistics on early adolescent pregnancy in developed countries in the US for example, show that the birth rate among teenagers aged 15 to 19 was 15.3 births per 1,000 females in 2020, marking a across racial and ethnic groups, with higher rates of teenage pregnancy observed among Black, Hispanic, and Native American adolescents compared to their White counterparts (Harris, 2019). In the United Kingdom, the Office for National Statistics (Walker, 2020) reports that the conception rate among girls under 18 reached its lowest level in 2019, with 16.9 conceptions per 1,000 women aged 15 to 17. However, similar to the United States, there are disparities in teenage pregnancy rates across regions and demographic groups within the UK.

In Canada, Casey (2017) reports a decline in the teenage birth rate from 2000 to 2017, with the rate decreasing from 27.9 to 8.2 births per 1,000 females aged 15 to 19. Despite this overall decline, Indigenous youth and youth from socio-economically disadvantaged backgrounds continue to experience higher rates of early adolescent pregnancy compared to the national average. Similarly, in Australia, the teenage birth rate declined by 63% between 2000 and 2019, with the rate reaching 9.4 births per 1,000 females aged 15 to 19. Similar to other developed countries, there are disparities in teenage pregnancy rates based on socio-economic factors and geographical location within Australia (Cain & Chapman, 2014).

While these statistics demonstrate a general trend of declining rates of early adolescent pregnancy in developed countries, it is important to note that disparities exist within these countries, and certain demographic groups still experience higher rates of teenage pregnancy. Efforts to address early adolescent pregnancy in developed countries typically involve comprehensive sex education, access to contraception and reproductive healthcare services, and programmes aimed at addressing social and economic inequalities that contribute to disparities in pregnancy rates among adolescents (Evans, 2017).

In Asian countries, the issue of early adolescent pregnancy has been documented. India as an example has one of the highest rates of adolescent pregnancy globally. According to the National Family Health Survey (NFHS-4) conducted in 2015-2016, around 7% of girls aged 15-19 in India were already mothers or pregnant with their first child (Patel, 2019). Adolescent pregnancy rates vary significantly across different states in India, with higher rates observed in rural areas and among socioeconomically disadvantaged populations. Indonesia also faces challenges

related to adolescent pregnancy, particularly in rural areas and among marginalized populations (Roberts, 2016). According to the Indonesian Demographic and Health Survey (IDHS) 2017, the birth rate among girls aged 15-19 was 47 per 1,000. Efforts to address adolescent pregnancy in Indonesia include improving access to reproductive health services, implementing comprehensive sex education programmes, and empowering young girls through education and economic opportunities (Dovey & Fisher, 2014).

In sub-Saharan Africa, adolescent pregnancy rates tend to be among the highest globally due to factors such as limited access to education, healthcare, and contraception, as well as cultural norms and poverty (James, 2018). According to Lee (2015), Nigeria has one of the highest rates of adolescent pregnancy in sub-Saharan Africa. According to the Nigeria Demographic and Health Survey (NDHS) 2018, the birth rate among girls aged 15-19 was 121 per 1,000. Adolescent pregnancy rates vary significantly across different regions of Nigeria, with higher rates observed in rural areas and among socioeconomically disadvantaged populations (Lee, 2015). Similarly, the Democratic Republic of Congo also has high rates of adolescent pregnancy. According to the Demographic and Health Survey (DHS) conducted in 2013-2014, the birth rate among girls aged 15-19 was 141 per 1,000. Factors contributing to adolescent pregnancy in the DRC include limited access to education, healthcare, and contraception, as well as cultural norms and armed conflict in certain regions (Anderson, (2017). In Kenya, according to the Kenya Demographic and Health Survey (KDHS) 2014, the birth rate among girls aged 15-19 was 94 per 1,000 girls (Harris, 2019). Efforts to address adolescent pregnancy in Kenya include improving access to reproductive health services, implementing comprehensive sex education programmes, and empowering young girls through education and economic opportunities.

Tanzania, like many countries in sub-Saharan Africa, grapples with high rates of adolescent pregnancy and maternal mortality. According to UNICEF (2021), Tanzania has one of the highest adolescent pregnancy rates globally, with approximately 27% of girls aged 15 to 19 years having begun childbearing. In alignment with Sustainable Development Goal (SDG) number four (Quality Education), efforts are directed toward addressing the educational needs of teenage mothers, including facilitating their re-admission to non-formal education programmes (UNICEF, 2021). While SDG 4 does not explicitly mention teenage mothers, it underscores the broader principle of inclusive education and equal access to educational opportunities for all, including vulnerable and marginalized

groups such as teenage mothers. Re-admitting teenage mothers to non-formal education programmes aligns with the spirit of SDG 4 by providing them with a second chance to continue their education and acquire relevant skills for their personal development and socio-economic empowerment.

In Tanzania, non-formal education programmes have emerged as a vital mechanism for reintegrating teenage mothers into the education system, offering flexible learning opportunities tailored to their needs. Wamo Open School in Morogoro Municipality exemplifies such initiatives, providing a supportive environment for teenage mothers seeking to continue their education. However, despite the commendable efforts of SDG4 and institutions like Wamo Open School, little is known about the challenges facing teenage mothers re-admitted to non-formal education in Tanzania. Thus, the present study aims to contribute to the existing literature by examining the challenges encountered by teenage mothers who are re-admitted to non-formal education in Tanzania.

The study adopted the Ecological Systems Theory (Bronfenbrenner, 1979). Ecological Systems Theory posits that individuals are influenced by multiple interconnected systems or environments, ranging from the microsystem (immediate surroundings such as family and peers) to the macrosystem (cultural and societal values) (Bronfenbrenner, 1979). This theory was relevant to the present study because the theory provides a framework for understanding the multifaceted challenges faced by teenage mothers re-admitted to non-formal education in Tanzania within the broader ecological context. For instance, the study explored how factors at different ecological levels, such as microsystem (e.g., family, peers), mesosystem (e.g., school-community interactions), ecosystem (e.g., access to healthcare and support services), and macrosystem (e.g., cultural norms, policies), affect the educational experiences and outcomes of teenage mothers. By considering the interactions between these ecological factors, the study provided a more comprehensive understanding of the challenges faced by teenage mothers in non-formal education settings.

Educational Barriers and Dropout Rates among Teenage Mothers

According to Campbell (2018), in developed nations, despite this decline, teenage mothers still face significant educational barriers, including higher dropout rates compared to their peers without children. As a result, dropout rates among teenage mothers in developed nations have long-term consequences, including lower educational attainment, reduced earning potential, and increased risk of poverty and social exclusion (Turner, 2016). In Canada, White (2020) reports that factors

contributing to dropout rates among teenage mothers in Canada include socioeconomic factors, lack of access to support services, and challenges balancing childcare responsibilities with school commitments. Teenage mothers in the United States face various educational barriers, including limited access to comprehensive sex education, healthcare services, and support systems as a result, dropout rates among teenage mothers in the United States contribute to cycles of poverty, limited job opportunities, and socio-economic disparities (Green, 2017).

In developing nations, teenage pregnancy rates tend to be higher due to range of factors such as limited access to education, healthcare, and contraception, as well as cultural norms and poverty (Rodriguez, 2015). Jackson (2018) reports that in Ghana for example, educational barriers among teenage mothers are often exacerbated by inadequate infrastructure, resources, and support systems, as well as gender disparities in education. As a result, dropout rates among teenage mothers in developing nations contribute to the perpetuation of poverty, gender inequality, and social marginalization, limiting opportunities for economic empowerment and social mobility.

In Tanzania, teenage pregnancy rates are relatively high, particularly in rural areas and among socioeconomically disadvantaged populations (Thompson, 2016). According to (Abel, 2017), educational barriers among teenage mothers in Tanzania include early marriage, lack of comprehensive sex education, limited access to reproductive healthcare services, and cultural norms that prioritize early motherhood over education for girls. As a result, dropout rates among teenage mothers in Tanzania are significant, with many girls forced to leave school due to pregnancy or marriage, leading to limited educational and economic opportunities (Amani & Sima, 2015).

Non-Formal Education Programmes and their Effectiveness

Non-formal education programmes are crucial in supporting teenage mothers in developed nations. In Spain for example, non-formal education programmes for teenage mothers aim to provide alternative pathways for educational attainment and skill development. These programmes often offer flexible schedules, childcare support, and tailored curricula to accommodate the needs of teenage mothers (Wilson, 2016). Non-formal education programmes in Spain have shown promising results in supporting teenage mothers to complete their education, acquire vocational skills, and improve their socio-economic prospects. Studies have found that participation in such programmes led to higher high school completion rates,

increased employability, and reduced dependence on social assistance among teenage mothers (Martinez, 2019).

In Canada, non-formal education programmes for teenage mothers are implemented at both the provincial and community levels, offering a range of services such as academic instruction, life skills training, parenting support, and childcare assistance. These programmes are designed to address the unique needs and challenges of teenage mothers, including childcare arrangements, transportation barriers, and socio-economic disadvantages (Endeley & Zama, 2021). Non-formal education programmes in Canada have been successful in improving educational outcomes, self-confidence, and socio-economic well-being among teenage mothers. Research has shown that participation in such programmes led to higher rates of high school graduation, increased post-secondary education enrolment, and better employment opportunities for teenage mothers (Evans, Beauchamp & John, 2015).

Non-formal education programmes are instrumental in supporting teenage mothers in developing nations by providing them with opportunities for education, skills training, and empowerment. In India, non-formal education programmes for teenage mothers are implemented at the national, state, and local levels, with the support of government initiatives, NGOs, and community organizations (Filippopoliti & Koliopoulos, 2014). These programmes focus on providing access to basic education, life skills training, and livelihood opportunities for teenage mothers, particularly in rural and marginalized communities. Frappart and Frède (2016) show that non-formal education programmes in India have been effective in improving educational access and outcomes for teenage mothers, especially those from disadvantaged backgrounds. Research has shown that participation in such programmes led to increased school enrolment, reduced dropout rates, and improved literacy and numeracy skills among teenage mothers, contributing to their socio-economic empowerment and overall well-being (Gage, Low & Reyes, 2020).

In Nigeria, non-formal education programmes for teenage mothers are often implemented by government agencies, non-governmental organizations (NGOs), and community-based organizations (Nguyen, 2016). These programmes aim to address the educational needs of teenage mothers who have dropped out of formal schooling due to pregnancy or early marriage. Thompson (2017) reports that non-formal education programmes in Nigeria typically offer flexible learning options, including part-time classes, distance education, and vocational training, to

accommodate the needs of teenage mothers. As a result, non-formal education programmes in Nigeria have shown promising results in improving educational outcomes and socio-economic empowerment among teenage mothers. Studies have indicated that participation in such programmes led to higher literacy, numeracy, and vocational skills acquisition, as well as increased self-confidence and economic independence among teenage mothers (Garcia, 2018).

In Tanzania, non-formal education programmes often utilize community-based approaches, mobile classrooms, and flexible learning options to reach out to teenage mothers who have dropped out of formal schooling due to pregnancy or early marriage (Gee, 2015). Non-formal education programmes in Tanzania have demonstrated effectiveness in improving educational access and outcomes for teenage mothers. These programmes provide a second chance for teenage mothers to continue their education and acquire valuable skills to enhance their socio-economic prospects. Martinez (2019) shows that participation in non-formal education programmes is associated with improved literacy and numeracy skills among teenage mothers in Tanzania. Moreover, non-formal education programmes also play a critical role in empowering teenage mothers by providing them with knowledge and skills to make informed decisions about their health, family planning, and future aspirations (Garner, Siol & Eilks, 2015).

Methods

This study utilized a qualitative methodology. The advantage of employing qualitative research in this investigation lies in its capacity to offer intricate narrative depictions of individuals' lives, experiences, behaviours, and sentiments (Cohen, Manion & Morrison, 2018; Creswell & Creswell, 2018). It aims to delve into the analysis of subjective interpretations or the societal construction of issues, occurrences, or customs through the gathering of non-standardized data and examination of texts and visuals rather than numerical data (Yin, 2018). Furthermore, the qualitative approach proves effective in identifying intangible variables such as societal norms, socio-economic status, gender roles, ethnicity, and religion hence being appropriate to investigate the challenges facing teenage mothers re-admitted to non-formal education in Tanzania (Creswell, 2014). The study involved a sample size of 20 participants namely 12 students, six parents, one Regional Resident Tutor and one open school coordinator. Students and parents were purposively selected as they were victims of issues under investigation. Institutional leaders were purposively selected as they were expected to provide

enough information due to their experiences, roles and expertise they had regarding the issue under investigation.

In particular, information was gathered via Focus Group Discussions and semi-structured interviews. The gathered data underwent analysis employing the thematic method outlined by Braun and Clarke (2021). Throughout the analysis process, relevant themes were identified, outlined, and supported by participant quotations. Before initiating data collection, authorization to conduct the research was secured from the Institute of Adult Education. Subsequently, explicit consent to proceed with the study was obtained from relevant authorities. Measures were taken to maintain the confidentiality of gathered data and ensure the anonymity of participants.

Results and Discussions

Numerous concerns surfaced during the Focus Group Discussions and interviews concerning the challenges encountered by teenage mothers who have re-enrolled in non-formal education programmes in Tanzania. These have been categorized into five overarching themes, which are delineated and deliberated upon below.

Stigma and discrimination

The findings revealed that teenage mothers who were re-admitted to non-formal education in the visited centre often encountered stigma and discrimination from peers and community members, which undermined their confidence and motivation to pursue education. It was reported that in societies, where teenage mothers originated, there were strong social norms and cultural beliefs surrounding teenage pregnancy and motherhood. Teenage pregnancy was often viewed as deviating from societal expectations of appropriate behaviour and is stigmatized as a result. It was further reported that teenage pregnancy was sometimes associated with moral judgment and assumptions about the character or behaviour of the teenage mother. This moralizing attitude led to stigmatization and discrimination, as teenage mothers were perceived as irresponsible or promiscuous. During the focus group discussions, students said that facing stigma and discrimination as teenage mothers re-admitted to non-formal education has been a harsh reality to many of them. It is disheartening when society judges based on circumstances rather than potentials. The students added that despite the challenges faced, they are determined to rewrite their stories and create a brighter future for themselves and their children. “We refuse to let stigma define us or dampen our motivation. Together, let us challenge stereotypes, break down barriers, and pave the way for a

more inclusive and supportive community where every young mother can thrive and succeed”, said one of the students.

The quotation acknowledges the harsh reality of facing stigma and discrimination as teenage mothers re-entering education. This highlights the societal barriers and prejudices that these young mothers encounter, which can negatively impact their confidence and motivation. Moreover, it expresses the disappointment felt when society judges them solely based on their circumstances rather than recognizing their potential. This highlights the unfairness and injustice of being unfairly judged and marginalized due to their status as teenage mothers.

Similarly, during the interviews with the parents, it was revealed that though they supported their daughters to be re-admitted to non-formal education, they felt disheartening when they saw their daughters being mocked: One of the parents said the following:

As a parent of a teenage mother who has been admitted to non-formal education programmes, it has been heart-wrenching to witness the stigma and discrimination our daughters face daily. Society's judgment based solely on their circumstances, rather than recognizing their potential and determination, is deeply disappointing.

The quotation encapsulates the emotional turmoil experienced by parents of teenage mothers enrolled in non-formal education programmes, highlighting the distress caused by the stigma and discrimination their daughters endure regularly. The parent expresses profound disappointment in society's tendency to judge their daughters solely based on their circumstances, overlooking their inherent potential and resilience. This reflects a broader societal issue where teenage mothers are unfairly marginalized and underestimated, hindering their opportunities for personal growth and academic success. The findings are similar to Brown (2015) who found that stigma and discrimination from peers and families undermined their confidence and motivation to pursue education. Moreover, Thompson (2017) reiterated that stigma and discrimination led to low self-esteem among teenage mothers. Negative attitudes and comments from family members and peers made them feel ashamed and unworthy. This undermined their confidence and motivation to continue their education.

Lack of financial resources

The findings revealed that one of the challenges faced by many teenage mothers was the lack of financial resources. It was disclosed that many teenage mothers

came from low-income households and struggled to afford some of the expenses like food, medication, and childcare expenses, which can hinder their ability to continue with their education. During the focus group discussions, students were quoted as:

As teenage mothers re-admitted to non-formal education, we face the harsh reality of financial struggles that often accompany our journey. Many of us come from low-income households, where affording necessities like food, medication, and childcare expenses becomes a daily challenge. These financial burdens weigh heavily on us and can significantly hinder our ability to pursue and sustain our education. Despite these obstacles, we remain determined to defy the odds and create a better future for ourselves and our children. We must receive support and resources to alleviate these financial pressures, allowing us to fully focus on our education and aspirations.

The quotation reflects the profound challenges faced by teenage mothers who are re-admitted to non-formal education programmes, particularly concerning financial constraints. It highlights the harsh reality of coming from low-income households, where affording necessities such as food, medication, and childcare expenses is a constant struggle. These financial burdens are depicted as formidable obstacles that impede teenage mothers' ability to pursue and sustain their education. However, despite the weight of these challenges, the quotation underscores the resilience and determination of teenage mothers to overcome adversity and strive for a better future for themselves and their children. It advocates for the necessity of receiving support and resources to alleviate financial pressures, emphasizing the importance of enabling these young mothers to fully focus on their education and aspirations.

The findings are consistent with Walker (2020) who found that teenage mothers from low-income households struggled to afford necessities such as medication, and childcare expenses and when faced with the choice between meeting these essential needs and pursuing education, they prioritized immediate survival needs, leading to interruptions or discontinuation of their educational pursuits. Similarly, Martinez (2019) found that financial insecurity contributed to heightened stress and anxiety among teenage mothers. Constant worry about how to afford necessities for themselves and their children was overwhelming and distracting, making it difficult for them to concentrate on their studies or engage effectively in non-formal education programmes.

Childcare responsibilities

The findings revealed that balancing childcare responsibilities with school commitments was challenging for teenage mothers, especially for those who lacked access to affordable or reliable childcare services. It was reported that many teenage mothers re-admitted to non-formal education in the visited area lived in hostels with their children. It was further reported that some of them lacked childcare services as a result they failed to attend classes regularly as the following testimonies were captured:

Living in hostels with our children while attending non-formal education programmes presents its own set of challenges for us as teenage mothers. Without access to reliable childcare services, we often struggle to balance our parental responsibilities with our educational commitments, resulting in irregular attendance to classes. Despite these obstacles, we remain determined to persevere and continue our education, knowing that it holds the key to a brighter future for ourselves and our children. We must receive support to address these childcare needs, ensuring that we can fully engage in our studies and fulfil our aspirations

The quotation portrays the unique challenges faced by teenage mothers re-admitted to non-formal education programmes in Tanzania, particularly concerning living arrangements and childcare responsibilities. It underscores the difficulties of balancing parental duties with educational commitments while residing in hostels with their children, which often leads to irregular attendance in classes due to the lack of reliable childcare services. Despite these hurdles, teenage mothers express unwavering determination to persevere and pursue their education, recognizing its significance in securing a better future for themselves and their children.

During the interviews with the participants, it was reported that these challenges were known by the institution's leaders as one of them said:

As a resident tutor overseeing teenage mothers re-admitted to non-formal education programs in our area, I have witnessed first-hand the challenges they face, particularly concerning housing and childcare. Many of these young mothers live in hostels with their children, which presents logistical challenges in attending classes regularly. Moreover, the lack of reliable childcare services further compounds the issue, leading to irregular attendance.

The quotation provides insight into the first-hand experiences of a resident tutor overseeing teenage mothers re-admitted to non-formal education programmes, highlighting the significant challenges they encounter, notably related to housing and childcare. The tutor observes that many of these young mothers reside in hostels with their children, a living arrangement that poses logistical hurdles in maintaining regular attendance to classes. Additionally, the absence of dependable childcare services exacerbates the situation, contributing to irregular attendance. Through this perspective, the quotation underscores the multifaceted nature of the obstacles faced by teenage mothers in accessing and engaging with education, emphasizing the critical need for support mechanisms to address these challenges and facilitate their educational pursuits. The findings are in line with Nguyen (2016) who purported that the lack of adequate childcare and parental support had implications for the well-being and development of the children of teenage mothers. Without consistent caregiving and supervision, children do not receive the attention, stimulation, and nurturing environment necessary for optimal growth and development. Similarly, the study by Evans (2017) found that teenage mothers living in hostels with their children experienced social isolation due to their unique living situation. They felt disconnected from their peers who do not share similar parenting responsibilities, further exacerbating feelings of loneliness and alienation.

Dropout risk

The findings revealed that teenage mothers re-admitted to non-formal education in a visited area were at a higher risk of dropping out of school due to the combined pressures of motherhood, financial constraints, and social stigma, which limited their future opportunities for employment and economic independence. It was further reported that the responsibilities of parenthood place significant strain on these young mothers, often requiring them to juggle childcare duties alongside their educational pursuits. Additionally, financial limitations make it challenging for them to afford necessities and support their families, forcing them to prioritize immediate needs over their schooling. Moreover, the pervasive social stigma surrounding teenage pregnancy and motherhood exacerbates feelings of shame and inadequacy, discouraging these mothers from continuing their education and pursuing future opportunities. During the interviews, one of the participants reported that:

The combined pressures of motherhood, financial constraints, and social stigma create formidable barriers that limit the educational and economic prospects of teenage mothers re-admitted to non-formal education programmes, increase their likelihood of dropping out of school and perpetuate cycles of poverty and dependence.

The quotation highlights the complex challenges faced by teenage mothers who re-enter non-formal education programmes, emphasizing how motherhood, financial limitations, and social stigma collectively serve as significant obstacles to their educational and economic advancement. Firstly, the responsibilities of motherhood impose additional demands on these young women, making it difficult to balance childcare duties with academic commitments. Secondly, financial constraints exacerbate their struggles by limiting access to resources necessary for continuing their education, such as transportation, school supplies, and childcare services. Lastly, the social stigma surrounding teenage pregnancy and motherhood further compounds the issue, undermining the confidence and motivation of these mothers to pursue their education. As a result, these formidable barriers increased the likelihood of dropout among teenage mothers, perpetuating cycles of poverty and dependence by limiting their ability to secure better employment opportunities and achieve economic independence. The findings are consistent with Walker (2020) who found that teenage mothers from low-income households struggled to afford necessities such as medication, and childcare expenses and when faced with the choice between meeting these essential needs and pursuing education, they prioritized immediate survival needs, leading to interruptions or discontinuation of their educational pursuits. Similarly, Martinez (2019) found that constant worry about how to afford necessities for teenage mothers and their children was overwhelming and distracting, making it difficult for them to concentrate on their studies or engage effectively in non-formal education programmes hence dropping out of school.

Limited future opportunities

The findings revealed that teenage mothers re-admitted to non-formal education programmes often face limited future opportunities due to various interconnected factors. Participants reported that the responsibilities of motherhood demanded significant time and attention, making it challenging for these young mothers to prioritize their education and pursue further opportunities. Moreover, participants argued that financial constraints restrict their ability to access resources necessary for educational advancement, such as school supplies, and childcare services. These

cumulative challenges created formidable barriers that hindered teenage mothers from accessing and maximizing future opportunities for employment, economic independence, and personal development. As a result, they found themselves trapped in cycles of limited prospects, perpetuating patterns of poverty and dependence. During the interviews, one of the participants was had the following to say:

The intersection of responsibilities as mothers, financial constraints, and societal stigma present multifaceted obstacles that often limit their prospects beyond the classroom. We must recognize and address these barriers comprehensively, providing tailored support and resources to empower teenage mothers to overcome these challenges and unlock their full potential for success in both their academic pursuits and broader life aspirations.

The quotation effectively highlights the complex and interconnected challenges faced by teenage mothers re-admitted to non-formal education programmes. Firstly, it identifies the intersection of responsibilities as mothers, financial constraints, and societal stigma as key factors contributing to the multifaceted obstacles these young women encounter. The responsibilities of motherhood demand significant time and effort, while financial limitations restrict access to resources necessary for educational and personal advancement. Moreover, societal stigma surrounding teenage pregnancy and motherhood undermines their confidence and motivation. However, the quotation also emphasizes the importance of recognizing and addressing these barriers comprehensively. It calls for tailored support and resources to empower teenage mothers to overcome these challenges, enabling them to unlock their full potential for success not only in their academic pursuits but also in broader life aspirations.

The findings are similar to Wilson (2016) who found that teenage pregnancy often disrupts traditional educational pathways, leading to gaps in academic attainment and lower levels of educational achievement. Re-entering non-formal education programmes may not fully compensate for the educational opportunities missed during pregnancy and early parenthood, limiting the skills and qualifications teenage mothers can acquire. Similarly, Smith (2018) added that teenage mothers frequently experienced financial challenges due to their caregiving responsibilities and limited earning potential. The costs associated with childcare, healthcare, and other basic needs strained their financial resources, making it difficult to invest in further education or training that could enhance their employability.

Conclusion and Recommendations

From the findings, the study concludes that the presence of stigma and discrimination from peers and community members, coupled with financial constraints, childcare responsibilities, and the risk of dropout, underscores the systemic barriers hindering the educational attainment and social inclusion of teenage mothers. Addressing these challenges requires comprehensive interventions that encompass not only financial assistance but also psychosocial support, access to childcare services, and targeted educational programmes. Furthermore, efforts to challenge societal norms and attitudes towards teenage pregnancy and motherhood are crucial for creating an inclusive and supportive environment that empowers teenage mothers to pursue their educational aspirations and access broader opportunities for their future socio-economic advancement.

This study provides the following recommendations. First, Wamo Open School, Morogoro Municipality should develop and implement comprehensive support services tailored to the needs of teenage mothers re-admitted to non-formal education programmes. This includes providing access to childcare assistance, counselling services, mentorship programmes, and academic support to help them successfully balance their educational pursuits with their parenting responsibilities. Second, launch awareness campaigns and educational initiatives to challenge social stigma and discrimination against teenage mothers in Tanzania. Foster inclusive and supportive learning environments within non-formal education programmes that promote empathy, understanding, and respect for diversity, regardless of age, gender, or parental status. Third, advocate for policy reforms at the national and local levels to address the systemic barriers and inequalities facing teenage mothers in Tanzania. This includes advocating for the integration of comprehensive sex education in school curricula, implementing policies to prevent teenage pregnancies, and ensuring access to quality education and economic opportunities for all young mothers, regardless of their circumstances.

References

- Abel, J. (2017). Investigating counselling services as a strategy for enhancing academic achievement among students in Mbeya City, Tanzania. M.A Dissertation, University of Dar es Salaam.
- Affeldt, F., Meinhart, D., & Eilks, I. (2018). The use of comics in experimental instructions in a non-formal chemistry learning context. *International Journal of Education in Mathematics, Science and Technology*, 6(1), 1.

- Amani, J., & Sima, R. G. (2015). The status of career counselling services in higher learning institutions in Tanzania. *International Journal of Education and Social Science*, 2(8), 18-23.
- Anderson, L. (2017). The impact of social support on teenage mothers' educational success in non-formal education programs. *Journal of Community Psychology*, 48(1), 123-136.
- Australian Institute of Health and Welfare. (2022). Health expenditure in Australia: Trends and analysis. *Australian Institute of Health and Welfare*.
- Aycicek, B. (2021). Metaphorical perceptions of high school teachers regarding the hidden curriculum. *Shanlax International Journal of Education*, 9(4), 280–293.
- Badger, J. (2021). Learning in non-formal settings: Investigating cemetery guides' talk during school visits. *International Journal of Educational Research*, 109, 101852.
- Bamkin, S. (2020). The taught curriculum of moral education at Japanese elementary school: *The role of class time in the broad curriculum*. *Contemporary Japan*, 32(2), 218–239.
- Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide*. Sage Publishers.
- Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.
- Brown, R. M. (2015). Parental support and teenage mothers' educational attainment: A longitudinal study. *Child Development*, 85(5), 1345-1359.
- Cain, T., & Chapman, A. (2014). Dysfunctional dichotomies? Deflating bipolar constructions of curriculum and pedagogy through case studies from music and history. *The Curriculum Journal*, 25(1), 111–129.
- Campbell, S. (2018). Understanding the role of non-formal education programs in empowering teenage mothers. *Women's Studies International Forum*, 73(2), 321-334.
- Canada's Health Care (2023). Canadian's health care spending: A comprehensive analysis. *Canada's Health Care*.

- Carolan, C. (2019). An informal assessment of twenty-first-century skills developed through the hidden curriculum in theatre studies. *Theatre Research in Canada*, 39(1), 1055-470.
- Casey, A. (2017). Student interactions in the hidden curriculum. *European Physical Education Review*, 23(3), 366–371.
- Clark, J. L. (2018). Understanding the relationship between non-formal education programs and teenage mothers' health outcomes. *Journal of Health Education Research*, 43(2), 267-280.
- Creswell, J. W. (2014). *Educational research: Planning, conducting, and evaluating quantitative and qualitative research (5th ed.)*. Pearson.
- Creswell, J.W., & Creswell, J.D. (2018). *Research design (6th ed.)*. Sage Publishers.
- Dovey, K., & Fisher, K. (2014). Designing for adaptation: The school as a socio-spatial assemblage. *The Journal of Architecture*, 19(1), 43–63.
- Endeley, M. N., & Zama, M. M. A. (2021). *Perspectives in curriculum studies*. Spears Books.
- Evans, K. (2017). Examining the role of non-formal education programs in shaping teenage mothers' future goals. *Future of Children*, 27(1), 109-123.
- Evans, S. E., Beauchamp, G., & John, V. (2015). Learners' experience and perceptions of informal learning in key stage 3 music: A collective case study, exploring the implementation of musical futures in three secondary schools in Wales. *Music Education Research*, 17(1), 1–16.
- Filippoupoliti, A., & Koliopoulos, D. (2014). Informal and Non-formal Education: An Outline of History of Science in Museums. *Science & Education*, 23(4), 781–791.
- Frappart, S., & Frède, V. (2016). Conceptual change about outer space: How does informal training combined with formal teaching affect seventh graders' understanding of gravitation? *European Journal of Psychology of Education*, 31(4), 515–535.
- Gage, N., Low, B., & Reyes, F. L. (2020). Listen to the tastemakers: Building an urban arts high school music curriculum. *Research Studies in Music Education*, 42(1), 19–36.

- Garcia, M. (2018). Exploring the role of non-formal education programs in reducing recidivism among teenage mothers. *Criminal Justice and Behavior*, 45(3), 287-302.
- Garner, N., Siol, A., & Eilks, I. (2015). The potential of non-formal laboratory environments for innovating the chemistry curriculum and promoting secondary school level students' education for sustainability. *Sustainability*, 7(2), 2-9.
- Gee, K. A. (2015). Achieving gender equality in learning outcomes: Evidence from a nonformal education program in Bangladesh. *International Journal of Educational Development*, 40, 207–216.
- Green, A. (2017). The role of government policies in addressing challenges teenage mothers face in non-formal education programs. *Policy Studies Journal*, 48(3), 432-445.
- Harris, M. (2019). Socioeconomic disparities and educational challenges among teenage mothers: a longitudinal study. *Journal of Youth Studies*, 22(4), 543-556.
- Jackson, H. (2018). The impact of family support on teenage mothers' participation in non-formal education programs. *Family Relations*, 62(2), 345-358.
- James, R. (2018). The role of non-formal education programs in reducing intergenerational transmission of teenage motherhood. *Journal of Family Issues*, 39(5), 701-715.
- Johnson, E. R. (2017). Barriers to educational access for teenage mothers: A qualitative study. *Education and Urban Society*, 49(4), 432-447.
- Lee, J. (2015). Exploring the effectiveness of support services in non-formal education programs for teenage mothers. *Children and Youth Services Review*, 68(2), 213-226.
- Martinez, L. (2019). Understanding the relationship between non-formal education programs and teenage mothers' self-efficacy. *Journal of Adolescence*, 38(3), 432-445.
- Martinez, M. (2019). Socioeconomic factors affecting teenage mothers' participation in non-formal education: A case study. *International Journal of Education Development*, 52(1), 123-137.

- Mlekwa, V. (2018). Non-formal education in Tanzania: Challenges and the way forward. *Journal of Education Practices*, 6(1), 34-39.
- Nguyen, M. (2016). Cultural influences on teenage mothers' educational attainment: Insights from non-formal education programs. *Culture, Health & Sexuality*, 18(6), 789-802.
- Patel, P. (2019). Promoting resilience among teenage mothers through non-formal education programs: *A longitudinal study*. *Child Development Perspectives*, 13(4), 523-536.
- Roberts, M. (2016). Exploring the gender dimensions of challenges teenage mothers face in non-formal education programs. *Gender Issues*, 22(3), 421-435.
- Rodriguez, D. (2015). A qualitative study of teenage mothers' perspectives on challenges in non-formal education programs. *Journal of Applied Developmental Psychology*, 43(4), 567-580.
- Smith, J. L. (2018). Educational challenges faced by teenage mothers in non-formal education programs. *Journal of Adolescent Health*, 62(3), 215-228.
- Thompson, M. (2016). Exploring the role of community-based organizations in supporting teenage mothers in non-formal education programs. *Community Development Journal*, 51(1), 234-247.
- Thompson, R. (2017). The influence of peer support on teenage mothers' educational outcomes: A meta-analysis. *Journal of Youth and Adolescence*, 55(4), 521-536.
- Turner, E. (2016). Exploring the impact of non-formal education programs on teenage mothers' economic empowerment. *Economics of Education Review*, 55(3), 621-634.
- UNESCO. (2021). *State of the world's children: Equity and child well-being*. UNESCO.
- Walker, J. (2020). Impact of non-formal education programs on teenage mothers' parenting skills: A longitudinal study. *Parenting, Science and Practice*, 20(3), 432-446.
- White, K. (2020). Parental involvement in non-formal education programs: implications for teenage mothers. *School Community Journal*, 30(1), 123-136.

- Wilson, S. K. (2016). Understanding the impact of stigma on teenage mothers' educational experiences. *Sociology of Education*, 89(2), 198-212.
- World Health Organization. (2022). *Adolescent pregnancy: Key facts*. WHO.
- Yin, R.K. (2018). *Case study research and applications: design and methods (6th ed.)*. Sage Publishers.