

## TEACHING FOR ACTIVE LEARNING IN SELECTED HIGHER LEARNING INSTITUTIONS IN TANZANIA: PERCEPTION, UNDERSTANDING, STRATEGIES, CHALLENGES AND PROSPECTS

MARY JIBREA PhD.

JORDAN UNIVERSITY COLLEGE, P.O. BOX 1878 MOROGORO, TANZANIA

### **Abstract**

*This study explores the practice of teaching in higher learning institutions in Tanzania from the perceptions and understanding of lecturers and students of four selected universities. The interest in the topic has been prompted by the growing need to promote teaching for active learning so as to provide lecturers and students with relevant knowledge and skills to prepare them to become more adept critical thinkers, problem solvers, creative thinkers and decision makers in an increasingly complex, dynamic and uncertain future. Applying constructivist theoretical framework, the researcher sought to respond to the major question: "Do lecturers and students in higher learning institutions in Tanzania practice teaching for active learning respectively?" The specific objectives were meant to explore the understanding of lecturers and students about active teaching and active learning; to determine the extent to which lecturers and students employ teaching for active learning strategies in classes; to assess challenges that lecturers and students face as they implement teaching for active learning and the prospects for adopting teaching for active learning. The researcher adopted a cross-sectional design using mixed methods approach for triangulation purposes. The study population comprised of 221 finalist students of whom 102 (51.4 %) were males and 101 (48.6%) were females. It also included 40 lecturers of whom 26 (60%) were males and 14 (40%) were females. Data were collected through class observations, structured interviews, focus group discussions and questionnaires.*

*The results showed that conceptions about teaching for active learning were based on lecturers' and students' personal philosophy and their fields of study. Few lecturers and students employed teaching for active learning strategies in classes. The challenges that lecturers and students face as they implemented active teaching included - inter alia, individual lecturers' pre-conceptions about teaching and learning; lack of expertise in using strategies for active teaching, lecturers - students' power relationships, and the nature of the curriculum; language barrier, and class sizes. However, there is a high prospect for the lecturers and students adopting teaching for active learning. Such adoption is likely when lecturers and students get exposed to strategies for active teaching and active learning respectively; when the number of students in classes is manageable and when teaching and learning resources are available and in good condition; and when students change their mind sets and adapt active teaching and learning conditions. The researcher has recommended professional development focusing on active teaching that support and qualify university lecturers. Other recommendations included improving the teaching and learning situations; providing lecturers with induction programs; improving students-lecturers' relationships; ensuring enough and good teaching and learning resources; ensuring logical lecturer – student ratio and ensure syllabuses match the students' needs for twenty first century technological and digital world.*

*Keywords: Teaching, Active Learning, Learning Strategies, Language Barriers*

### **Introduction**

Teaching for Active Learning (TAL) is considered important to maximize students' potential through education as well as enhancing students' cognitive development. TAL is normally contrasted with teaching for passive learning (TPL) Chaijaroen & Khanjak

(2008) assert that TPL is based on theoretical knowledge and is the transmission of knowledge leading to what Professor Mazrui (2012) of Harvard University who claims that TPL is a situation in which students passively receive information that they quickly forget after the end of the course test.

In addition, several studies, for instance (Cronje, 2006; Hirumi, 2002; Vrasidas, 2000) noted that the use of TPL include (i) difficulties in sustaining attention and concentration of students, (ii) challenges in students motivation, (iii) challenges in knowledge assimilation and (iv) difficulty in adaptability of instruction. Further, students attention and concentration decreases after 20 – 30 minutes from the start of the lecture (Horgan, 2003); and students performance within 20 – 30 minutes hence learning activities should be changed every 10 – 15 minutes Horgan (2003) and Oreovika (2003). Other studies found that there is a relationship between distraction and length of lecture Risko et. al. (2012). The second motivational element within lecture that can disengage students to participate in learning is depicted by (Scheele, 2006) who argues that students are more likely to participate in a lecture that initiates extrinsic motivation such as graded class participation and end of class tests. These activities not only serve as assessment learned in the lecture, but also enforce students' persistence to listen to the lecture in preparation for the class assessment. Students' fear of failure constitute the extrinsic motivation variable of students to persist in class lecture Scheele (2006).

While acknowledging the advantages of TAL, there are many conceptions about this transformative practice. Some see it as students participating in learning i.e. performing learning activities wherein students observe and construct their own knowledge from multiple experiences; others see TAL as students acquiring competencies (skills, knowledge and attitudes); while some see it as schools, curriculum planners, community and lecturers collaboratively working together to influence students to learn; whereas others

see TAL as the lecturer becoming a facilitator of learning focusing on students' diverse needs, interests and abilities Kafumu (2010). Furthermore, within educational contexts there are several philosophical meanings of constructivism as observed by Mathew (2002). Therefore, the differences in perception of TAL have become an interesting area of research in countries of sub Saharan Africa. Some scholars, see for example Tabulawa (2003) consider TAL approach as a western imperial condition imposed in developing countries' educational contexts without fair consideration of cultural, technological and socio-economic and political needs for development. Tabulawa suggests that TAL approach and other imposed educational innovations are not effective in developing countries such as Tanzania since they are enforced without significant consideration of the context of their implementation. Likewise, Sigimba (2008) suggests that TAL approach was enforced in Tanzania without considering limited instructional resources including shortage of lecturers, overcrowded classes, text and reference books; computer assisted facilities, furniture, infrastructure and constrained staff development programmes.

TAL in higher learning institutions for a country like Tanzania is highly needed due to the need for the development of higher order thinking capabilities among its graduates and the challenges facing the education system in the country. This is evidenced by the massive failure of many graduates to fulfill satisfied job demands (Dahlan, 2016). This perspective is also in line with private companies complaints on the inability of fresh graduates to respond properly to duty in workplaces (Dahlan, 2016). The challenges that face higher learning institutions in Tanzania among

other things are the mismatch between higher education and the economic, political, social, cultural and demographic changes taking place in Tanzania Education Policy (2014), the market demand, the inadequate facilities like shortage of classrooms, shortage of public rooms for discussions, big classrooms accommodating more than 300 students, lack of adequate chairs, poor library management, untrained staff in libraries, insufficient number of books and inadequate computers and internet. There are also problems of low academic culture envisioned by students not wanting to know but clinging to certificates. There is also the challenge of language gap (Ndyali, 2016) cautioned that, Tanzania higher education institutions have not raised much expectations that graduates lack the skills required by the labour market. This trend results in mass graduate unemployment.

Tanzania realized a long time ago that education is the key input for economic growth and the social progress of the nation. This is why the education sector has the greatest and most pervasive multiplier effects in an economy. The two key outputs of the education sector are the human resources that manage other sectors of the economy and the knowledge and attitudes, motivations and entrepreneurial dispositions that are central to economic growth, peace and stability. That is why the Government of Tanzania recognizes the central role of education in achieving the overall development goal of improving the quality of education and improving the quality of life of its citizens. This is well articulated in the Tanzania Development Vision 2015 and the National Strategy for Growth and Reduction of Poverty. Tanzania is also a signatory of several international agreements including Education for All (EFA) and the Millennium Development Goals (MDGs). In addition, the

formulation of the strategy of Education for All (1990), which was adopted at a World Conference in Jomtien, Thailand, had the overall goal of the overriding concerns for the quality, efficiency and effectiveness of education (Mushi, 2009). Furthermore, in 2008, the National Education Task Force was set up to review the existing education system with a view to recommending appropriate reforms for the 21<sup>st</sup> century.

Different measures have been taken by the government of Tanzania to ensure teaching is active in order to produce critical graduates that can solve community problems and those of the nation. The measures include challenging the transmission of the readymade curriculum content from generation to generation, which limited learners' sharing of their lived experiences and their creativity, critical thinking, and problem solving within the Education for Self Reliance (ESR) philosophy. However, such measures did not go along with changing the language from colonial English to national language Kiswahili that would enhance the learners to effectively construct knowledge (Mtitu, 2014). . Moreover, very little is known about lecturers' perceptions about active teaching, the extent to which lecturers employ active teaching, and the challenges that they face in implementing active teaching. Currently, most published articles on teaching for active learning had been descriptive accounts rather than empirical investigations of the subject. Many were out of date, either chronologically or methodologically; and a large number of important conceptual issues like understanding, perceptions, strategies, challenges and prospects had never been explored. This new qualitative and quantitative research is thus needed to examine understanding, perspectives, strategies, challenges and prospects of

teaching for active learning with a view to enhance students' learning. This study aims to fill this gap in the literature.

### **Research Methodology**

The researcher employed a mixed methods approach. This means that both qualitative and quantitative study approaches to gather data were deployed. The researcher's choice aimed at learning and collecting in depth information about TAL from the randomly and purposively selected lecturers and students. The choice is supported by Creswell (2005) who define a mixed methods research design as a procedure for collecting, analyzing and 'mixing' quantitative and qualitative data in a single study to obtain an in depth understanding of a research problem. The researcher used a mixed methods design because the researcher was seeking to provide a better understanding of the research problem which was to assess teaching for active learning among students and lecturers understanding, strategies, challenges and prospects, rather than by either study on its own. The quantitative data, such as scores on the instruments, yield specific numbers that can be statistically analyzed and can produce results to assess the frequency and magnitude of trends. It also offers useful information if the researcher wants to describe a large number of units.

Based on the topic of TAL in Tanzania higher learning institutions, the researcher set out to examine lecturers' and students' understanding, strategies, challenges and prospects of TAL. The researcher was guided by the four research questions mentioned above, only issues relating to the lecturers and students' understanding, strategies, challenges and prospects of TAL were examined in light of the constructivist

teaching beliefs. Applying the interpretive and constructivist research approach allowed the researcher to focus on addressing the research problem and its objectives namely establishing the lecturers and students understanding, strategies, challenges and prospects of teaching for active learning. Linking qualitative and quantitative data provided several advantages. It enabled confirmation of results from each method via triangulation of data collection, data instruments and hence enriching details extracted to enhance the research analysis and outcomes. The mixed method approach is increasingly accepted by scholars as an approach that could broaden the range of any research and deliver stable results for the themes under investigation (Creswell & Clark, 2007; Tashakkori & Teddlie 1998).

Mixed Method approach allowed an explorative inductive process that began with empirical evidence of a particular phenomenon and proceeded to level of abstraction, theorisation, generalisation and deductive confirmation for hunch testing (Rocco et al., 2003); increased the study validity with triangulation of data and increased validity and interpretability, showing different facets of a phenomenon (Greene, Caracelli & Graham, 1989); the quantitative data provided numerical answers to the research question, but there was a need to understand the factors that were more relevant to the study; this two-pronged approach added depth and breadth to inquiry results and interpretations, and mitigated the effects of inconsistent qualitative and quantitative findings (Rocco et al., 2003). Undertaking mixed methods approach was advantageous in many ways. Creswell (2005) reiterates that a mixed methods approach permits the researcher to study selected issues in depth and in detail.

According to Creswell, the mixed methods approach can produce a wealth of detailed information from a small number of selected studies within selected research sites. Mixed methods approach provides an insight into how people make sense of their experiences, which cannot be easily provided by other research methods.

### **The Theoretical Framework of the Study**

Different contexts have different demands and these demands pose different challenges to human beings. Thinkers that are known live in societies that are faced with different challenges and their thinking is a way of reacting to the challenges of their time. They think of the kind of learning and education that can react to the challenges of their time. The same applies today; we need to study today's societal challenges so that we can design a kind of teaching and learning that will best address the challenges of our time. Construction paradigm is the current paradigm, philosophy or thinking about what learning involves. In constructivist paradigm, learning is viewed as the construction of knowledge. Learning is associated with higher order learning of mature learners, andragogy or heutagogy.

In addition, Greene and Gredler (2002) emphasize that all constructivists agree about the necessity of changing the ways of class teaching. The word schemata were used for the cognitive structures. So learning takes students' experiences from the physical and social world and adds to it what already exist in the students' minds. Construction is thus the process of taking in new information and adding it to be part of the schema or cognitive structure in the mind. Learning is a continuous process and it begins at a state of conflict or disequilibrium. The conflict is between what is already in the mind schema and the new

information that the brain comes into contact from the physical and the social world. New information is unfamiliar objects or anything that came into knowledge through the senses. At a time of conflict the brain works to scrutinize the new information, contrasting and comparing it with what already exist in the cognitive structures. At the time of scrutinizing learners apply different strategies to find more data about this new information. Sometimes data are collected by asking questions to other people. When enough data has been obtained, the new information is taken and included in the existing structure a process which is known as assimilation. To assimilate means to incorporate, to absorb or to take aboard. In the language of learning, assimilation means understanding. Taking new information broaden the cognitive structures. It demands that the existing form of structure change in order to give room to new information. This reorganization of the cognitive structure after assimilation is called accommodation. When assimilation and accommodation have taken place a state of equilibrium is reached hence learning involves successive phases of disequilibrium, assimilation, accommodation and equilibrium.

Teaching for active learning demand a lot of activities that are organized to meet new goals. Lecturers need to ask questions such as: what are the most suitable activities to meet new demands? That is, to ask what are the suitable activities to arouse cognitive conflicts so as to facilitate assimilation and to allow accommodation in classes. Further, lecturers have to remember that individuals have different cognitive structures as these are developed differently depending on individuals' history. Therefore, different individuals and different environments

demand different ways of learning. Students learn better and faster when they are assisted by experts. Vygotsky called the difference between students learning as ZPD meaning Zone of Proximal or Potential Development. This is the difference between learners' ability to learn on their own and the ability to learn when helped by experts. Vygotsky's concept of ZPD is of great help to facilitators of learning. It guides lecturers to assist students to learning beyond what they have already known.

This aligns with transformational learning as advocated by Mezirow (2014) who introduced the concepts of meaning perspectives. That is the individual overall view of the world and meaning schemes i.e. smaller bits of knowledge and values relating to individual experiences. Mezirow argues that meaning perspective change as a result of responses to life experiences and provide the raw material for the changes that occur in transformational learning. Mezirow's theory of transformational learning is based on three main themes namely: experience of life, critical reflection and rational discourse. Experience of life provides the essential starting point in any learning event. Critical reflection is the distinguishing feature of adult learning and the mechanism in which the student questions the validity of their beliefs and values. Rationale discourse induces the student to explore the depth and meaning of their beliefs and values and to share these with their lecturers and peers Bates (2016). Indeed, Mezirow suggests that transformational learning will induce more far reaching behavioural change in person and produce a more significant impact, or paradigm shift, than other kinds of learning.

## **Findings and Discussion**

### **Students' Perceptions on Teaching for Active Learning**

The research study was set to establish the students' perceptions on Teaching for Active learning. The Likert scale was used to collect information on the perception of students in teaching for active learning in higher learning institutions. Statements that reflected perception and understanding of students about teaching for active learning were formulated, and the respondents were required to reply to the statements whether they strongly agreed, agreed, were undecided, disagreed or strongly disagreed with each of the statements. The score assigned to each statement was based on respondents' responses. The correct answers were given 5 if a respondent strongly agreed, and 4 if a respondent just agreed, while 3 was for undecided, 2 for disagree and 1 for strongly disagree (Kothari, 2009).

There were 10 statements which were used, therefore, the maximum score which an individual would obtain was 50 (i.e. 10x5); the medium score that an individual would score was 30 (10x3) and the minimum score which an individual would obtain was 10 (i.e. 1x10). The scores were then re-grouped into positive, neutral and negative perceptions. Positive perception ranged from 31 to 50 scores, neutral attitude was regarded if a respondent scored 30 and negative perception was regarded if a respondent scored below 30 that mean 10 to 29 depending on the scores results. Table 4.1 below summarizes the results on perceptions, which were based on a Likert scale.

**Table 4.1: Students' perceptions, strategies, challenges and prospects of teaching for active learning methods**

| Statements                                                                                                                 | Scores (%) |          |           |
|----------------------------------------------------------------------------------------------------------------------------|------------|----------|-----------|
|                                                                                                                            | D          | U        | A         |
| Active teaching entails lecturers using a variety of methodology in teaching                                               | 16         | 5        | 79        |
| Students in higher learning institutions are engaged in higher learning activities                                         | 23         | 9        | 67        |
| When students in higher learning institutions are engaged actively in the learning process we say they are active learners | 18         | 7        | 75        |
| Teaching through problem solving ensures active learning                                                                   | 16         | 3        | 81        |
| When students engage in discussion, they are actively learning                                                             | 16         | 6        | 78        |
| In higher learning institutions classes students interact with their colleagues and their lecturers                        | 20         | 8        | 72        |
| Active learning promotes critical thinking in classes                                                                      | 13         | 4        | 83        |
| Competence in note taking ensures active learning                                                                          | 19         | 11       | 70        |
| Students in higher learning institution classes are motivated in their learning                                            | 26         | 17       | 57        |
| In higher learning institutions students and their lecturers are friends.                                                  | 28         | 17       | 56        |
| <b>Average score</b>                                                                                                       | <b>20</b>  | <b>9</b> | <b>72</b> |

**Key: 1 D=Disagree, U=Undecided, A=Agree**

The findings indicate that 83% of the students agreed with the statement that teaching for active learning promotes critical thinking in class. Likewise 81% of the students agreed with the statement that teaching through problem solving ensures active learning. Similarly, 79% of the students agreed that active teaching entails lecturers using a variety of methodology in teaching. On the other hand, 78% of the students affirm that when students engage in discussion, they are actively learning. However, 75% of the students affirm that when students are engaged actively in the learning process we say they are active learners. Further, 72% of the students affirmed that in higher learning institutions students interact with their colleagues and

their lecturers in their classes. Furthermore, 70% of the students agreed with the statement that competence in note taking ensures active learning. On top of that, 67% of the students agreed with the statement that students in higher learning institutions are engaged in higher order thinking.

#### **Students' Responses Regarding Notion, Meaning and Description of TAL**

Students were asked to show their understanding of the meaning of the active teaching for active learning in higher learning institution classes. Table 4.2 below presents the summary of the distribution of respondents' views on the meaning of active teaching for active learning in higher learning institutions.

**Table 4.2 Notion, Meaning and Description of TAL**

| <b>Students Institutions</b>                                                                                               | <b>Frequency</b> | <b>Percentage</b> |
|----------------------------------------------------------------------------------------------------------------------------|------------------|-------------------|
| Competence based, effective, extensive, intensive, useful, relevant, facilitative, authentic teaching and learning         | 18               | 27.7              |
| Participatory, cooperative, collaborative, involving, engaging, interactive, sharing and integrative teaching and learning | 39               | 60.0              |
| Lecturer using various teaching techniques                                                                                 | 3                | 4.6               |
| Student centred teaching                                                                                                   | 2                | 3.1               |
| Others                                                                                                                     | 3                | 4.6               |
| <b>Total</b>                                                                                                               | <b>65</b>        | <b>100.0</b>      |

From Table 4.2 above the results show that 39 (60.%) of the students affirm that the meaning of TAL is the participatory, cooperative, collaborative, involving, engaging, interactive, sharing and integrative teaching and learning strategy. However, 18 (27.7%) of the students said that TAL is the competence based, effective, extensive, intensive, useful, relevant, facilitative, authentic teaching and learning. Further, few 3 (4.6%), 2 (3.1%), 3 (4.6%) of the students affirmed that TAL means that lecturer using various teaching strategies and students centered techniques respectively. Based on the findings in Table 4.2 above, a good number of students seem to suggest that teaching for active learning in higher learning institutions class is something which should be participatory,

that means everybody should participate in his or her way during the teaching time. But also, it is cooperative; students should cooperate either in group discussions or with the lecturer during the time of class hours. Further, collaborative, involvement and engagement is needed for teaching for active learning.

#### **Students' Responses Regarding Lecturers' Strategies**

The current research study aimed at establishing the students' responses regarding lectures' strategies for active learning in higher learning institutions. Table 4.3 presents the summary of the distributions of the respondents' views on lectures' strategies for active learning in institutions of higher learning.

**Table 4.3 Lectures Strategies**

| <b>Lecturers Strategies</b>      | <b>Frequency</b> | <b>%</b>   |
|----------------------------------|------------------|------------|
| Questions and answers techniques | 24               | 36.9       |
| Discussions                      | 18               | 27.7       |
| Assignments and Projects         | 8                | 12.3       |
| Presentations                    | 1                | 1.5        |
| Tests and Examinations           | 4                | 6.2        |
| Others                           | 6                | 9.2        |
| No response                      | 4                | 6.2        |
| <b>Total</b>                     | <b>65</b>        | <b>100</b> |

The results from Table 4.3 above show 24 (36.9%) of the students responded

that lecturers use question and answer techniques as one of the strategies while 18

(27.2%) of the students affirmed that lecturers use discussions, 8 (12.3%) assignment and projects, 4 (6.2%) tests and examinations and only 1 (1.5%) of the students affirmed that lecturers use presentations as one of the strategies of teaching for active learning in higher learning institution classes.

**Table 4.4: Students Strategies**

| <b>Students strategies</b>                | <b>Frequency</b> | <b>Percentage</b> |
|-------------------------------------------|------------------|-------------------|
| Asking and Answering Questions            | 20               | 30.8              |
| Discussions                               | 12               | 18.5              |
| Individual Responsibility                 | 14               | 21.5              |
| Attending all Classes                     | 4                | 6.2               |
| Creating Good Relationship with Lecturers | 11               | 16.9              |
| No Response                               | 4                | 6.2               |
| <b>Total</b>                              | <b>65</b>        | <b>100.0</b>      |

The results in Table 4.4 above show that 20 (30.8%) of the students affirmed that asking and answering questions were the strategies that students normally deploy in ensuring TAL while 14 (21.5%) of them mentioned students' individual responsibility as strategy for TAL, whereas 12 (18.5%) mentioned discussions, 11 (16.9%) responded by saying that creating good relationship with lecturers was the strategy

### **Students Strategies**

The study was set to find out the students' strategies indicators for TAL. Table 4.4 presents the summary of respondents' views on students' strategies indicators for TAL.

for TAL and 4 (6.2%) mentioned attending all classes as a strategy for TAL.

### **Lecturers Competence**

The lecturers' competence is one of the strategies for establishing the effectiveness of TAL. Thus, the current research study sought to find out the lecturers; competence as an indicator of TAL. Table 4.5 presents the summary of the distribution of the respondents' views on the lecturers' competence on TAL.

**Table 4.5: Lecturers Competence**

| <b>Lecturers Competence</b>             | <b>Frequency</b> | <b>Percentage</b> |
|-----------------------------------------|------------------|-------------------|
| Competent                               | 18               | 27.7              |
| Moderate                                | 8                | 12.3              |
| Some Competent and Others not Competent | 11               | 16.9              |
| Not Competent                           | 5                | 7.7               |
| Others                                  | 8                | 12.3              |
| No Response                             | 15               | 23.1              |
| <b>Total</b>                            | <b>65</b>        | <b>100.0</b>      |

The results in Table 4.5 show the lecturers competence to be one of the indicators for TAL. The results show 18 (27.7%) of the students affirmed that the

lecturers were competent while 11 (16.9%) responded by saying that some lecturers were competent and others were not competent, 8 (12.3%) respondents

responded that some lecturers were moderate and 5 (7.7%) reiterated by saying that lecturers were not competent in teaching for active learning in higher learning institution classes.

### Students' Perception on Lecturers Becoming Competent

Students' perceptions on lectures becoming competent in applying TAL were sought. Table 4.6 presents the summary of respondents' perceptions on lectures becoming competent in applying TAL.

**Table 4.6: Lecturers Becoming Competent**

| Lecturers Becoming Competent          | Frequency | Percentage   |
|---------------------------------------|-----------|--------------|
| Through Training                      | 15        | 23.1         |
| Abiding by Professional Ethics        | 11        | 16.9         |
| Being Committed                       | 9         | 13.8         |
| Grounding teaching on Students' Needs | 2         | 3.1          |
| Introducing TAL Model                 | 9         | 13.8         |
| Others                                | 14        | 21.5         |
| No Response                           | 5         | 7.7          |
| <b>Total</b>                          | <b>65</b> | <b>100.0</b> |

The results in Table 4.6 show how lecturers can become competent in TAL. The results show that 15 (23.1%) of the students said that lecturers can become competent in TAL through training while 11 (16.9%) responded by saying that lecturers can become competent through abiding by professional ethics, 9 (13.8%) responded by saying that lecturers can become competent by being committed, whereas 9 (13.8%) responded that lecturers can become competent through introducing models of

TAL and few (3.1%) reiterated that lecturers can become competent through grounding teaching on student's needs.

### Students becoming competent

In the current research study, the respondents' perception on students becoming competent was determined. Table 4.7 below presents the summary of the respondents' views on students becoming competent in using TAL.

**Table 4.7: Students Becoming Competent**

| Students Becoming Competent                       | Frequency | Percentage   |
|---------------------------------------------------|-----------|--------------|
| By Being Actively Involved in Learning Activities | 18        | 27.7         |
| By Being Provided with Problem Solving Activities | 10        | 15.4         |
| By Being Committed and Resourceful                | 10        | 15.4         |
| By Establishing Good Relationship with Lecturers  | 14        | 21.5         |
| By Reorienting to Independent Studies             | 5         | 7.7          |
| Others                                            | 4         | 6.2          |
| No Response                                       | 4         | 6.2          |
| <b>Total</b>                                      | <b>65</b> | <b>100.0</b> |

The results in Table 4.7 show how student can become competent in active learning in higher learning institution classes. The findings show that 18 (27.7%) of the students affirm that a student can become competent in AL through being actively involved in learning activities while 14 (21.5%) of the respondents responded that students can become competent in TAL by establishing good relationship with lecturers, 10 (15.4%) reiterated by saying that students can become competent in AL by being provided with problem solving learning

activities, whereby 10 (15.4%) responded by saying that students can become competent in AL by being committed and resourceful and only 4 (6.2%) responded by saying that students can become competent by reorienting to independent studies.

### Improving lecturing

The research study was set to find out if lecturing can be improved. Table 4.8 presents the summary of respondents views on whether lecturing can be improved.

**Table 4.8: Improving Lecturing**

| Improving Teaching                                           | Frequency | Percentage |
|--------------------------------------------------------------|-----------|------------|
| Provide Adequate and Better Lecturing and Learning Resources | 22        | 33.8       |
| Provide Standard Workload                                    | 4         | 6.2        |
| Provide Conducive Syllabus                                   | 11        | 16.9       |

The result in Table 4.8 shows on how the lecturing can be improved for TAL. The results show that 22 (33.8%) of the students affirmed that for the lecturing improvement there should be provision of adequate and better lecturing and learning resources, 11 (16.9%) reiterated that the provision of conducive syllabus, 5 (7.7%) responded by saying that maintaining good relationship with students would improve lecturing whereas few 4 (6.2%), 3 (4.6%) said that

there should be provision of standard workload and reduce overcrowded classes in order for teaching to be improved.

### Role of Other Actors

The role of other actors in improving the application of TAL in learning was highlighted. Table 4.9 presents the summary of distribution of respondents' views on the role of other actors for effective application of TAL in institutions of higher learning.

**Table 4.9: Role of Other Actors**

| Role of Other Actors                               | Frequency | Percentage   |
|----------------------------------------------------|-----------|--------------|
| Prepare Conducive lecturing and Learning Situation | 18        | 27.7         |
| Government to Increase Budget for Education        | 7         | 10.8         |
| Politicians not to Interfere with Academic Affairs | 6         | 9.2          |
| Curriculum Developers to Update Syllabus           | 1         | 1.5          |
| Others                                             | 12        | 18.5         |
| No Response                                        | 21        | 32.3         |
| <b>Total</b>                                       | <b>65</b> | <b>100.0</b> |

The results in Table 4.9 above show the role of other actors in TAL. The findings show that 18 (27.7%) of the students affirmed that the role of other actors was to

prepare conducive lecturing and learning situations while 7 (10.8%) of them affirmed that the government should increase budget for education and 6 (9.2%) said that

politicians should not interfere with the academic affairs. Only 1 (1.5%) of the student affirmed that curriculum developers needed to update syllabus for active learning in higher learning institution classes.

### **Conclusions**

The researcher intended to highlight new discovery in the dynamics of teaching for active learning which in turn envisioned highlighting the effective and cognitive aspects of the teaching for active learning contributing to students' critical thinking skills, communication skills, cooperative and collaborative skills, problem solving skills and creative skills. These skills are a prerequisite to the success of the current fast changing technological world. This study was meant to make an important contribution to the literature by demonstrating that teaching for active learning makes a unique contribution to students learning. Moreover, the findings from this study were meant to contribute substantially to the wellbeing of the Tanzania society as a whole and add to the rapidly accumulated evidence that teaching for active learning is critical to students learning success or adversely to students' dissatisfaction and failure to cope with today's fast changing technological and digital world.

The researcher meant the study to be useful in selling the relevance of teaching for active learning to lecturers and students in order to enhance lecturers and students understanding, accountability, and effectiveness of teaching and learning in higher learning institutions' classes. Basing the research on the theory of constructivist, the researcher expected to enlighten lecturers and students on the current knowledge and relevance of teaching for active learning. The research was also meant to expose to lecturers and students

the strategies, challenges and prospects of teaching for active learning.

Exploring the literature on past researches, theorists and scholars worldwide, Africa and Tanzania, the researcher found out that good teaching were defined in terms of helping students learn. That is, the learning of students need to be given priority and focused on students' involvement in the learning activities which is contrasted with the teaching activities that merely display the knowledge of the lecturers. The researcher argued that lecturers and students approach to teaching and learning respectively are not related to the modern conceptions of teaching and learning. The modern conception of teaching and learning are based on the knowledge that today's students are living in a world that is different from the world years back. Today's students live in a global competition and collaboration spurred by information, knowledge, and innovation. Technology has replaced workers who perform routine work while it prefers workers with higher level skills. Today's world need people who can adapt and contribute to organizations, products and processes with communications, problem solving and critical thinking skills. In addition, today's students are millennial, digital natives, and social net workers who are keen to work on their own or in collaboration with others (Hammond, 2008).

Therefore, today's students need to be engaged with the demands of the current knowledge age. The skills needed to succeed in life and workplace in today's world require a paradigm shift coupled with high demands for higher learning institutions which are faced with crisis situation due to enrolment pressure, lack of resources, demands for twenty first century competencies in knowledge, skills and attitudes that

correspond with needs of contemporary work place and the economic inflation. This aligns with Bonwell and Eison, (2003) who assert that students must do more in class than just listen. Thus, this research which focused on teaching for active learning together with the understanding rate by lecturers' and students' strategies challenges and prospects of active teaching for active learning.

The implications of the results are considered from the perspectives of what it encompasses lecturers and students understanding of teaching for active learning together with the strategies, challenges and prospects on the move from teaching for passive learning to teaching for active learning. As the twenty first century in which we live is marked by rapid and constant change, students in this century are faced with need to continually learn to adapt to new contexts, expectations and technologies throughout their lives. Further, to be successful, students need to know how to successfully navigate, shifting careers and learning new jobs, roles and relationships that are in progression. They will have to transform broken systems and organizations and create new ones that are more effective and socially just. For this reason, lecturers today's need to facilitate the learning process of the twenty first century so that students in their quest for personal and professional growth will be in a position to fulfil the demands for higher learning institutions.

The suggestions for other blended contexts supporting teaching for active learning include key implications for quality of teaching and learning. The results indicate that teaching for active learning is perceived as a positive and relatively higher level of teaching and learning achievement whereas teaching for passive learning is perceived negatively as the lower level of

teaching and learning. This aligns with Hammond (2008) who asserts that to prepare students for today's world; lecturers need to improve the quality of the instruction. This assertion also reflects the assertion of Bonwell and Eison (2003) who say that students in higher learning institutions should do more than just listen.

From the current research study it could be asserted that teaching for active learning in higher learning institutions matters for students learning outcomes. Teaching for active learning has provided an insight into qualitative variation in students learning including perceptions of the learning such as quality of teaching, how appropriate the teaching workload is, the understanding of course goals as indicators of qualitatively different experiences. The significance of lecturers and students' perceptions is not limited to whether they are positive or negative about teaching for active learning, but how they relate to the quality of approaches and the outcomes of students learning and what their attitude is towards teaching for active learning.

### References

- Bates, B. (2016). *Learning Theories Simplified And How to Apply Them to Teaching*. SAGE publications. London.
- Bonwell, C. C. & Eison, J. A. (2003). *Active Learning. Creating Excitement in classes*. James Rhew Associates.
- Chaijaroen, S, & Khanjak, I. (2008). *Synthesis of Learning Innovation Model Enhancing Learning Potential Using Brain -Based Learning*. Khon Kaen University, Faculty of Education.
- Greene, J. C. Caracelli, V. J. (1989). *Toward a Conceptual Framework for Mixed Method Evaluation Design*.

- Educational Evaluation and Policy Analysis, 11 255 – 274.
- Creswell, J. W. (2009). *Research Design: Qualitative, Quantitative and Mixed Approaches*. Los Angeles: Sage Publications.
- Creswell, J. W. & Clark, P. (2007). *Designing and Conducting Mixed Methods Research*. Thousand Oaks. California: Sage Publications.
- Cronje, J. (2006). Paradigms Regained Toward Integrating Objectivism and Constructivism-Instructional Design and the Learning Success. *Educational Technology Research and Development*. 54 (4), 387- 416.
- Dahlan, A. (2016). Concept Mapping as a Teaching Tool on Critical Thinking Skills and Academic Performance of Diploma Nursing Students Education in Medicine Journal Vol. 8 (1) 67 – 74.
- Darling-Hammond, L. (2008). *Powerful Learning: What we Know About Teaching for Understanding*. Willey Publications.
- Green, S. K. & Gredler, M. E. (2002). *Active Learning: Creating Excitement in the Class*. Technical Report 1.
- Hirumi, A. (2002). Student-centered, technology Rich Learning Environments (SCeTRLE): Operationalizing Constructivist Approaches to Teaching and Learning. *Journal for technology and Teacher Education*, 10 (4): 497-537.
- Horgan, T. R. (2003). *Higher Education Consortia: Raising Aspirations Through Collaboration*. Philanthroperiodicals Fundraising. Wiley Periodicals. 2003: 65-77.
- Horgan, T. R. & Oreovica, (2003). A Constructivist Mobile & Principled Approach to the Learning and Teaching of Programming – W. A. Alsoggaf Dissertation RMIT University (2012). Melbourne Victoria Australia.
- Kafumu, P. D. (2010). *The Mineralogy and Geochemistry of Sands Dunes Occurring in the Eastern Serengeti Plains, Northern Tanzania*. *Tanzania Journal of Earth Science*.
- Mathews, W. J. (2002). *Constructivism in Classes: Epistemology, History and Empirical Evidence*. Teacher Education Quarterly Summer, 2003.
- Mtiti, E. A. (2014). *Learner-Centered Teaching in Tanzania: Geography Teacher's Perceptions and Experiences*, A PhD Thesis Submitted to Victoria University of Wellington.
- Mushi, P. A. K. (2009). *History and Development of Education in Tanzania*, Dar es Salaam: Dar es Salaam University Press.
- Merzirow, J. (2014). *Creating a Transformational Learning Experience: Immersing Students in an Intensive Interdisciplinary Learning Environment*. *Journal for the Scholarship of Teaching and Learning*. 2014 Eric
- Risko, E. F. Anderson, N. Sarwal, H. Engelhardt, M. & Kingston, H. (2012). *Everyday Attention: Variation in Mind Wandering and Memory in a Lecture*. *Applied Cognitive Psychology*. Vol. 26 (2) 234 – 242.
- Rocco, T. S., Bliss, L.A. & Gallagher, S. (2003). *Information Technology, Learning and Performance Journal*, 21 (1).

- Scheele, P. (2006). Scheele Learning Systems, Internationally Recognized Authority on Leadership, Learning and Change. Retrieved from <http://scheelelearning.com/individuals/virtual-events>.
- Tabulawa, R. (2003). Teacher's Perspectives on Class Practice in Botswana. Implications for Pedagogical Change. *International Journal of Qualitative Studies in Education*, 11 (2) 249 – 268.
- Tashakkori, A. & Teddlie, C. (1998). *Mixed Methodology: Combining Qualitative and Quantitative Approaches* (Applied Social Research Methods. California: SAGE Publisher. United Republic of Tanzania (URT). President's Office, "Tanzania Development Vision 2015" Dar es Salaam.
- Vrasidas, C. (2000). Constructivism Versus Objectivism: Implications for Interaction, Course Design and Evaluation in Distance Education. Center for the Application of Information Technologies, Western Illinois University.