# The Contribution of Moodle Platform in Reaching the Unreached People: A case of the Open University of Tanzania

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#### **Abstract**

This paper focuses on the role of Moodle platform on reaching the unreached people. The main objective of this paper was to evaluate the contribution of Moodle learning system on educating people living in different geographical location in and outside the county. Specifically, the paper establishes the perception of learners towards Moodle platform; establishes the benefits of Moodle platforms to learners and determines challenges facing Moodle platform learners' and tutors. The study involved 14 postgraduate students enrolled in the Faculty of Arts and Social Sciences (FASS) in the Open University of Tanzania (OUT). 2 Moodle technicians and 3 course instructors. The study adopted descriptive research design. The data was collected using questionnaires, interviews and direct observations. The findings revealed that enrolment and retention of students have increased and different categories of people are enrolled at the OUT as studies do not disturb their work. Despite the fore mentioned benefits, the challenges facing moodle platform include learners negative attitudes towards Moodle platform, little understanding of the Moodle platform by some lecturers; shortage of power or electricity block-out interfere the system; unavailability of the OUT web page or network connectivity; resistance in adopting the Moodle platform by staff members who do not want changes. From the findings, the study recommends that more training should be provided to faculty staff and students. Moreover, OUT should ensure stable connection to OUT-web and make sure the internet is available all the time.

**Key words:** Moodle Platform, Perception, The Open University of Tanzania, Reaching, Unreached

#### Introduction

Open and Distance Learning (ODL) is becoming an important and alternative mode of study to meet the huge unmet demand for education at all levels and especially for higher education (Nyandara, 2012). With technologies, challenges facing distance learners are lessened to some levels. Application of technology should be used as a tool to provide a platform for achieving objectives and standards (Reigluth, 1999). Information and Communication Technology (ICT) has opened a new avenue to globalization in education (Aguele, 2014). In higher education levels, ICTs are being used for developing course material; delivering content and sharing content; facilitate communication between learners, teachers and the outside world. ICT has also enabled the creation and delivery of presentation and lectures; academic research; administrative support and student enrolment (Mondal and Mete, 2012).

Learning Management Systems (LMS) have been widely adopted by higher learning institutions globally for over a decade (Mtebe, 2015). LMS are now installed in many higher education institutions in Sub-Saharan Africa including Tanzania. The web-based LMS are intended to support teaching and learning activities. Web-based course management system is the latest pedagogical tool based on technology (Zakaria and Daud, 2013). Moodle is management system, which enables delivery of online education/ courses. It allows instructors to plan and designate activities for the students (Zakaria and Daud, 2013). With Moodle platform, learners can learn anywhere or wherever s/he is, interacting with themselves and their teachers. LMS consist of various features that enable faculty members to share learning material as well as providing interaction with their students both synchronously and asynchronously (Vovides et al. 2007). The most widely adopted LMS in the region are Blackboard, Sakai, Knowledge Environment for Web-Based Learning KEWL and Moodle (Unwin et al. 2010) The Open University of Tanzania adopted Moodle platform. Application of technology

should be used as a tool for providing a platform for achieving objectives and standards (Reigluth, 1999 also Zakaria and Daud, 2013). Moodle is also known as Learning Management System (LMS) or Virtual Learning Environment (VLE) that is a protected on learning space. A VLE usually combines multiple tools and activities for teaching and for organizing learning. In contrast to online providers that offer a single blog, wiki or open, public forums and chats; the Moodle VLE combines all such communication tools in one space. Moodle is an open source of learning management system that is provided freely and can be run on many operating systems (Adesope and Ahiakwo, 2016). Moodle is an acronym for Modular Object Oriented Dynamic Learning Environment.

It is free to download, change, share, improve and customize to whatever you want it to be. It is basically used for online or hybrid courses but can be used to supplement a face to face course. Moodle was developed by Martin Dougiamas as part of his PhD in Education thesis (Dougiamas and Taylor, 2003). The underlying philosophy of Moodle is maximum instructor control and minimal administrator control (Dougiamas and Taylor, 2003). Moodle is based on the philosophy of socio-constructivist pedagogy, which encourage discovery and provide collaborative activities (Zakaria and Daud, 2013). However, Moodle allows instructors to plan and designate activities for their students. Students are given time to read the materials uploaded in the moodle, and then respond to assignments and discussions. The interactions are among the students themselves and between students and lecturers.

#### Literature Review

# The Open University of Tanzania and Moodle Platform

The Open University of Tanzania (OUT) is the first University in East Africa region to offer educational programme through Open and Distance Learning (ODL) mode. Thus, the OUT is an ODL government institution with the mission of providing quality and affordable education for all. Since 2001, the Open University of Tanzania has been running a number of postgraduate programs, which lead to the awards of Postgraduate Diplomas, Masters and

PhD degrees. The number of students admitted per annum at postgraduate level has increased from 150 in 2001 to 3,149 in 2014/15 (OUT, 2015). The university has five faculties, which are Faculty of Arts and Social Sciences (FASS), Faculty of Business Management (FBM), Faculty of Education (FED), Faculty of Science, Technology and Environmental Studies (FSTES) and Faculty of Law (FLAW).

Faculty of Arts and Social Sciences (FASS) is the pioneer of Moodle platform at the university. It was the first faculty to transform its teaching from evening and executive mode to Moodle kind of teaching. Through Moodle platform, learners can easily interact with the course instructors more often than ever before. Through Moodle system, learner can continue doing all work while interacting with fellow students as well as course instructors. FASS is now using Moodle platform as its main delivery mode to all undergraduate and postgraduate programmes. Moodle platform is still a new mode of study, which needs strong and aggressive advertisement in order to capture clients' attention from the experience gained in different regions, Moodle platform is a good LMS as both tutors and students interacts. Reading materials are uploaded in the Moodle platform in which students read them, interact themselves under the guidance of the lecturer, there after actual teaching or face-to-face sessions follows.

# Study Rationale

There has been an exponential expansion of Open and Distance Learning (ODL) all over the world (Gilroy et al., 2001). ODL has been an alternative to conventional universities. The demand for education has gone up due to population increase, as the result conventional universities failed to enroll all students with qualifications, as the solution, the OUT become an alternative. The OUT is an ODL institution, which use blended mode of delivery mixing distance and limited face-to-face sessions. Moodle platform was introduced as a way of taking on-board all students residing in remote areas and those at proximity to the university. Under normal ODL, it was difficult to conduct face to face sessions in regions with few students. As the result, these students were denied face to face sessions, which

was a requirement to complete their studies. With Moodle Platform face to face was declared option as student could interact in the system. Moodle is a very effective virtual learning environment. With moodle, teachers and students are notified of new forums, new posts, assignments uploaded in the Moodle, quizzes, assignment and other tasks. Ceteris peribus, the moodle platform has no geographical boundaries provided there is improved technology (ICT). With all these arguments, there is a need to ascertain the contribution of Moodle platform in reaching the unreached people living in remote areas. For this case, this paper ought to examine the contribution of Moodle Platform in reaching the unreached people. The objectives of this study were to: (i) examine lecturers and students perceptions towards Moodle platform, (ii) find out the benefits of Moodle platform (iii) determine challenges encountered in the application of Moodle platform.

#### Methodology

This study adopted a descriptive research design to find out the contribution of Moodle platform in reaching the unreached people. A descriptive research design was opted for because it allows description of issues in details and it accommodates narratives. The population of the study comprised of 14 postgraduate students, 3 course instructors and 2 ICT technicians who were randomly selected from the Open University of Tanzania in Dar es Salaam. Simple random sampling technique was applied in the selection process. The used collection instruments for data included structured questionnaires, and interviews Ms Excel and content analysis for data analysis where data were presented in tables and figures. The data collected were also presented in frequencies and percentages. The Likert scale was used to capture lectures and students perceptions towards Moodle platform. The Likert scale ranged from agree, neutral and disagree.

# **Findings**

# Demographic Information of Respondents

Table 1 shows respondent's demographic information. In this study, 52.6% were male and 47.4% were female. Employment status shows

that 94.7% were employed in different areas, of 5.3% of the respondent were not employed. The other information presented in the table is the programme pursued by respondents.

Table 1: Respondents Demographic Information (n=19)

| Respondents | Classification | Respondents | Percentages |
|-------------|----------------|-------------|-------------|
| Profile     |                |             |             |
| Gender      | Male           | 10          | 52.6        |
|             | Female         | 9           | 47.4        |
| Types of    | MA NRAM        | 2           | 10.5        |
| programme   | MSW            | 2           | 10.5        |
|             | MA ICD         | 2           | 10.5        |
|             | MA Kiswahili   | 2           | 10.5        |
|             | MTPM           | 2           | 10.5        |
|             | MA History     | 1           | 5.3         |
|             | MCED           | 2           | 10.5        |
|             | MSc Economics  | 1           | 5.3         |
|             | MA M&E         | 2           | 10.5        |
|             | Lecturers      | 3           | 15.8        |
| Employment  | Yes            | 18          | 94.7        |
| status      |                |             |             |
|             | No             | 1           | 5.3         |

As depicted in Table 1, students involved were postgraduate pursing various programmes and majority 97.4% were employed.

# Perceptions and Experiences towards Moodle platform

Perception is the way people think about something, while experience is the knowledge (skills) or mastery of an event or subject gained through involvement in or exposure to it (Webster, 1959). Experience is also the way people are familiar or used to something. This section focuses on the perception of students and lecturers on the use of Moodle platform for learning (Table 2). In this regard, the perceptions are grouped into positive and negative perceptions. Moodle platform enable learners to learn before actual teaching, increase enrolment as

students can learn wherever they are, and it is flexibility for learners to ask whatever the problem encountered.

Table 2: Perceptions of Lecturers and students towards Moodle Platform

| Perceptions                     | Agree      | Neutral   | Disagree  |
|---------------------------------|------------|-----------|-----------|
| Moodle encourage students to    | 14 (73.7%) | 4 (21)    | 1 (5.3%)  |
| read                            |            |           |           |
| Increase enrolment              | 1 (5.2%)   | 9 (47.4%) | 9 (47.4%) |
| Enable learners to learn before | 14 (74%)   | 5 (26%)   | 0         |
| face to face                    |            |           |           |
| It has no geographical barriers | 14 (74%)   | 3 (16%)   | 2 (10%)   |
| Convenient to learners          | 11 (58%)   | 5 (26%)   | 3 (16%)   |
| Learning materials are          | 15 (79%)   | 2 (10,5%) | 2 (10,5%) |
| regularly updated               |            |           |           |
| Internet connectivity           | 3 (16%)    | 5 (26%)   | 11 (58%)  |
| (availability)                  |            |           |           |
| Computer accessibility          | 4 (21)     | 7 (37%)   | 8 (42%)   |
| Course content are organized    | 15 (79%)   | 4 (21%)   | 0         |
| logically throughout the course |            |           |           |
| Availability of learning        | 16 (84.5%) | 2 (10,5%) | 1 (5%)    |
| support                         |            |           |           |
| Availability of instructors in  | 9 (47%)    | 7 (37%)   | 3 (16%)   |
| online sessions                 |            |           |           |
| Results are available in time   | 17 (89.5%) | 2 (10,5%) | 0         |

# Moodle platform encourage both lecturers and students to read

The findings indicated that, the majority (73.7%) of respondents agreed that Moodle system encourages students to read. This implies that, students have to read in order to answer quizzes, assignments and participate in discussion forums. This is also supported by responses from interviews. For example, one student interviewed said this,

.....since reading materials are in the Moodle system and without reading them no way you can be able to answer

assignments, answer term papers and participate in different forums, reading is a must. With this argument, Moodle system encourages students to read......

#### One lecturer interviewed had this to say, "

.... Lecturers have to read and be prepared before face to face sessions because students would have read what is to be taught before the face to face sessions, otherwise lecturer(s) may be asked questions by students but fail to respond....."

Overall, Moodle platform encourage both tutors and student to read.

#### Moodle platform increase enrolment

When respondents were asked to comment on the premise that, Moodle platform increased enrolment, 47.4% were uncertain, were neutral. It was so because respondents did not have access to enrolment data for comparison. The same 47.4% of the respondents disagreed with the premise that, Moodle platform increased enrolment. Only 5.2% of the respondents, the lecturer commented that, Moodle platform had increased enrollment by saying that,

"before Moodle system, my program attracted 10 students, with Moodle system the number has almost thrice, this year enrolled students are 28.

# The Moodle system enables learners to learn before face-to-face sessions

Students can access reading materials in the Moodle before meeting with lecturer to discuss callenging areas. The majority of the respondents (74%) agreed that, the Moodle platform enabled learners to access and read before face-to-face sessions (Table 2). However, 26% of the respondents were neutral, were uncertain whether Moodle systems enabled learners to learn before face to face sessions or not.

# With Moodle platform, no geographical limitation

Moodle platform is not affected by geographical location. Distance is not a problem in Moodle platform as learners can learn wherever s/he is. S/he does not need to come to class as it is used to be in conventional universities. Student can interact with tutor wherever they are, using mobile phone and internet provided network is available. When respondent were asked to rate if Moodle platform has no geographical barriers, 74% of the respondents agreed that there was no geographical barrier with Moodle system (Table 2); 10% of respondent disagreed while 16% were neutral, did not know whether Moodle system had geographical barrier or not. One student interviewed had this to say,

.....Moodle is suitable as learners can learn wherever they are, they have not to come to class, instead internet has bridged the gap.....". Lecturer had this to say, "With Moodle platform large geographical location is covered as students in remote rural areas and outside the country can learn through this system.

#### Convenient to learners

Convenient means allowing someone to do something easily or without trouble or hindrances. Moodle platform allows learners to engage in more than one activity. When respondents were asked to comment on convenient of Moodle system to their activities, 58% agreed that Moodle platform is convenient mode of study to them, where 16% disagreed (see Table 2). However, 26% of the respondents were not sure whether the Moodle was convenient to them or not. One student interviewed said this,

"Moodle platform is convenient to me because I am employed; I have to attend work at the same time studying. With Moodle this is possible".

# Another respondent had different view,

"it is not convenient to me because I need to have a computer which is very expensive and internet access which is also difficulty here at Serengeti National Park".

#### Learning materials are regularly updated

The findings indicated that, most of learning resources posted in the Moodle platform are regularly updated timely. This implies that, the instructors were adding new materials and updating learning resources they post in the system regularly. When respondents were asked to rate if learning resources were regularly updated and references were current and relevant, 79% of the respondents agreed (see Table 2). When students were asked to provide comments regarding learning resources, the majority indicated that instructors were updating learning resources such as posting new notes, new assignments; new discussion forums and quizzes. New resources were posted in the system as new cohort or intake starts.

#### Internet connectivity or availability

Internet connectivity and availability is the blood of the Moodle system, without which Moodle system is defunct. About 58% of the respondents had no access to reliable internet connection (see Table 2). However, only 16% of the respondents agreed that they had stable and reliable internet access because they were residing in urban areas, while 26% were uncertain about internet accessibility. The most affected students were those using internet connection in their offices or at home using modem. Sometime the system is very slow which takes long time for one to get what is needed. One of the students interviewed had this to say,

"My employer does not allow workers including me to use the office internet or computer for private activities including studies".

# Computer access

The majority of respondents (42%) had no access to computer as shown in Table 2. Most students commented that, they have to travel some kms to access computer services for typing their work and submit it to instructors. About 21% of the respondents had access to computer as they live close to the university premises where they could use computer in the university library. One of the students interviewed had this to say, "Have to get a computer from my neighbor

for typing assignment, hove to pay some money fir that". However, 37% of the respondents were neutral, uncertain about computer access (see Table 2).

#### Course content are organized logically throughout the course

Course content is very important to learners. It gives learners knowledge and skills. When respondents were asked to rate the appropriateness and sequence of content and learning activities within the course, more than two-thirds of the participants (79%) agreed while only 21% were neutral, were not sure whether content is appropriate or not (see Table 2). Moreover, when asked if all modules (Knowledge areas) were covered in the course content uploaded in the system 82% agreed, 10% were neutral. Only 8% disagreed (Figure 1). One student interviewed said that, "All knowledge areas contain what is to study per course; it is in line with the course outlines".

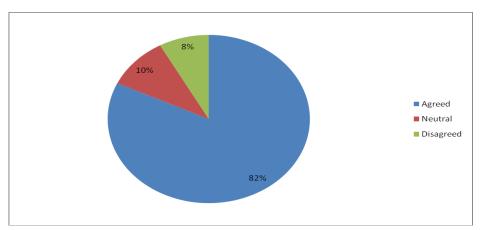


Figure 1: All Modules or knowledge areas were covered in the course content uploaded in the Moodle system

# Availability of learning support

Respondents were positive on learning services provided prior and during course delivery. 84.5% of the respondents agreed that lecturer, IT technicians and other university workers were supportive to them in case of any problems or advice asked for while 10.5% of respondents were not sure of availability of learning support. Only 5% disagreed on the availability of learning support. Some of the libraries did not have enough reference books and students were unable to

access online resources. When respondents were asked if they were able to access online resources from the library, 40.4% of respondents agreed; 5.8% were undecided and 53.8% disagreed (Figure 2). Likewise, when asked if there were enough reference books at the centres, the majority of respondents (over 80%) disagreed.

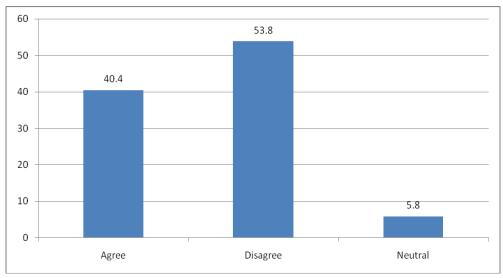


Figure 2: Convenient access to online learning resources

#### Availability of instructors in online sessions

Moodle platform require active interaction between instructor(s) and student(s). When the respondents were asked how often, instructors appeared in online sessionsthe majority of respondents said instructors were not available in most of live chats. For example, one student said that, "In most of the time, lecturers are not available online during session hours". Another student said that, "lecturers are taking long time to respond to their queries". However, nearly half of respondents (47%) agreed that instructors were participating in asynchronous discussion forums, and were providing timely and meaningful feedback while 37% of respondents were neutral and 16% disagreed. On the other hand, students suggested that face-to-face sessions should be increased from three days to at least five days. For instance, one respondent suggested that, "....the college should increase allocate more time for face to face in the learning centre to give lecturers ample time to teach".

#### With Moodle platform results are available in time

Before the operation of Moodle system at the OUT, complains loss of results was a major problem. Students were not able to get their results in time. With Moodle system and strictness of the Directorate of Examination Syndicate, complains on lost results have been lowered to almost zero. Overall, respondents were positive on the uploading of their results in SARIS on time. The majority of respondents (89.5%) agreed that, Moodle system facilitated the process of uploading results in the SARIS on time. 10.5% of the respondents were uncertain, nothing has changed, the results were uploaded as it is used to be. The information technology technician interviewed had this to say,

"Students answer assignments, term paper and other tasks in the Moodle system. Marking are done on the Moodle system and the results are kept in the system for many years, in case results are not found, it is easy to retrieve the results in the Moodle platform and upload them in the SARIS".

#### Technical issues

When respondents were asked if they encountered any technical difficulties when participating in Moodle platform or blended learning delivery, almost 68% said YES, while 32% said NO. When the students were asked to explain some of the difficulties they were facing in Moodle platform, the majority of them ascribed it to be inaccessibility of PDF and Video clips. For example, one student said, "..... there are some materials which are not downloaded while you want to". Similarly, another student said, "..... Some pdf files and video clips are not shown or playing". However, many respondents indicated that, CDs were useful and effective in providing an alternative means to access learning resources. Moreover, most of course notes, videos clips and animations were accessible on CDs. As shown in Figure 3, 95% of respondents agreed and 5% disagree that CDs were effective and courses were accessible.

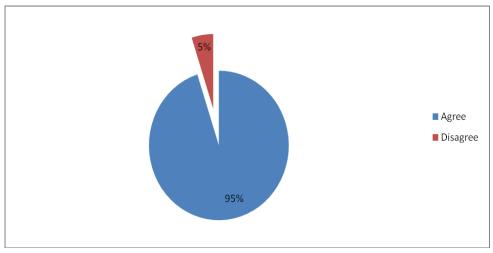


Figure 3: Accessibility and effectiveness of CDs

# Advantages of Moodle platform

Respondents listed various benefits of Moodle platform in learning as presented in Table 3.

Table 3: Summary of benefits from the application of Moodle platform

| S/no | Advantages for the application of Moodle system   | Frequencies | Percentages |
|------|---|-------------|-------------|
| 1    | Lecturers, learners and IT experts are active in the Moodle platform  | 17          | 89.5        |
|      | all the time.   |             |             |
| 2    | Provide room for interaction  | 18          | 94.7        |
|      | between students themselves and with their lecturers/tutors.  |             |             |
| 3    | It is very good your fellow students, as well as lecturer can challenge learning system as you. You can be directed to come back in case you go astray. | 12          | 63.2        |
| 4    | Moodle is beyond comparison; it is the best ever; imagine one is sick; s/he can interact using his  | 10          | 52.6        |

|   | smart phone, I-pad or Laptop.<br>Learners can study wherever s/he<br>is, in the bus, on the bed or<br>elsewhere, moodle is marvelous.   |   |      |
|---|---|---|------|
| 5 | It is good for employees as you kill two birds with one stone i.e. working at the same time engaging in studies. You don't need to leave your job/employment for attending studies as in the case of conventional universities. | 7 | 36.8 |
| 6 | It is very convenient for every age group, professionals, business people, farmers, pastoralist and others; it is user friend system to everyone.   | 6 | 31.6 |

Findings in Table 3 show that, 89.5% of the respondents reported that Moodle system influence lecturers, learners and IT expert to be active all the time in the Moodle platform. Lecturers have to post assignments, discussion and quizzes in the system, while students have to respond to the tasks posted in the Moodle lecturers are guiding the process. Almost all respondent (94.7%) agreed that, Moodle platform provides a room for interaction between students themselves and with their lecturers/tutors.

Moodle platform helps lecturers to provide students with things to cover before coming for face-to-face sessions. Before face to face, student will be aware of what to be covered during the face-to-face session and be able to pre-determine the difficult areas, which will be emphasized during the face-to-face sessions. About 63.2% of the respondents agreed that, Moodle system is a good learning system as one can be challenged and criticized by fellow students, as well as lecturers. A student can be directed to come back in case s/he goes wrong or posts a wrong answer. With Moodle platform, students are

free to post their arguments supporting or not supporting comments from their colleagues and from the lecturers. One student interviewed said that, "One day I was appointed to provide a modal answer to one question, my colleagues criticized my answer and at the end I found that I was wrong, I had read wrong books".

As depicted in Table 3, 52.6% of the respondents were of the opinion that, Moodle platform is beyond comparison; it is the best ever; imagine someone is sick; s/he can interact with others using smart phone, I-pad, Laptop or any other devise. Learners can study and learn wherever s/he may be. Moodle is marvelous. A student taking MA Kiswahili said this,

"I was sick admitted at Mnazi Mmoja Hospital and I had to submit assignment, the deadline was near, what I did was to ask my friend to bring my laptop, I did the assignment and submited it before the deadline".

In conventional universities, if you are sick, you have to postpone submitting assignments. The study also found that Moodle is a good learning system for employees as reported by 36.8% of the respondents. Working at the same time studying is possible with Moodle platform. One does not need to leave a job/employment for attending studies, as is the case in conventional universities. One student working with TANAPA had this to say,

"I applied studies at one of the Conventional University in Tanzania, but I was denied permission for studies by my employer, then I applied at the OUT, I was given permission as I am doing my work as usual. I am expecting to graduate this year".

So far, about 31.5% of the respondents agreed that Moodle system is very convenient for every age group, professionals and business people. It is a user-friendly system to everyone. Overall, people interviewed declared that, Moodle platform is a system suitable for learning and teaching. It is a revolution in education delivery.

#### Challenges facing Moodle Platform in OUT

Although the initiative of Moodle platform in Tanzania is blossoming at fast speed, it is important to note that there are some challenges that might prevent the smooth or further growth of the platform. 58% of the 19 respondents said that, cost involved in Moodle platform is one of the challenges facing Moodle delivery system (Table 4). Learners must invest money in the technology applied in Moodle platform. Learners must purchase or own various devices like smart phones accepting whatssap, I-pad and laptop, modems and have money to recharge the modem in order to access information (internet). access library materials, interacting with others and be able to participate in discussions. One of the students interviewed said that,

"Cost involved in the technology is a challenge; before I started studies, I had no computer, modem or smart phone. After enrolling in the MA NRAM program I was forced to invest 1,530.000/= to buy computer (Tshs 1,100,000/=); smart phone (Tshs 400,000/=) and modem of Tshs 30,000/=".

This sum of money is much at start, as you pay once.

Table 4: Challenges facing Moodle platform

| S/no | Challenges                    | Frequency | Percentages |
|------|-------------------------------|-----------|-------------|
| 1    | Technology (Buying            | 11        | 58          |
|      | computer, I-pad, smart        |           |             |
|      | phone)                        |           |             |
| 2    | Unreliable infrastructures,   | 15        | 79          |
|      | power or electricity cut      |           |             |
| 3    | Unavailability or instability | 12        | 63          |
|      | of the OUT web page or        |           |             |
|      | network connection            |           |             |
| 4    | Learners negative attitude    | 8         | 42          |
|      | and perceptions towards       |           |             |
|      | Moodle platform               |           |             |
| 5    | Students and staff has little | 5         | 26          |

|   | understanding of the        |   |    |
|---|-----------------------------|---|----|
|   | Moodle platform             |   |    |
| 6 | Members who do not want     | 4 | 21 |
|   | changes continue to resist  |   |    |
|   | the platform.               |   |    |
| 7 | Age limit, people with high | 3 | 16 |
|   | age are reluctant to accept |   |    |
|   | changes.                    |   |    |

The second challenge facing Moodle platform is unreliable infrastructure. Infrastructure to support Moodle platform is still a challenge to most areas in Tanzania. This challenge was supported by 79% of the respondents. Issues like internet or network connection, computer and associated facilities; electricity in some areas is not available to users. One of the student taking MSc. in HACD who had terminated studies, was asked why termination, he had this to say this,

"I decided to terminate studies due to inaccessibility of internet. I joined the program when I was in Dar es Salaam, then I was transferred to Mkuranga. In Mkuranga, the internet connection is a problem, very difficult to get network, I tried several time but in futile. As the result I decided to terminate studies".

For Moodle platform to work smoothly, reliable internet connectivity is necessary. Since urban area is well connected to internet, the Moodle system favored areas with internet network and excludes areas, which have not. In this case, urban learners benefit more than their counterpart in rural areas. Another challenge mentioned by respondents was unavailability of the OUT web page or poor network connection as agreed by 63% of the respondents (Table 4). It was noted that internet accessibility is not stable in some places, mainly remote ones. The student taking MA Kiswahili interviewed in Ilala district has this to say,

"I commended the OUT for embarking on Moodle system, the problem with Moodle platform is internet; internet is very slow and sometimes is not accessible or available. He is employed and mainly accessing computer during working hours, this time the internet is very slow because, this is the time where many people are using internet. Despite this challenge, I enjoyed Moodle system. The lecturer interviewed said that, the problem with Moodle platform is internet connectivity, which affects both students and lecturers".

The perception of both tutors and students towards Moodle platform was mentioned by 42% of the respondents (Table 4). Any change must face resistance; tutors have their reasons for not accepting the Moodle platform. One of the lecturers interviewed said that,

"Moodle platform will stop lecturers going to teach in the regions which in turn we will not get money i.e. per diem". The second tutor said that, "I am a computer illiterate how can I teach using Moodle, my eyes are not ok? Moodle is for you youth". One of the students had perceptions that, "Moodle is difficult because I have no computer and my knowledge with computer is not good, I used to take work to stationeries, type them, ask them to print, then I take it to my supervisor".

Lack of expertise and experience in Moodle are other challenges. In order for a person to apply moodle, appropriate knowledge is needed. The two days set for moodle training is not enough for serious issues like academic. More days are required for Moodle training. Un-readiness of staff to use Moodle platform is also a challenge. The lecturer interviewed commented that,

"ICT instructors should circulate friendly manual which I believe they have to course instructors to remind them on some technical parts such as how to mark and grade students' tasks".

Another challenges mentioned was, some students and staff have little understanding of the way Moodle platform works as agreed by 26% of the respondents (Table 4). However, 21% of the respondents continue to resist the platform, they do not want changes. They prefer blended Model (executive, evening and distance). Old or aged people are wise, but people with high age were reluctant to accept changes that Moodle system. 16% of the respondents mentioned their eye as a problem to them. They cannot read on the computer screen, thus, Moodle is not suitable to them.

#### **Discussions**

This paper reports on the contribution of Moodle platform in reaching the unreached people. The study revealed that Moodle platform has increased the possibility of people acquiring high education than before. Before starting of Moodle platform at the OUT, people (students) were unable to enroll for further studies because of their responsibilities. Under conventional universities, attending lectures regularly is necessary, with ODL or Moodle platform is an option. Interaction is done without been in direct contacts with media like internet and computer. Review of literature have shown that computer and internet can be used in distance education to systematically complement course delivery, facilitate access to course and resources, improve interaction and communication with students and for provision of feedback to students and support (Nihuka, 2010).

Infrastructures supporting Moodle platform is still a challenge to most countries in Africa. Issues like network connection, computers and associated facilities, electricity in some countries are not available to users (Nihuka, 2010). The ICT infrastructures and facilities are still inadequate, but the prevailing issue of broadband connection and availability of high bandwidth through National Research and Education Networks (NRENs) is believed to solve the ICT infrastructure in terms of broadband connectivity. Unfortunately, while solving the issues of broadband connectivity, electricity is becoming a scarce resource in most of African countries. The students interviewed indicated that, they had knowledge and skills related to internet for browsing of resources, email and for sending documents as attachments. Similar results were also reported in

previous studies by Abdel-Wahab (2008). Knowledge of using internet is necessary for students because it facilitates searching of resources for students studies on the web (Nihuka, 2010). It enables important communication between lecturers and students and among students themselves (Pena-Bandalaria, 2007). It allows provision of feedback to students on their learning. ICT experts plays crucial role in providing support to students on the use of the technology (Pena-Bandalaria, 2007). It is therefore through ICT that distance education programs are provided to the learners in their remote social and geographical location.

This initiative has led to an increasing interactivity between students and other ODL personnel. Through the internet and mobile phones, technology has assisted the learners to enjoy the services of the ICT personnel. Through ICTs, students can seek clarification on issues bothering on their program and get reply immediately. It was found that, some students lack knowledge and skills on the use of computer and internet. This hinders students searching materials in the net and doing tasks provided by lecturers. Knowledge of internet is necessary for distance learners because it facilitates searching for resources on the web (Nihuka 2010). These benefits are relevant to OUT because of the wide spread of the student population all over the country. In Moodle platform, skills and knowledge on computer and access to internet is the prerequisite because without it students cannot learn.

The challenge of infrastructure for Moodle platform was looked at. Investment in the use of ICT in distance education is an ideal endeavor, which must be supported by everybody in the institution. According to Koohang and Durante (2001) knowledge and experiences of some forms of technologies have great influence on perceptions regarding whether or not to use technologies in education. This means that students' decision to use computer and internet in education for learning depends on their perceptions about the benefits of using such technologies. The results of this study have demonstrated that, students benefit by using computer and internet in distance education at the OUT. The results of this study have also shown that using computer and internet in distance education

(Moodle platform) makes students more responsible for their learning. This means that, students are able to access various sources including internet unlike before. With Moodle platform, students feel more responsible for their learning as opposed to depending on lecturers for learning resources and other academic needs.

According to Siritongthaworn *et al.* (2006). students agree to use elearning technologies such as computer and internet because they are convenient in terms of access time and place. The results of this study have shown that, the application of e-learning technologies (computer and internet) in Moodle platform have increased enrollment and access to education. The results of this study have demonstrated that students' awarenessthat the use of computer and internet in distance education have the potential to enhance their learning. Students also know that the application of these technologies facilitate easy access to resources (learning material), assignments and course outlines. This realisation is not unique in this study because numerous studies have reported similar results (Kochanga and Durant, 2003). However, students positively perceive that, web-based distance learning promote students learning (Kochanga and Durant, 2003).

In the light of the results of this study and my own experience on elearning implementation, this study has highlighted the potential of using computer and internet for education at the Open University of Tanzania. The current efforts towards e-learning integration should be appreciated and systematically monitored for effective implementation to realise success. The results of this study imply that students' knowledge and skills on computer, internet and their perceptions must be seriously considered during course(s) designing for e-learning delivery. We may not be able to begin with all students in every course/programme but certainly with a few who seem to be technology-literate.

#### **Conclusions and Recommendations**

The paper has provided information on the role of Moodle platform in reaching the unreached people. Before the introduction of Moodle

platform, it was difficult, sometimesimpossible to run evening or executive sessions in regions or centers with less than 10 students. With Moodle platform, it is possible for students to learn even if it is one student. Because of this study, it is concluded that, Moodle platform is a tool for teaching at the university as student and lecturers and students themselves do interact. With Moodle platform, universities and institutions have opportunities to bridge the gap and provide access to education to all regardless of distance. This can be through mobilization of technologies that are appropriate for tutors and learners. Moodle platform is among the delivery mode, which needs strong and aggressive tutors and students. This platform has improved delivery of education at OUT. It has solved the problem of learning materials to some extent as reading materials or resources are part of Moodle platform. With Moodle platform students are free to study wherever they are, provided have computer and internet accessibility.

This paper recommends the following: the university should ensure availability and access to internet all the times. Students and lecturers should use internet in the late hours or early in the morning, as this time the internet is stable and fast as few people are using internet. Students should download reading materials, print them and read them offline when there is no internet. Students can also respond to tasks or assignments given and post them when the internet is available. Where there is no internet student can read the printed materials, respond to assignments on paper or type the work on the computer, and then submit the work when there is internet connectivity. In case of difficulties, students are free to contact tutors and ITs experts for help. Experts should be available to assist Moodle users all the time. Electricity is another challenge to Moodle users. It is advisable to work hard when there is power. Alternatively, students can use solar or generator to produce power as a substitute to electricity. The study recommends that more training should be provided to faculty staff and students. Moreover, OUT should ensure stable connection to OUT-web and make sure internet is available all the time.

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