Provision of Higher Education through the Open and Distance Learning Mode in Tanzania: Students' Perceptions

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Abstract

Open and distance learning is increasingly gaining popularity and seen as a viable means to promote access to education. In Tanzania, the development of open and distance learning in higher education institutions dates back to 1992 following the establishment of the Open University of Tanzania. Open and distance learning was promoted to fulfil the need for improved access to higher education and offer more opportunities to individuals interested in pursuing educational programmes but were or are not able to follow them in conventional institutions due to various factors. This paper stems from a study originally conducted in 2014 that examined students' perceptions of the provision of higher education through open and distance learning at the Open University of Tanzania. The issue was subsequently re-visited by examining the students' perceptions of the provision of support services, curriculum design, and the use of information and communication technology. Findings demonstrate that students generally perceive support services, curriculum design, and the use of information and communication technology as satisfactory. However, some challenges remain, potentially inhibiting the students from successfully learning at a distance. It is recommended that the Open University of Tanzania should secure the relevant technologies, such as those for employing video-conferencing and tele-tutoring, with a view to eliminate the use of costly, outdated technologies. The Open University of Tanzania should also review its support service system to allow a flexible learning environment for students.

Keywords: distance education, higher education, open learning, open and distance learning, perceptions, Tanzania

1.   Introduction

The open and distance learning (ODL) mode of study has been considered the best option for promoting access to higher education across the globe following its flexibility, learner-friendly approach, and cost-effectiveness (Itegi, 2015; Manzoor, 2018). The Open University of Tanzania (OUT), established in 1992, is a major institution of higher learning offering education through ODL (Mushi, 2012; Open University of Tanzania [OUT], 2021). Its establishment was predicated on the need to improve access to higher education and provide opportunities to individuals who were or are not able to follow conventional study calendars due to various factors such as demanding and competitive entry requirements, socio-cultural factors such as family responsibilities, inflexibility in terms of time, routine, and space, as well as students'

economic circumstances and geographical locations (Sanga, 2022, 2013; Bhalalusesa, 2005). OUT operates through a network of regional study centres, with 27 regional centres and nine coordinating centres spread throughout Tanzania and beyond to reach upcountry distance learners (OUT, 2021).

Since its establishment, enrolment has increased at OUT, although at a relatively slow pace compared to that of conventional universities. For instance, the total number of undergraduate students enrolled annually has increased annually from 2,565 in the 2007/2008 academic year 2007/2008 to 3,746 in the 2020/2021 academic year (OUT, 2021). This rising enrolment rate possibly signifies the recognition of the available alternatives to higher education. Despite these achievements, many issues related to performance and quality remain largely unsettled, potentially exacerbating the disconnection between the purpose [of an open university] and real practices. For instance, students and the public still consider distance higher education a second-class or last-resort alternative (Sanga, 2013; Bhalalusesa, 2005).

Furthermore, Mutasingwa (2010) admits that parties (administrators, instructors, and learners) given various responsibilities are not fulfilling the roles expected of them, and the programmes delivered under the ODL mode seem not to be cost-effective. Apart from these issues, an appalling concern is that there is a huge gap between enrolment and graduation rates. For instance, the total number of students enrolled from 1994 to 2020/2021 was 173,740, but those who graduated between 1999 and December 2020 totalled 46,728 (a general graduation rate of 26%) (OUT, 2021). This implies that the majority of students (74%) have either dropped out, or that it takes them a long time to graduate. The persistence of these problems raises some questions: Is OUT really open? Is OUT [and other distance education providers in the country or elsewhere in Africa] providing fertile grounds for innovation, new ideas, and knowledge that shape individuals and the wider society? Is OUT truly espousing the main purpose(s) of its establishment? It is against this backdrop that this study examined students' perceptions of the provision of higher education through ODL at OUT. More specifically, the study focuses on students' perceptions of the provision of support services, curriculum design, and the use of information and communication technology (ICT).

2.   Literature Review

2.1.   Conceptualising ODL

The ODL term reflects a combination of two phrases, suggesting there exists a difference between 'open learning' and 'distance learning'. Biao (2012) asserts that for many decades, the term 'distance learning' has been used to describe learning that is organised, dispensed and acquired at a distance; the prefix 'open' became attached to distance learning towards the end of the 20th century as a result of three significant developments, namely, criticisms against the formal school system, the enforcement of the General Agreement on Tariffs and Trade (GATT), and globalisation.

According to Biao (2012), there are several aspects involved in criticisms pointed against the formal school system. In addition to being costly to establish and maintain, the formal school system is not elastic and pliant enough to accommodate a high number of people who would need education. Moreover, although GATT was established in 1947 to regulate international interaction, it was only in 1994 that education was considered an international tradeable commodity. GATT had significant positive effect on the development of ODL (Preece and Biao, 2011). Thirdly, the phenomenon of globalisation which suddenly turned the world into a global village did much to encourage educational interaction among societies that hitherto would not have dreamt of educational collaboration due to the great geographical distance separating them (Preece and Biao, 2011).

Therefore, the concept of open learning entered the educational lexicon. The prefix 'open' was added to 'distance learning' to encapsulate learning that is managed at a distance as well as 'open learning', which is described by Rowntree (1992) as "arrangements to enable people to learn at the time, place and space which satisfy their circumstances and requirements". The ODL term thus emphasises opening up opportunities by overcoming barriers that result from geographical separation, personal work obligations, or conventional course structures that have often prevented people from gaining access to the training

they need. According to Sanga (2022), open learning entails increased flexibility, access, and learner-centredness to study opportunities.

In a broad spectrum, the most thorough definition of ODL is probably the one given by UNESCO (2002), which states that ODL represents "approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place and offering flexible learning opportunities to individuals and groups of learners" (p. 5). From these definitions, we can see that in ODL, teachers and students are separated by space, but not necessarily by time. This is true because it is possible to deliver real-time education through various technologies such as compressed/live videos. Hence, from various definitions, the ODL mode encompasses at least the following features:

i. Physical or spatial separation between students and teachers.
ii. The use of appropriate technology to facilitate teaching and learning.
iii. An accredited organisation/institution for planning, coordinating, evaluation, and course development.
iv. Self-directedness in learning (self-discipline and time-management), through which a learner decides what, when, and how to study (Harry et al., 1994

Despite ODL's potential in providing learning opportunities, in Africa there are several unique challenges, many of which are influenced by the diverse socio-economic, infrastructural, and cultural contexts across the continent (Sanga, 2022; Manzoor, 2018; Itegi, 2015). Some of the key challenges include limited access to technology and infrastructure, the digital divide, cultural and societal norms, and quality assurance and accreditation.

Many parts of Africa still face significant challenges in terms of ensuring reliable electricity, Internet connectivity, and access to modern computing devices (Sanga, 2022), the lack of which hinders students' ability to engage effectively in online or technologically mediated learning. Also, there is a substantial digital divide between urban and rural areas, as well as between different regions and countries within Africa. In Africa, face-to-face interaction and communal learning have been largely emphasised. Likewise, ensuring that ODL programmes meet the same quality standards as conventional programmes also remains a challenge (Manzoor, 2018; Mahai, 2022).

2.2. Curriculum Design in ODL

Curriculum design is a process that involves a wide variety of issues. According to Lavonen (2020), the curriculum encompasses objectives, learning experiences (content), methods and evaluation (assessment). In ODL, this also involves planning and organising the curriculum and its course contents. Sanga (2022) asserts that ODL has to be learner-centred, which means that all aspects of curriculum design need to be congruent with the diverse needs and experiences of the learners. Cummins and Sayers (1996) argue that the design of a distance learning curriculum needs to be sensitive and relevant to cross-national cultural experiences. The needs, experiences, and contexts of the people the curriculum is intended to serve must also be taken into account. Dodds and Edirishingha (2000) posit to the diverse nature of the audience for distance education, which includes people of all ages, from young children to ageing adults. Curriculum designers must thus bear in mind that the curriculum needs to be elastic enough to accommodate the needs and experiences of a range of people, including urban and rural dwellers, the employed, self-employed, and unemployed, learners who can identify with the language of instruction as their first language or otherwise, and other sub-groups.

Along the same lines, Glennie (1996) argues for a learner-centred approach to distance education that responds to learners' diverse needs. Putting learners first, she argues, means that the needs, traditions, and interests of ODL institutions and their staff should not dictate learning programmes in distance education. This implies that curriculum designers need to be cognisant of environmental constraints such as lack of infrastructure, poor access to ICTs, the existence of multilingual and multi-cultural communities, and the absence of a culture of independent reading and learning in many communities.

2.3.   Learner Support Services in ODL

Learner support services refer to systems or procedures that are purposefully created and effectively utilised by distance education institutions to support and/or facilitate teaching and learning (Mahai, 2022; Sanga, 2022; Prasad, 2018). Learner support remains an important aspect of distance education delivery, reflecting the wide range of support strategies employed to help distance learners complete their courses successfully. Learner support services involves providing learners with the integrated and multifaceted assistance they need to cope with and meet the demands of distance learning to achieve their desired educational outcomes. For instance, some of these services include career guidance, provision of personal time tables, library services, book services, Internet and email support, pre-examination counselling, and other related services (Commonwealth of Learning [COL], 2002; Venance, 2015; Sanga, 2022).

The provision of learner support services depends largely on the capacity and resources at the disposal of a particular institution (Sanga, 2022). Learner support takes place from two points of view: academic and administrative. Academic support services include tutorials, advising, and counselling. Administrative support services include enrolment, admission and registration, recordkeeping, information provision, and delivery of study materials. Although learners can access educational opportunities in the ODL mode, without learner support it is unlikely they will succeed. Learner support is thus a critical component that facilitates learning and helps distance learners to succeed.

2.4.   Information Technology in ODL

ICTs include printed media, audio, video and audio-visual methods, computers, multimedia, or interactive television, cable, microwave and satellite linkages, and fibre optics (COL, 2002 p. 81). Technology in distance education is specifically used to widen its scope, to strengthen the capacity of distance education providers to meet the needs of the masses. Technology also plays an important role in enhancing ODL as illustrated below:

> Although the Internet-related technologies no doubt are of benefit to distance education, integrating them with other media (print, video conferencing, radio, television, etc.) would form a new learning domain which would enable distance education educators and students to engage in learning interactions more effectively, and develop new and different forms of educational interactions. Because of this mix of media and multimedia which appeals to a variety of learning styles, students will learn more effectively than they would from one medium alone" (Ivala, 1999, p. 9).

Mackintosh (1999) as cited in COL (2002) argues that in the context of the information technology revolution, distance education is simply not possible without technology. The time-space divide in distance education needs to be mediated or bridged by technology. However, it is widely documented that the use of information technology in educational institutions particularly those using the ODL mode is still hampered by a lack of expertise and infrastructure, as well as a largely technologically illiterate user-group. From these revelations, it is clear that organisations and practitioners involved in open and distance education would agree on the important role of information technology in making ODL more effective.

Generally, such issues in ODL as support services, curriculum design, and information technology seem to be among of the important components in considering the ODL mode. Many studies emphasise the need to maintain the effectiveness of these components so as to enhance learning at a distance. For instance, Mushi (1999) suggests that distance education should involve developing, producing, and distributing self-instructional materials in addition to organising face-to-face sessions. He further argues that if these activities are efficiently organised and conducted by distance education institutions, they could lead to better institutional performance.

Thus, the objectives of this paper are:
   i.   To provide an account of the students' perceptions of the provision of support services, and
   ii.   To examine students' perceptions of curriculum design and use of ICT at OUT.

3.   Methodology

This paper is based on a study originally carried out in 2014 that has been revisited to track any possible changes and interventions. The study employed a mixed-method research approach. The main purpose of adopting this approach was to achieve complementarity, whereby results from the qualitative analysis were interpreted to enhance, expand, illustrate, or clarify findings derived from the quantitative analysis. The need to produce interpretations that students hold regarding ODL serves as a justification for the use of a qualitative approach, while the use of a quantitative approach was necessitated by the need to collect quantifiable data (based on a five-point Likert scale). The study was conducted at OUT, mainly at three Dar es Salaam-based OUT regional centres, namely Ilala, Kinondoni, and Temeke. OUT was chosen on the basis that it is the only university in Tanzania offering undergraduate and several postgraduate programmes through ODL. Besides, it is the largest and oldest provider of higher education through ODL, thus making it a source of rich data. The Dar es Salaam region was selected for several reasons. Firstly, it serves as OUT's headquarters, hence it holds a vast document archive for the study. As well, the region has the highest number of students pursuing degree programmes through ODL (OUT, 2021).

The target population for the study was continuing undergraduate students at OUT. A convenient sampling technique was used to identify 72 participants: 20 from Ilala, 20 from Temeke, and 32 from Kinondoni. A questionnaire, interview, and documentary review were used to gather information from the field. Documentary review was used for triangulation. The reviewed documents include speeches from the OUT Vice-Chancellor, the clients' charter, policies, prospectuses, and the Facts and Figures for the 2020/2021 academic calendar. Qualitative data from the interviews were analysed through thematic analysis, whereby the questionnaires were analysed descriptively (i.e., using frequencies and percentages) by using the Statistical Package for Social Sciences version 20.0 and Microsoft Office Excel 2013. The researcher ensured observance to relevant ethical research protocols.

4.   Findings and Discussion

4.1.   Students' Perceptions of Support Services

ODL requires sound support services to enable students to take considerable responsibility in managing their own learning. Biao (2012) submits that one of the major demands of the ever-changing landscape of distance learning is the provision of effective learner support. This is a critical component that facilitates learning and helps distance learners achieve success. From this standpoint, this study assessed the perceptions of students regarding the provision of support services at OUT. Three instruments were used to collect data: questionnaire, documentary review, and interview. In the questionnaire, a five-point Likert scale was used, which required the students to indicate the extent to which they agreed with statements related to support services. Table 1 summarises responses from the questionnaire:

Table 1. Responses on the students' perceptions of learner support services

Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
1. Learners are supported to become independent through the use of technology for tutoring at a distance, contact tutoring, and counselling.	0	0	6	8	13	18	29	40	24	33
2. Sufficient contact sessions are arranged to enable learners to use the course materials effectively for learning.	7	10	14	19	11	15	27	38	13	18
3. Tutors are accessible to learners for individual tutoring.	13	18	16	22	20	28	14	19	9	13
4. Assignments and tests are returned in a timely manner.	19	26	18	25	11	15	18	25	6	8

Statement	Strongly Disagree		Disagree		Neutral		Agree		Strongly Agree	
	F	%	F	%	F	%	F	%	F	%
5. Learners have access to counselling before and during the course or programme, as well as after completion.	8	11	12	17	12	17	29	40	11	15
6. Satisfactory and cost-effective arrangements are made to meet learners' needs for physical facilities for study and tutorials.	7	10	17	24	9	13	27	38	12	17
7. Learners have access to the facilities (e.g., libraries) that are necessary for successful learning.	5	7	4	6	13	18	28	39	22	31
8. Learner structures such as student representative councils are established, recognised, and empowered to represent learners on structures of institutional governance.	7	10	11	15	18	25	27	38	9	13

4.2. Supporting Students to Become Independent

Teaching and learning at a distance require learners who are active and internally motivated to engage in independent learning (Sumbawati et al., 2020). Consequently, support services should be arranged to uphold this endeavour. Students at OUT believed that they receive support to become independent learners. Shown in Table 1, the majority of respondents agreed with the statement that "learners are supported to become independent through the use of technology for tutoring at a distance, contact tutoring, and counselling." This implies that support services are provided at OUT, and they enable students to accomplish their studies successfully. A review of the available documents revealed that OUT is committed to helping its students cope with learning environments. For instance, the statement "Provide adequate training to students on study skills for the ODL mode of learning" (p. 5) in the student affairs policy is one such commitment (OUT, 2008). Therefore, support services at OUT are somewhat satisfactorily provided. It should be noted that ODL programmes that do not respond to students' needs and fail to teach them effectively can create feelings of failure and frustration in learners, thus contributing to high drop-out and low completion rates (Biao, 2012). The author further insists that in such circumstances, ODL may become discredited as it is viewed as a second option or quick fix, justifying the fears of its critics.

4.3. Enabling Students to Use Course Materials Appropriately

In ODL, the study materials - commonly referred to as learning materials - are designed to serve as the students' self-directed learning manuals and incorporate the instructor and instructional strategies/methods (Messo, 2014). OUT has been producing its own study materials, and also using those from other universities: African Virtual University, University of Nairobi, Abuja University, Makerere University, and Indira Gandhi National Open University are some of its sources (Mushi, 1998). Thus, the key aspect of study materials is to make sure that they are of quality, available, and that learners receive assistance to use them properly. The responses show that students perceived the study materials positively, as the majority agreed with the statement that "sufficient contact sessions are arranged to enable learners to use the course materials effectively for learning" (refer to Table 1). This is similar to findings from the interviews, as one of the participants, a sixth student from the Education programme in the second year, stated that learning materials are good, and adequately provided. We are also directed on how to properly follow the instructions in those materials for us to study smoothly. From these findings, it is evident that OUT supports its students' learning by facilitating proper interaction with study materials. It is also important to consider the fact that ODL materials should be well-designed as they replace the presence of the teacher, although not that of assessment (Petroman & Petroman, 2013).

4.4. Access to and Interaction with Tutors

Effective interaction between distance learning students and their instructors through online tutoring (e-tutoring) produces a sense of fulfilment, belonging and realisation with the educational environment (Chugh et al., 2017; Joubert & Snyman, 2018). When asked about whether or not "tutors are accessible to

learners for individual tutoring", the majority of students disagreed. It can, therefore, be deduced that interaction between students and tutors at OUT is limited. Such findings were also reflected during the interviews, as one of the participants, a ninth student from the Education programme in the third year, said:

> I hardly meet with or talk to tutors. They are difficult for us to reach, and when face-to-face sessions are scheduled, there are a lot of students, which makes it difficult for them to accommodate each student's unique demands."

As revealed in this study, limited interaction between students and tutors poses a challenge to students' learning. It should be noted that access to, and interaction with tutors in ODL are essential components that contribute to the overall quality and effectiveness of the learning experience. They provide learners with personalised support, guidance, and motivation, helping them achieve their educational and career goals (Sanga, 2022). Due to the need to enhance interaction between students and instructors, Joubert and Snyman (2018) argued that ODL institutions must use technology-enhanced learning as a method of providing academic support for students in light of technical breakthroughs and increasing reliance on technology.

4.5.   Prompt Feedback (Timely Return of Assignments)

One reason that OUT has established learning centres and located some of these learning centres in remote areas is to enable easy access to services including assessment feedback (Messo, 2014). A majority of the students revealed their dissatisfaction on the return of assignments. The majority disagreed, and some were neutral, with the statement that "assignments and tests are returned in a timely manner" (shown in Table 1). This indicates that students are dissatisfied with assessment practices. Their dissatisfaction was also revealed during the interviews, as one of the participants, an eleventh student from the Journalism programme in the second year, said:

> Sometimes, there are delays in turning up the assignments. They are sometimes misplaced as well. It has happened twice to me. This affects learning following the importance of feedback."

These findings are consistent with previous studies, such as that of Bitegeko and Swai (2012), which indicate the persistence of poor feedback in ODL institutions. The authors further argue that many students at OUT received delayed feedback on marked assignments and timed tests from the instructors, which also seem to be a discouraging factor to their studies. This was also observed by Hara and Kling (2003), who stated that in most cases, ODL students experience confusion, anxiety, and frustration due to a perceived lack of prompt or clear feedback from instructors.

4.6.   Provision of Counselling Services

Counselling services are provided to learners as they enrol and undergo studies at OUT. A total of 40% of the respondents agreed, while 15% strongly agreed with the statement that "learners have access to counselling before and during the course or programme as well as after completion". This suggests that learners generally receive guidance on how to progress with their studies. The commitment to provide efficient and effective guidance and counselling services to students has also been affirmed in several OUT official documents, i.e., student affairs policy, client service charter, and the 2021/2022 prospectus (OUT, 2008, 2010, & 2021).

Literature indicates that providing counselling services to learners is very important for several reasons. Ahmed (2017) argues that when first-year students enrol into educational institutions, they are exposed to psychological issues that are social, personal, and professional in nature, necessitating counselling. Counselling services are intended to help and support students with psycho-social issues, particularly as they transition into university life (Kamunyu et al., 2016). The authors add that these issues may interfere with their ability to make the necessary adaptations in their academic, interpersonal, and campus life (Kamunyu et al., 2016).

4.7.   Provision of Satisfactory and Cost-Effective Arrangements to Meet Learners' Needs

OUT students generally agreed that cost-effective arrangements are in place to enable them to meet their learning needs. The majority of students agreed with the statement that "satisfactory and cost-effective arrangements are made to meet learners' needs for physical facilities for study and tutorials". However, some had concerns about the availability of learning facilities. During the interview, one responded of 26th student from the Science programme in the first year submitted the following response:

> For me and my colleagues taking the Bachelor of Science with Education, and I think even those in other courses related to science, the facilities we are provided with are not sufficient to promote learning. We, as an alternative, share with friends in conventional universities at some point."

Concerning the accessibility of learning facilities such as the library, findings in Table 1 show that the majority of students agreed with the statement that "learners have access to the facilities (for example, libraries) and equipment that are necessary for successful learning". However, some of the students remained neutral, and others disagreed with this statement. The varying responses indicate learners' dissatisfaction with the accessibility of learning facilities.

The majority of students (38%) agreed with the statement that "learner structures, such as student representative councils, are established, recognised, and empowered to represent learners on structures of institutional governance". Furthermore, a close analysis of participants' responses from the interviews suggests that, in general, students had a positive perception of the support services that are provided at OUT. One respondent, the 33rd student from the ICT programme in the second year, submitted the following response:

> Our learning support is very good because they give us some materials to read, information about the course, and sometimes, if you need counselling services, are provided."

The researcher took a step further by looking at challenges associated with the provision of learner support services. In this regard, learners identified several challenges: the inadequacy of classroom facilities in learning centres, and of library facilities. Figure 1 summarises the questionnaire findings:
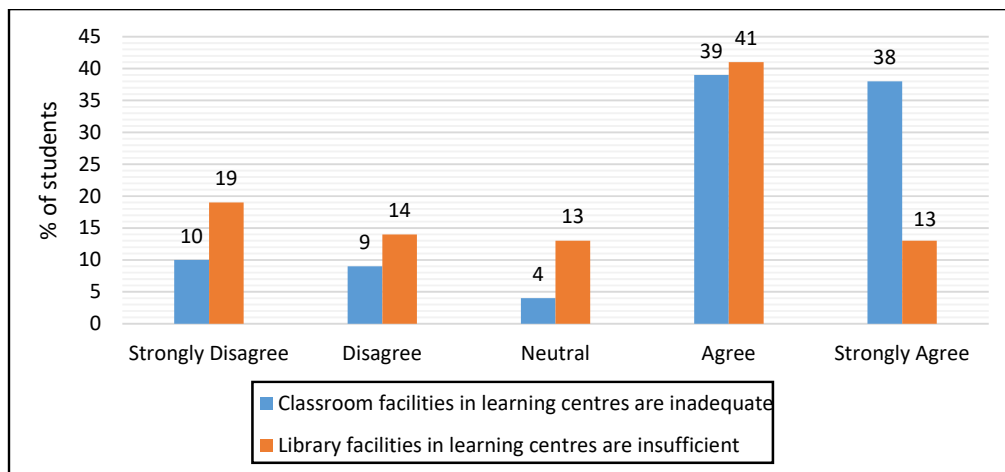
Figure 1. Challenges associated with support services

Figure 1 reveals that the major challenge involves the inadequacy of classroom facilities in learning centres: the majority of students agreed with the statement that "classroom facilities in learning centres are not adequate". Also, learners believe that library facilities in learning centres are insufficient. While the support services provided at OUT seem somewhat deficient, there have been efforts to improve the

situation. In his opening speech for the 2018/2019 academic year, the Vice-Chancellor of OUT, among many others, requested that employees provide better customer service so that both continuing and new students can get services in a virtuous environment. He said, "Do not let the students suffer, help and serve them with decorum so that they will come back the next day". The statement was made on 12 October 2018 at OUT's temporary headquarters in Kinondoni, Dar es Salaam, during the Vice-Chancellor's meeting with OUT employees (OUT, 2018).

Generally, OUT provides support services to its students, but the services are potentially inadequate as some gaps were observed especially in the provision of prompt feedback, accessibility of tutors, counselling services, learning environments, and other related services. This seems to be the reality with many institutions of distance learning. Mowes (2005) argues that students face a variety of difficulties related to accessing support services in ODL including difficulties in communicating with their tutors and becoming oriented to the distance learning environment. While the provision of these services at OUT is not satisfactory, it should be noted that successful student learning is greatly influenced by the nature of services provided (Lee, 2003).

4.8.   Students' Perceptions of the Use of ICT

Currently, the world is witnessing rapid and far-reaching developments in science and technology (Hara & Kling, 2003). These developments have inevitably necessitated the integration of ICT with education. Ivala (1999) submits that the integration of ICT in education, particularly in ODL, not only widens the scope of education but also strengthens the capacity of distance learning providers to meet student needs. In fact, ODL depends on technology to enhance teaching and learning. Against this backdrop, the second objective of this study involved investigating students' perceptions regarding use of ICT at OUT, in order to establish university credentials on the use of ICT. As was the case with the first objective, the researcher used a questionnaire, an interview, and a documentary review to gather information. Figure 2 presents the findings generated from the questionnaire:
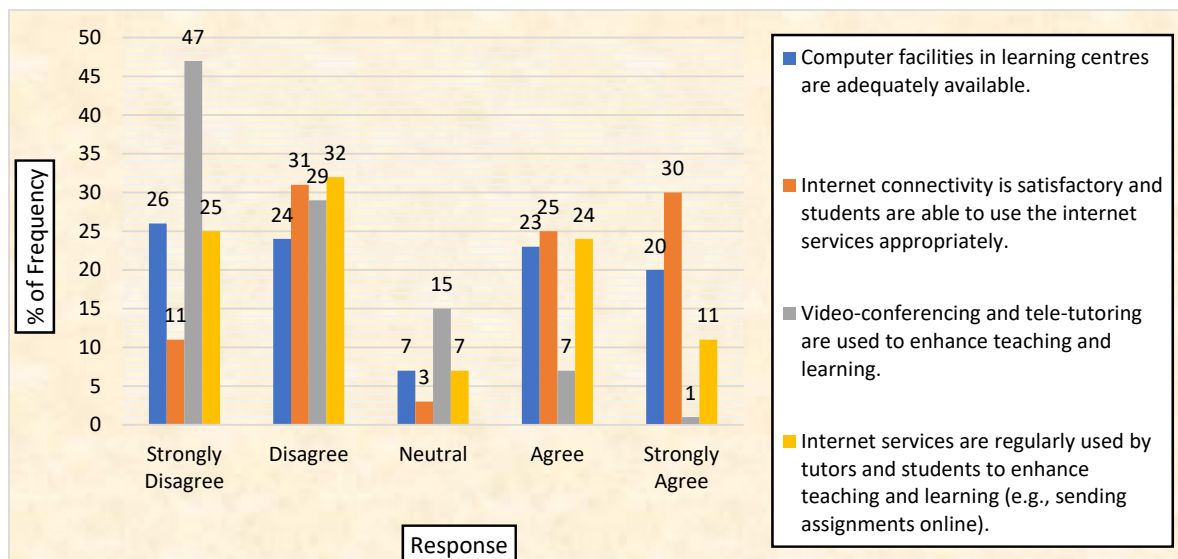

Figure 2. Perceptions of students toward the use of ICT

4.9.   Availability of Computer Facilities

Students believe that computer facilities at OUT do not sufficiently accommodate all students in the various learning centres. These views were evident in the questionnaire and interview. The majority of students acknowledged that computer facilities in learning centres are not adequately available: as shown in Figure 2, a high percentage of students disagreed with the statement that "computer facilities in learning centres are adequately available". Likewise, interviews with the participants revealed the same

sense of dissatisfaction. For example, one of the participants of a 20th student from the Education programme in the third year at the Temeke Learning Centre had this to say:

> Yes, computers are available, but they cannot accommodate all of us. There are very few, but you can also find one or two computers connected to the Internet. I have not been able to use a computer at my centre. I always use computers at the Kinondoni centre where I can access wireless Internet services. In general, computer and Internet services are not satisfactory."

An analysis of the available official documents at OUT (facts and figures, policies, prospectuses and reports) could not establish the figures on the number of available computers for facilitating students' learning in learning centres, i.e., there was no information related to the availability of computers in learning centres despite much emphasis on the use of ICT to facilitate teaching and learning.

4.10. Internet Connectivity

Although an important means of accessing online materials and communication, Internet access was found to be unreliable at OUT learning centres. The majority of students disagreed with the statement that "Internet connectivity is satisfactory and students are able to use the Internet services appropriately". However, a significant number of students strongly agreed (30%) and agreed (25%) that Internet connectivity is satisfactory. With these varying responses, it is evident that Internet services are not reliable and vary across centres. This is in line with the findings by Messo (2014), who observed that students at OUT are dissatisfied with access to Internet services.

4.11. Online Course Delivery Practices

It is well documented that teaching and learning at a distance must take advantage of virtual environments (Gonzalez et al., 2019). Reflecting on online course delivery practices at OUT, the majority of students expressed concern that video-conferencing or teleconferencing and other networking facilities for live lectures and conversations with instructors are missing. As shown in Figure 2, 47% of students strongly disagreed and 29% of students disagreed with the statement that "video-conferencing and tele-tutoring are used to enhance teaching and learning". Moreover, instructors were perceived as reluctant to use online gadgets to enhance learning. From the questionnaire, findings revealed that 18% of students strongly agreed and 23% agreed with the statement that "Internet services are regularly used by tutors and students to enhance teaching and learning (e.g., sending assignments online)". These findings were confirmed during the interviews. These issues were raised, with one of the interviewees of a 13th student from the Social Work programme in the second year is responded with the following:

> Internet service is helpful to us and the management because they provide information about course registration, results, and sometimes course outlines and modules through the university website. But I have never communicated with a tutor through the Internet. Maybe others have, but I am sure they have been experiencing the same."

These findings imply that Internet services are used by the university management to provide general information, but not by individual tutors to facilitate teaching. It should be noted, however, that explicit efforts to integrate education with modern technology at OUT have been put in place. The establishment of the ICT policy in 2009, which has been regularly revised, is one such effort (Nihuka, 2015). This policy clearly specifies that the university aims to (i) enhance the usage of ICT as the primary medium for communication between students and teachers, and (ii) transform all study materials that will be developed into an interactive format that is consistent with the Moodle learning management system (OUT, 2014). Likewise, the university client charter states that OUT is committed to the delivery of quality distance learning through the use of modern technologies (OUT, 2010). However, the findings reveal that outdated technologies, such as the use of print materials, are common. A similar observation was made by Ngenzi (2012) and Muganda et al. (2012), who identified a number of deficiencies in the use of ICT at OUT. It should be noted that as the world experiences rapid technological change, OUT

should also keep abreast of these changes instead of relying on costly, outdated technologies. This could support efforts to attract large numbers of students as well.

4.12. Students' Perceptions of Curriculum Design

Curriculum is an important component in all educational systems and one that determines the quality of education. Due to varied characteristics of the distance learning audience, which includes people of all ages from young children to ageing adults, the curriculum must take into consideration different needs, experiences, contexts (Dodds & Edirishingha, 2000). Against this backdrop, this study explored the students' perceptions of curriculum design. The researcher used a questionnaire, an interview, and a documentary review to gather information. Figure 3 presents the findings generated from the questionnaire:
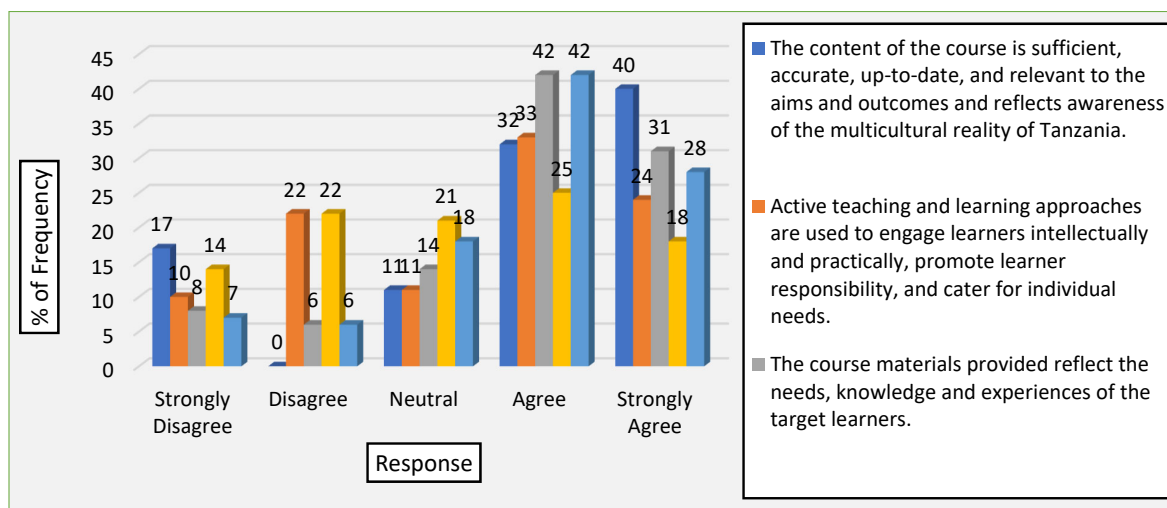
Figure 3. The students' perceptions of curriculum design

4.13. Relevance of the Course Content

The majority of students believed that course content is relevant, with 40% strongly agreeing and 32% agreeing with the statement that "the content of the course is sufficient, accurate, up-to-date, and relevant to the aims and outcomes and reflects awareness of the multicultural reality of Tanzania". However, 12 students (17%) strongly disagreed with the statement. While the course content seems to be relevant in the students' opinion, Glennie (1996) recommends that curriculum designers recognise environmental constraints such as lack of infrastructure, poor access to ICTs, the existence of multilingual and multi-cultural communities, and the absence of a culture of independent reading and learning in many communities.

4.14. Teaching and Learning Approaches

Literature on distance learning places emphasis on student-centred learning (Moran & Myringer, 2003). Thus, the role of the teacher is to enable students to become actively involved in the teaching and learning process. Out of 72 respondents, 24 (33%) agreed, and 17 (24%) strongly agreed with the statement that "active teaching and learning approaches are used to engage learners intellectually and practically, promote learner responsibility, and cater for individual needs." This shows a great deal of satisfaction with the approaches used by the university to enhance teaching and learning. Based on these responses, it can be concluded that the learner-centred approach is dominant at OUT. Glennie (1996) calls for a learner-centred approach to distance learning that responds to learners' diverse needs. The author further insists that the needs, traditions, and interests of ODL institutions and their staff should not dictate learning programmes in distance learning.

4.15. Appropriateness of Teaching and Learning Materials

Teaching and learning materials were considered generally appropriate. As shown in Figure 3, the majority of students agreed with the statement that "the course materials provided reflect the needs, knowledge, and experiences of the target learners." Also, the majority of students agreed that "there are clearly laid-down aims and learning outcomes and an explicit indication of study time (notional study hours per section of the study material) that allow learners to adopt sensible study plans", although a large number of students (32%) were neutral.

Students had varying views regarding the quality of materials provided at OUT. They either agreed, disagreed or were neutral with the statement that "the overall technical quality of the materials is satisfactory and facilitates learners' use." These findings are contrary to Messo (2014), who reported students' dissatisfaction over the quality of the instructional method. This could be explained by the potential availability of significant interventions that have led to improvements. While there seems to be general improvements in teaching and learning materials at OUT, it should be noted that tailored and well-designed materials facilitate effective self-paced learning, enabling students to grasp concepts, apply knowledge, and achieve desired learning outcomes. Accessible and culturally sensitive resources further enhance inclusivity, ensuring that diverse learners can engage meaningfully with content. Additionally, up-to-date materials reflect current knowledge and advancements, ensuring relevance in an ever-evolving educational landscape.

4.16. Relevance of Assessment Strategies

Assessment is an integral part of the learning process. Consequently, it is crucial for ODL institutions to put into practice a reliable assessment system that can guarantee the accomplishment of course objectives (Chaudhary & Dey, 2013). Major assessment strategies in ODL include examinations, tests, and assignments (Musingafi et al., 2015). The authors add that assessment provides feedback to both students and instructors on students' progress and the class as a whole, aiding in the decision-making process. Therefore, it is crucial to accurately record students' marks and make sure instructors provide regular feedback both for the satisfaction of learners and the reputation of the institution. Experiences at OUT show that assessment strategies are congruent with students' learning outcomes, as the majority of students agreed with the statement that "the assessment strategies are matching with the aims and outcomes of student learning in the course." This signifies that the assessment strategies are in harmony with the curriculum content, thus enhancing learning. As a result of this observation, it can be deduced that the students' perception of curriculum design at the OUT is generally positive. This finding is a notable accomplishment as many ODL institutions have been criticised for inappropriate and delayed assessment feedback (Sanga, 2022; Hara & Kling, 2003; Musingafi et al., 2015; Chaudhary & Dey, 2013).

5. Conclusion

From what has been observed, ODL is now an educational option that is worth focusing on so as to improve access to higher education. The study has established that throughout the years of OUT's operations, the provision of distance higher education in Tanzania has somewhat improved technologically, specifically in the method of delivery, with a strong network of learning centres in and beyond the country to reach needy learners. Along with these achievements, OUT has formulated legal frameworks (such as ICT policies) for efficient delivery of service to clients. Therefore, based on the findings and discussion points in this paper, it is recommended that the Tanzanian government support ODL as an emerging useful educational option, which is very crucial for future ODL development. Government support, both materially and financially, would be useful in helping OUT accommodate students' needs in terms of support services, curriculum design and proper use of ICT. OUT should also strive to secure the right technologies, including use of video-conferencing and tele-tutoring, with the aim of eliminating use of costly, outdated technologies. OUT should also review its support services system to create a flexible learning environment for all students. More specifically, OUT should find appropriate and prompt ways of providing feedback (assignments and marked test scripts) and modules, making sure that tutors are accessible, providing counselling services and adequate physical facilities such as library

materials in learning centres. This will create a conducive learning environment that will consequently result in positive student perception of ODL.

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