

THE INTERNATIONAL JOURNAL OF SCIENCE & TECHNOLEDGE

Inconsistencies That Happen During the Implementation of the Learner Centered Teaching

Rwegasha Ishemo

Lecturer, Department of Education, Sokoine University of Agriculture, Tanzania

Abstract:

Educators have been insisting on the utilization of the learner centered teaching during the teaching and learning process. To accomplish that aim, several countries have been instructing teachers on employing the learner centered teaching in the classrooms. This educational approach has been stating to be effective for improving teaching, learning, and students' performance. The implementation of the learner centered teaching has been observed to face some challenges. One of the arguments is the inconsistencies between teacher's perceptions and practices. The inconsistencies found to occur when teachers carry out the teaching and learning process in the classrooms. In this case, teachers found to be unsuccessful in performing effective practices as suggested in the learner centered teaching. They support facilitating students by employing the learner centered teaching, but in the real teaching, they mix with the teaching methods/practices that are not effective.

Keywords: *Learner centered teaching, teacher centered approach, consistent/inconsistent, implementation, perceptions, practices, curriculum*

1. Introduction

The education systems in several countries have provided instructions that guided teachers to employ the learner centered teaching in the classrooms. This initiative has been influenced by educational efforts driven by the World Education Forums (Jomtien-Thailand and Dakar-Senegal), Millennium Development Goals, and the international organizations (Ginsburg, 2009; Inter-agency Commission, 1990; Schweisfurth, 2013; UNESCO, 2000). Correspondingly, Vavrus et al. (2011) added that the reforms-initiated programs in Sub-Saharan countries intended to make sure teachers are effectively implementing the learner centered teaching into their classrooms. Wenglinsky (2001) wanted schools to be successful by adopting the education policy supported active as opposed to passive teaching. Furthermore, the movement of educational transformation was explained in a program that insisted on the utilization of the learner centered teaching in Middle East and Gulf States. The program put emphasis on making science and mathematics teaching be more focused on hands-on and problem-solving practices than on memorization (Mendizabal, 2014).

It is important to recognize that the movement towards learner centered teaching has been occurring in the world. The adoption of the foregoing approach is an essential way of supporting and improving teaching and learning in the classrooms. This initiative has been expecting to assist teachers to implement the learner centered teaching successfully and ensure the accomplishment of the stated knowledge, skills, and understanding. According to Metto and Makewa (2014) student centered in teaching is known through research to enhance effective learning. Based on its characteristics, it was found that teachers who relied more on applying learner centered teaching have managed to engage students successfully and build a good learning environment. This situation has been emphasizing in several education systems.

The observation indicates further that there are several studies conducted to investigate the effectiveness of the implementation of the learner centered teaching in secondary schools. However, researchers failed to show whether teachers are completely consistent in employing the learner centered teaching as it has been instructed in the competence-based curriculum. Particularly, there is no clear evidence of the effective application of the foregoing educational approach. Therefore, it is significant to carry out a study to explore how teachers are adhering to the learner centered teaching in classrooms. Specifically, the present study examines whether teachers are entirely consistent in executing the learner centered teaching methods in various components/stages of the lesson development.

2. Literature Review

Scholars have been defining learner centered teaching approach according to their point of view. Brackenbury (2012) defines learner centered teaching as a collection of instructional practices that shift the emphasis of courses from the instructors' goals and methods of delivery to the knowledge and skills that the students develop (p.12). Likewise, Collins and O'Brien (2003) define learner centered teaching as an instructional approach in which students influence the content, the activities, the materials, and the pace of learning. The approach directed teachers to facilitate learning by using the methods/practices that make students active and creative in acquiring knowledge and skills. It requires teachers

and students to modify their thinking and actions towards the provision of education. Teachers should put emphasis on students' prior knowledge and use them to orient, guide, and activate students learning. Role of the teachers is that of acting as a facilitator of learning and not a transmitter of information.

Therefore, to achieve the lesson objectives during the teaching and learning process, teachers have been encouraging to employ the learner centered teaching which helps students learn the subject matter successfully. This educational approach is mainly focused on the students and takes them as important in the learning process. It takes the interest of students rather than other people participating in the education system. It focuses on what students do rather than what teachers do and places students at the center of the learning process. Teachers should therefore create an environment for them to support and assist students in learning. They have to build a framework to know whether learning is effective or not. To monitor, seek out and give feedback and to try alternative teaching and learning methods when others do not work productively. Westbrook et al. (2013) opined that teachers have to know students as important clients who must be guided effectively and assisted learning deeply the subject matter. They should provide students' opinion, attention, learning support, illustrate students' experiences, and produce a safe environment for learning. Teachers should talk with students and encourage active participation. Students need to solve and answer questions, discuss, explain, debate, brainstorm in class, and work in teams to master the subject matter.

According to Collins and O'Brien (2003), accurate implementation of the learner centered teaching leads to the increase of deeper understanding, greater retention of knowledge, learning motivation, and more positive attitude toward the subject matter. These are some of the reasons causing education systems instructing teachers to apply the learner centered teaching. The classroom practices should be accompanied with various teaching methods such as discussion, question and answer, role play, debate, jigsaw, demonstration, project work, observation, experimentation, field trips, problem solving, brainstorming, gallery walk and drama. Other practices include interactive methods, discovery learning, cooperative practices, challenging students' answers, assessing classroom practices, sharing ideas, and modifying teaching practices based on students' experiences and interests (Byrd, 2008; Sunzuma et al., 2012; Namangolwa, 2013; Mykrä, 2015).

Additionally, Weimer (2002) demonstrated from previous research that learner centered teaching is more effective than traditional teaching approach. Studies supported the learner centered teaching as an appropriate path to better student outcomes. In the process of facilitating the improved student outcomes, the scholar integrated the following educational characteristics: engaging in deep learning approaches rather than superficial attempts, independent lifelong learning, increasing motivation to learning, meaningful and long-term understanding, and better assessment outcomes especially with conceptual understanding tests. The foregoing characteristics illustrate what should be accomplished in the learner centered educational contexts.

Several studies have been conducted concerning how teachers execute learner centered teaching in the classrooms. A study by Paulo (2014) observed pre-service teachers did not execute the learner centered teaching and assessment as it should be. Nihuka & Ambrosi (2012) discovered that teachers normally prefer to use the learner centered teaching. For example, they agreed to ask questions, employ jigsaw and discussion methods. However, real classroom observation showed teaching is mostly chalk and talk methods. In providing the clarification, Wangeleja (2003) explained that although teachers were trained to use learner centered teaching; they still apply traditional practices. Despite teachers more positive attitude to the learner centered teaching; they did not apply authentic assessment methods such as portfolio, classroom/field observation, oral presentations, projects, interviews, and self/peer assessment (Salema, 2015). In addition to the same perspective, Hardman (2009) proved challenges happened and how they affected the implementation of the curriculum. The scholar advocated on the new pedagogic approaches as learner centered, group work, role-play, project, and debate. However, there was little evidence on the real application of these practices in the classrooms. Likewise, Alexander (2000) reported the differences that occurred between teachers' adopted theory and their theory in use. The interviewed teachers stated that they employed learner centered teaching, although their actual lessons and videotapes showed that students were not active and the traditional practices dominated.

In addition to the same outlook, several studies suggested the strategy to improve teaching practices and get authentic results should start at the teachers' beliefs and attitudes level. This is because teachers traits are vital for guiding their practices which in turn influenced the students learning and achievement. Hudson and Meyer (2011) asserted that teachers are implementing the curriculum according to their knowledge and skills. If they possess appropriate knowledge and skills, teachers can implement the curriculum successfully. However, if they lack proper characteristics, teachers can act as barriers to the suggested reforms. This state of affairs causes the difficult for teachers to change and apply the learner centered teaching. Thus, to conduct teaching and learning effectively teachers need accurate knowledge and skills to cope the educational reform towards the learner centered teaching. Reform occurred in different countries to ensure system of education responds to educational demands and thus improve the provision of education as it should be.

Due to its effectiveness learner centered teaching should be recommended in many learning contexts. However, educational stakeholders have to note that its implementation needs qualified and committed teachers, adequate teaching and learning materials, suitable curriculum and examination system, motivated students, and other accompanying factors. In order to guide classroom practices properly, it is suggested that teachers know their position, roles, and duties clearly. They should work and create an environment for them to support and manage students learning. Unfortunately, in many national and cultural contexts, the learner centered teaching come across inapt teaching and learning environment. One of the situations that occur in the curriculum implementation is the inconsistencies between what teachers are recommending and practicing concerning the learner centered teaching in various stages of the lesson. Teachers perceptions are not realized in the practices taking place in the classrooms. This is to say that, teachers are failing to

execute appropriately the learner centered teaching as they suggest. This situation causes teachers to be inconsistent in the classrooms.

3. Methodology

In selecting the research methodology, the purpose was focusing on the methods that manage and control complexities occurring in the classrooms. It produces a thorough understanding of teachers' perceptions and practices relating to the learner centered teaching. The criterion compelled to adopt a qualitative design. Scholars insist that classroom practices can be studied accurately by qualitative design. It is effective to provide an understanding of the people, contexts, and interactions. Scholars were of the view that qualitative design enabled investigating sophisticated practices in complex contexts (Flick, 2009). The current study was conducted in Dar es Salaam, one of the regions of Tanzania. This region was selected to represent other regions in Tanzania that have teachers and schools with relatively the same characteristics. The study applied the purposive sampling to select schools and key informative participants. In this case, 4 secondary schools and 8 teachers were selected. The study used the ethnographic strategy to explore the learner centered teaching extensively and in a natural classroom setting. This strategy enabled examining cultural attributes such as perceptions and practices as manifested in the classrooms. It facilitated the acquisition of information and generated ways of understanding the observable fact and promoting good quality descriptions and interpretations (Saunders, Lewis & Thornhill, 2009). To accomplish the collection of data, the researcher carried out semi-structured interviews, participant observations and reviewing documents. The thematic analysis was employed for identifying, analyzing, and reporting patterns/themes within the collected data.

4. Findings and Discussion

This article demonstrated the presence of inconsistencies that occurred during the implementation of the learner centered teaching. They have observed when exploring the perceptions and practices of teachers in various components/stages of the lesson development. The components/stages are stated as introduction, new knowledge, reflection, assessment, and classroom management. The inconsistencies are happening when educators compare what teachers are saying to what they perform during the teaching and learning process in the classrooms. In this regard, some of the perceptions and practices showed to comply with the learner centered teaching but others supported the teacher centered and other educational practices.

4.1. Teachers' Perceptions and Practices Occurred During the Lesson Development

Concerning the introduction of the lesson, teachers agreed and reported to employ the learner centered teaching. In their actual practices, teachers observed to comply with their perceptions. They introduced the lesson by assessing the previous knowledge of the students. The prior knowledge show ideas/concepts students know and those they do not know. It gives chance for the teacher to cover the information needed by the students. In the stage of generating new knowledge, all the visited teachers reported questioning and group discussion as the primary methods employed in the learner centered teaching practices. However, in the real classroom practices, teachers were observed mixing practices having some elements of the teacher centered approach. A good example is when teachers believed to employ active practices, but the actual practices incorporated chalk and talk lecture method. In addition, teachers did not apply group discussion practices as they suggested. Those who employed group discussion failed to encourage all students to participate and collaborate actively as it was supposed to be. Teachers have not employed and adhered to the interactive practices to engage students learning the subject matter.

In the stage of reflection, teachers agreed to facilitate this characteristic by receiving opinions from the students regarding the execution of the lesson. They wanted to get students views about the delivery of the subject matter already presented. However, in the real practices in classrooms, visited teachers just conducted reflection by asking questions focusing on the topic taught. No opportunity was given to students providing views concerning the actual teaching and learning process. Moreover, regarding the assessment teachers reported assessing by asking questions and giving tests, assignments, quizzes, and homework. Nevertheless, during the lesson teachers mostly applied the questioning method. In addition, participants reported conducting the ongoing assessment as emphasized in the learner centered teaching. However, in the real classroom practices the observation showed that teachers did not carry out a continuous assessment as they have claimed in an interview. One of the teachers performed students' assessment at the end of the lesson.

In terms of the classroom management, teachers agreed with practices of organizing sitting arrangements as crucial for classroom management. In the real practices, they did not arrange students to allow an opportunity for effective interactions as needed in the learner centered environment. Students are usually sitting quietly and copy notes written on the chalkboard and there was no movement and activeness in the classrooms. They just follow all the information from the instructor in order to learn the subject matter. Further to that, visited teachers considered organizing well group discussion and other practices as a good way to manage and control students in learner centered context. However, in the actual classroom practices, students were not well organized to give chance for the successful interactive practices. Students seemed to be more passive than active. Also, teachers reported the provision of various materials and resources as good for teaching. These substances help or motivate students to become active and learn successfully. Nevertheless, in the actual practices, they always make use of only the textbooks. No other materials and resources observed to be applied during the lesson execution.

Therefore, the preceding paragraphs showed that teachers have been mixing their perceptions and practices in the classrooms. It means that their perceptions and practices are not steady/consistent, they could be learner centered,

teacher centered, or other classroom practices. Teachers did not adhere to the learner centered teaching practices. This confirmed the fact that people do not always carry out what they always say they do (Johnson & Christensen, 2008). Other scholars reported the same phenomenon. Mellado et al. (2007) found teachers possessing a constructivist conception of science teaching and learning explain a good example, but in the classrooms, they employed traditional methods. Similarly, Mansour (2013) found teachers who admit possessing three belief patterns i.e. teacher centered, learner centered, and mixed. However, in their actual classroom practices, they applied teacher centered and mixed. None was found to follow the learner centered teaching purely.

Based on what facilitated by visited teachers in the classrooms, it is important to note the wrong interpretation occasionally made between teacher centered and learner centered. According to Schuh (2004), employing lecture method made the teachers believe that classroom practices are following teacher centered while applying group discussion is showing the learner centered. Several teachers think that they use learner centered because they have students working in groups. This view is not necessarily the case. What matters is how these practices are organized and executed accurately in the classrooms. The practices should be perfect as possible. This discrepancy suggested that researchers should go deep and observe classroom practices closely. They need to ask and watch clearly and frequently as to what extent teachers are consistent with the learner centered teaching as stipulated in the curriculum.

In short, the implementation of the learner centered teaching showed the presence of inconsistencies/contradictions between teachers' perceptions (what they say/perceive) and their actual practices (what they do/execute) in the classrooms. Therefore, it could be said that teachers did not practice according to what they initially suggested and this has an effect on the implementation of the learner centered teaching as well as the students learning and performance. This view indicates that teachers have some positive perceptions regarding learner centered practices. However, in the classrooms, teachers come across obstacles that compelled them to compromise their perceptions. Educators opined that the difficulties are usually caused by the poor situation of the classrooms, school organization, and teachers' lack of knowledge, skills, and motivation. These characteristics confirm the complexities occurring during the implementation of learner centered teaching. In general, the inconsistencies occur in many learning environments in different countries.

4.2. Factors Causing Inconsistencies in the Lesson Development

The visited teachers have reported factors causing inconsistencies in employing the learner centered teaching. They confirmed the existence of several factors that limit engaging students for learning entirely as one of the causes. For instance, they exhibited that guiding students to perform several practices as required by the learner centered teaching consume too much time. One of the teachers was of the view that, what is suggested in the learner centered practices is "wastage of time" for the teacher who has a lot of topics to cover. To compromise with this situation, teachers chose classroom practices that are fast and at the same time allow full coverage of the allocated topics. Further to the foregoing point, teachers observed that the inconsistencies occurred because of time limitation where teachers had given to cover a bulk of materials stipulated in the subject syllabus. One of the participants had the following to say, "the operating curriculum instructed teachers to cover a fixed amount of materials after a certain time". Therefore, if it happens that the teacher is working behind the time as per the scheme of work then, he/she would opt for the teaching practices that provide a chance of covering plenty of materials. Therefore, it is evident that the chalk talk lecture method was preferred because it assisted teachers to present and cover a lot of content.

Another teacher elucidated on the use of chalk talk lecture and provided the following descriptions.

Lack of enough time tends to limit the utilization of learner centered teaching. Many teachers including me prefer chalk talk lecture method because it gives a chance of presenting a lot of materials within a short time. This method saves time, and it is easy to employ by just transmitting the subject matter during the teaching and learning process (field data, 2018).

By using methods that are not effective, provided they save time, teachers compromise the real objectives of the learner centered teaching. They have to be blamed because negotiating with circumstances in the learning environment made them not consistent/stable. According to Ginsburg (2009), many teachers believe that learner centered teaching is useful. However, they find it difficult to use because of the pressure from the authority that requires teachers to ensure full coverage of the scheduled content. Pedersen and Liu (2003) clarified further on this challenge that the learner centered teaching is more time consuming. In a year, teachers can use only a limited number of teaching practices and cover limited content. This article challenges the ideas presented by scholars because within the allocated time teachers can employ the learner centered teaching without affecting the content coverage. What matters is for the teachers to develop knowledge, skills, creativity, and commitment and understand how to guide students learning successfully. Teachers should develop a broad repertoire of teaching methods that they can employ as appropriate.

The information above is in line to Froyd and Simpson (2008) who said coverage of material depends on the knowledge and skills of the teacher. Several teachers can cover a lot of material with student centered teaching and others cover less content. Others can cover fewer topics in group work and students learned and retained more information. Therefore, what matters is the competence and ability of the teacher. One of the strategies to address the lack of knowledge and skills is for the teachers to get opportunities of attending extra training. This might help them gain the correct methods and experiences to employ the learner centered teaching appropriately. In fact, this approach is recommended in various learning contexts. One of the teachers supported the application of this style of teaching and commented that:

I support learner centered teaching as good because it makes teachers facilitate learning successfully. Students are required to do more practices, collaborate and learn actively. My task is to understand how to guide and motivate students to accept and be ready for learning in such an environment (field data, 2018).

Another research participant provided the following account that demonstrates the required training for the teacher to implement learner centered teaching successfully:

I support learner centered teaching as good, however, if the teacher is not well trained in the formal teacher training and later lacking a chance for in-service training, it will be difficult for such a teacher to improve knowledge and skills of the learner centered teaching (field data, 2018).

Another factor that led to inconsistencies is the students' negative attitude towards the learner centered teaching. One of the participants confirmed that "students tend to discourage teachers who are employing learner centered practices because they consider these teachers as shallow" (that means not deep in the subject matter). According to these students, when the teacher tried to guide them to perform learning practices by themselves, they thought that the teacher does not understand well the subject matter. It is reported to hear students are describing such teachers that "the teacher employing learner centered teaching is shallow that is why he/she is always requesting students to participate and provide answers to the questions asked". This is not correct because teachers have instructed to engage students actively in their own learning. Teachers should provide the learning support and produce a positive environment for students' learning.

According to Sunzuma et al. (2012), students normally preferred teachers who still apply the traditional methods that accompany practices such as transmitting information. Bishop et al. (2014) added students prefer teachers who allow them sitting quietly, taking notes, memorizing materials, and answering close-ended questions. Many students do not react positively to the learner centered teaching. A good teacher to these students is the one who is doing everything in the classrooms, the one answering all questions. The notion of students or their negative attitudes discouraged teachers who employ the learner centered teaching. The discouragement coerced teachers to decide to employ classroom practices preferred by students even though they might not be effective. This means that students' downcast learner centered teachers and this is a poor classroom practice. The preceding cases demonstrate students' who preferred the traditional approach impedes teachers' efforts towards the learner centered teaching. In connection to that, Doyle (2008) identified the greatest challenge in implementing learner centered teaching as getting students to respond to changes and switch their learning paradigm.

The situation explained above is showing that students might sometimes influence the adoption of either teacher centered or learner centered. One teacher had this to comment regarding the student's views and practices: Some students are not ready for learning in an interactive way. These students prefer traditional ways of teaching and learning. This attitude sometimes causes me to employ the methods preferred by the students and hence opt for traditional methods like chalk talk lecture (field data, 2018).

Another teacher cited large class sizes (overcrowding) as a challenge to teachers when executing learner centered teaching. It is because the practices in this approach intend to involve all students, but this becomes difficult due to the large numbers of students. Teachers face difficulties on how to organize these practices in such an overcrowded environment. This problem found to occur in all the visited schools and it hinders the application of the learner centered teaching. Participants failed to organize students' interactions successfully. The number of students, desks, and chairs caused chaos when students are instructed to move, arrange, and interact during group discussion. Similarly, Baker and Westrup (2000) found large classes are challenging and can make teaching difficult. Vavrus et al. (2011) added that large classes affected the overall quality of education. Schweisfurth (2013) observed large classes compelled teachers to opt for lecture and thus continue with transmitting information.

The factors explained above confirm the challenges and complexities teachers have been encountering in implementing the learner centered teaching. The phenomenon indicates poor implementation of the learning paradigm. Therefore, the factors are expected to inform stakeholders about the challenges teachers face to implement the learner centered teaching in the classrooms. It helps all parties concerned to be in a good position to find appropriate strategies that can improve the foregoing practices. It would make teachers remain consistently without mixing active and passive practices.

5. Conclusion

In order to impart to students, the appropriate knowledge, skills, and understanding, it should have been structuring from the curriculum. In this case, Tanzania education system since 2005 started to implement competence-based curriculum which influenced the application of the learner centered teaching. In the classrooms, students have been expecting to be engaged actively in their own learning. The findings of this study have revealed that the classroom practices exhibited by teachers in the selected secondary schools did not indicate that they were successfully implementing the learner centered teaching. Teachers have been observed to be inconsistent in facilitating the learner centered teaching in the classrooms. In this regard, teachers were found to mix their perceptions and practices regarding the methods and practices of teaching. Some of the perceptions and practices showed to comply with the learner centered teaching but others supported the teacher centered and other practices. The foregoing observation confirms the inconsistencies/contradictions occurred during teaching and learning process. In most cases, the teachers' perceptions are not always realized in the practices taking place in the classrooms. This affects the teaching, learning, and performance of students. By referring to the foregoing results, teachers need assistance so as to utilize appropriately and demonstrate a

good connection between their perceptions and practices. This should improve the implementation of the learner centered teaching in the classrooms.

6. References

- i. Alexander, R.J. (2000). *Culture and pedagogy: International comparisons in primary education*. Oxford: Blackwell Publishers Ltd.
- ii. Baker, J. & Westrup, H. (2000). *The English language teacher's handbook: How to teach large classes with few resources*. London: VSO-Continuum.
- iii. Bishop, C.F., Caston, M.I. & King, C.A. (2014). Learner centered environments: Creating effective strategies based on student attitudes and faculty reflection. *Journal of the Scholarship of Teaching and Learning* 14(3), 46-63. doi: 10.14434/josotl.v14i3.5065
- iv. Brackenbury, T. (2012). A qualitative examination of connections between learners centered teaching and past significant learning experiences. *Journal of the Scholarship of Teaching and Learning* 12(4), 12-28.
- v. Byrd, J. (2008). *Guidebook for student centered classroom discussion*. USA: Interactivity Foundation.
- vi. Collins, J.W. & O'Brien, N.P. (Eds.). (2003). *Greenwood Dictionary of Education*. Westport, CT: Greenwood.
- vii. Doyle, T. (2008). *Helping students learning in a learner centered environment: A guide to facilitating learning in higher education*. Sterling, Virginia: Stylus Publishing, LLC.
- viii. Flick, U. (2009). *An introduction to qualitative research (4th Ed)*. London EC1Y 1SP: SAGE Publications Ltd.
- ix. Froyd, J. & Simpson, N. (2008). Student centered learning addressing faculty questions about student centered learning. *Course, curriculum, labor, and improvement conference*. Washington DC, 30(11).
- x. Ginsburg, M. (2009). Active learning pedagogies as a reform initiative: synthesis of case studies. American institutes for research under the EQUIP1 LWA. U.S Agency for International Development Cooperative Agreement No.GDG-A-00-03-00006-00.
- xi. Hardman, F. (2009). A review of teacher education in Tanzania and the potential for closer links between PRESET and INSET. A report produced in support to the Ministry of Education and Vocational Training (MoEVT) for the development of an INSET strategy and development plan linked to the Teacher Development and Management Strategy (TDMS) 2008-2013. MoEVT-UNICEF.
- xii. Hudson, B. & Meyer, M.A. (2011). Introduction: Finding common ground beyond fragmentation. In B. Hudson, & M.A. Meyer, (eds.), *Beyond fragmentation: didactics, learning and teaching in Europe*. Opladen & Farmington Hills: Barbara Budrich Publishers.
- xiii. Inter-agency Commission (1990). *World declaration on Education for All (document adopted by the world conference on Education for All: Meeting basic learning needs, Jomtien, Thailand, 5-9 March 1990)*. New York: Inter-Agency Commission.
- xiv. Johnson, B. & Christensen, L. (2008). *Educational research, quantitative, qualitative, and mixed approaches (3rdEd.)*. Thousand Oaks, California: Sage Publications, Inc.
- xv. Mansour, N. (2013). Consistencies and inconsistencies between science teachers' beliefs and practices. *International Journal of Science Education* 35(7), 1230-1275.
- xvi. Mellado, V., Bermejo, M.L., Blanco, L.J. & Ruiz, C. (2007). The classroom practice of a prospective secondary biology teacher and his conceptions of the nature of science and of teaching and learning science. *International Journal of Science and Mathematics Education* 6(1), 37-62. doi: 10.1007/s10763-007-9081-z
- xvii. Mendizabal, E. (2014). *Communicating complex ideas: Translating research into practical social and policy changes*. USA: On Think Tanks.
- xviii. Metto, E. & Makewa, L.N. (2014). Learner centered teaching: Can it work in Kenyan public primary schools. *American Journal of Educational Research* 2(11A), 23-29.
- xix. Mykra, T. (2015). *Learner centered teaching methods: A toolkit for secondary education teachers*. Indiana University Bloomington.
- xx. Namangolwa, S.M. (2013). *Pupils and teachers perceptions of learner centered methodologies in the teaching and learning of history: A case of selected high schools in Mongu district western Zambia (Master Dissertation)*. University of Zambia, Lusaka.
- xxi. Nihuka, K.A. & Ambrosi, B. (2012). *Learner centered approaches for curriculum implementation in secondary schools: Teachers perceptions and challenges*. Open University of Tanzania.
- xxii. Paulo, A. (2014). Pre-service teacher's preparedness to implement competence based curriculum in secondary schools in Tanzania. *International Journal of Education and Research* 2(7), 219-230.
- xxiii. Pedersen, S. & Liu, M. (2003). Teachers' beliefs about issues in the implementation of a student centered learning environment. *ETRD* 51(2), 57-76.
- xxiv. Salema, V. (2015). Assessment of the attitude of teachers and students towards learner centered pedagogy in secondary schools in Kilimanjaro region. *Educational Research* 6(2), 31-38.
- xxv. Saunders, M., Lewis. & Thornhill, A. (2009). *Research methods for business students (5th Ed)*. Harlow, England: Pearson Education Limited.
- xxvi. Schuh, K. L. (2004). Learner centered principles in a teacher centered pedagogy. *Teaching and Teacher Education* 20(8), 833-846.
- xxvii. Schweisfurth, M. (2013). *Learner centered education in international perspective: Whose pedagogy for whose development*. USA: Routledge.

- xxviii. Sunzuma, G., Ndemo, Z., Zinyeka, G. & Zezekwa, N. (2012). The challenges of implementing student centered instruction in the teaching and learning of secondary school mathematics in a selected district in Zimbabwe. *International Journal of Current Research* 4(5), 145-155.
- xxix. UNESCO (2000). *The Dakar framework for Action. Education for all: Meeting our collective commitments*. Paris: UNESCO
- xxx. Vavrus, F., Thomas, M., & Bartlett, L. (2011). *Ensuring quality by attending to inquiry: Learner centered pedagogy in Sub Saharan Africa*. Addis Ababa, Ethiopia: UNESCO-IICBA.
- xxxi. Wangeleja, M. (2003) *Innovations in the new teacher education curriculum*. *The Tanzania Education Journal*, 21, 22-29.
- xxxii. Weimer, M. (2002). *Learner centered teaching: Five key changes to practice (1st Ed.)*. San Francisco, CA: Jossey Bass.
- xxxiii. Wenglinsky, H. (2001). *Teacher classroom practices and student performance: How schools can make a difference*. Research Publications Office, Educational Testing Service, Princeton, NJ 08541.
- xxxiv. Westbrook, J., Durrani, N., Brown, R., Orr, D., Pryor, J., Boddy, J., Salvi, F. (2013). *Pedagogy, curriculum, teaching practices and teacher education in developing countries*. Final Report: Education Rigorous Literature Review. Department for International Development.