



## ASSESSMENT PRACTICES IN SECONDARY SCHOOLS IN KILIMANJARO REGION, TANZANIA; A GAP BETWEEN THEORY AND PRACTICE

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### **Abstract:**

Assessment as a process of determining the extent to which teaching and learning objectives have been achieved, is popular and used by teachers at different levels. However, the adoption of new approaches in teaching and learning such as learner centered approach based on social constructivism, possess a big challenge to teachers to align assessment practices with the theory. Many teachers belief that assessment is solely dictated by the teacher and the learner has nothing contribute in the process of setting and the administration of assessments. The theory of constructivism emphasizes on the role of learner in both learning and assessment procedures and the need for authentic assessment which incorporates diversity of objectives from both cognitive psychomotor and affective domains. This study focused on the assessment practices in secondary schools in Kilimanjaro and to determine how they align with the learner centered approaches. This study also assessed the attitudes of teachers and students and challenges encountered in assessment practices. The researcher adopted mixed research methods for data collection and analysis. This study sampled 580 students, 115 teachers, 6 heads of secondary schools, one education inspectors and one National Examination Council of Tanzania (NECTA) official. Data collection instruments were questionnaires, in-depth interview guides and document analysis guide. The findings indicated that there was a gap between theory and practice in assessment. A good number of teachers use teacher centered approach in both teaching and assessment procedures. It was also found that teachers and students had negative attitude towards the assessment procedures of learner centered approach, with several challenges. The researcher recommends the need for in- service training to empower teachers on how to

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set authentic assessment tests and exams which are more realistic in assessing students in secondary schools in Tanzania.

**Keywords:** assessment, learner centeredness, theory, tests, exams

## 1. Introduction

### 1.1 Overview of Curriculum of Secondary Schools in Tanzania

A comprehensive review of the curriculum from pre-primary to teacher education was effected in Tanzania officially in 2009 due to many number of reasons in Tanzania. According to Tanzania Institute of Education (TIE) (2013), the review of Ordinary Secondary Education curriculum has been made inevitable to meet the requirements of Education and Training Policy (1995), Tanzania Development Vision 2025, National Science and Technology Policy, Education Sector Development Programme (ESDP) and Secondary Education Development Programme, National Strategy for Growth and Reduction of Poverty (2004), recommendations from educational researches such as the research report on Secondary Education curriculum review prepared by TIE (2004). Also, the research findings and recommendations from the stakeholders necessitated the review of 1997 Secondary Education curriculum.

According to TIE (2013), the provision of any education programme reflects the existing local, regional and international situations. This indicates situations that can be contextually scanned from social and economic environment in which the intended education is supposed to take place. It is, therefore, imperative for a developing country like Tanzania to have a curriculum which embraces quality education as vital and inevitable for accelerating its socio-economic development.

### 1.2 Assessment of achievement in the reviewed curriculum

The Secondary Education curriculum shall provide information essential for assessing students' competencies and must cover a range of dimensions of student learning including mastery of content, cognitive development, social and psychological development and changes in terms of humanistic spiritual values (TIE, 2013). The main purpose shall be to guide and improve the process of teaching and learning. Effectively planned assessment can promote learning, build confidence and develop students understanding of themselves as learners. According to TIE (2013), there shall be two main components of assessment; Continuous Assessment and Final Examination.

Continuous assessment shall be of a formative in nature. It shall have diagnostic value in helping the learner develop a realistic self-image and inform the teacher on how the teaching and learning process can be developed (TIE, 2013).

Continuous assessment shall determine the progress of the learner and monitor the learning process occur throughout the four years cycle. The assessment tools which shall be used are assignments, tests, projects and terminal examinations. The scores for continuous assessments shall constitute a part of the final assessment of the student. Terminal test scores and project scores shall be sent to NECTA as CA of the student.

### **1.3 Examination Structure**

The examination shall have questions which measure all levels of the learning domains. Each examination paper shall consist of not less than three sections in which section one shall test all levels of domains but the main focus shall be on cognitive domain, while sections two and three shall focus more on the affective and psychomotor domains (TIE, 2013).

Also, science and technology subjects shall be examined in two papers which are theory and practical whereby each paper shall carry a weight of 50% of the total marks of the respective final examination for the subject. Language subjects shall be examined in both written and oral.

### **1.4 Assessment Methods**

According to TIE (2013), assessment methods for the Secondary Education Curriculum shall emphasize the competence based teaching and learning. These methods shall probe students' understanding, reasoning and critical thinking rather than their ability to return memorized facts. The methods shall include, portfolios, rating scales and rubrics, checklists, oral presentations, project work, practical tasks to demonstrate performance skills, written essays or reports, and analysis (for example of texts).

## **2. Statement of the Problem**

Despite the good statements in the curriculum about assessment practices, the real implementation may be a challenge and unrealistic if not taken with care. ADEA (2012) in their study about learner centered approaches in Tanzania argued that NECTA rarely evaluated what was going on in the classrooms before setting the examinations, and it was difficult to match examinations with what students had learnt and how they had learnt it. Examinations ought to test what students have done and learnt in school and how they learned it using learner centred approaches. This claim needs a wide consideration to determine whether or not assessment procedures in secondary schools are aligned with the policy of assessment stipulated by the curriculum and Tanzania Institute of Education (TIE).

## **2.1 Theoretical Framework**

The theory of social constructivist is informed by the work of Lev Vygotsky (1896-1934) (Salema, 2014). It is essentially a theory about how people socially construct knowledge. Vygotsky believed that learning could not be separated from social context. He argued that all cognitive functions begin as a product of social interactions and that learning was not simply assimilated but by a collaborative process (Drew, 2012). He viewed school as a perfect place to begin cultivating social interaction and learning through modeling appropriate social and academic skills (Salema, 2014).

## **2.2 Research Questions**

1. To what extent assessment procedures are aligned with the learner centered approaches in Kilimanjaro region?
2. What is the attitude of teachers and students on assessment procedures related to learner centered methods?
3. What are the challenges encountered implementing assessment procedures aligned to learner centered pedagogy.

## **3. Methodology**

### **3.1 Design**

Mixed research method was applied in this study. Specifically this study used Triangulation Design. Triangulation design is a one-phase design in which researchers implement the quantitative and qualitative approaches. The purpose of this design was to obtain different but complementary data on the same research to best understand the research problem. Mixed research method is flexible in collecting data from diverse situations (Cresswell, 2007).

### **3.2 Target Population and Sample**

This study was targeting heads of schools, teachers, inspectors, NECTA officials and students in secondary schools in Kilimanjaro region. The respondents were sampled from three districts in Kilimanjaro region. The sample comprised six heads of secondary schools selected by purposive sampling technique, 115 teachers selected by stratified sampling, 580 students sampled by stratified sampling and one educational inspector and one NECTA official was selected purposively.

### **3.3 Research Instruments**

This study used questionnaires for teachers and students, interview guides for heads of schools and education inspector and NECTA official. Observation guides and document analysis guides were also used as instruments for data collection.

### **3.4 Validity and Reliability / Trustworthiness**

Validity of the instruments was determined by research experts and reliability of the questionnaire was tested by Cronbach Alpha technique. Cronbach Alpha of 0.79 and 0.87 were obtained from teachers' and students' questionnaires respectively. The questionnaires were reliable because according to Kerlinger (2000) a value of Cronbach Alpha 0.7 is considered to be a cut off for acceptable and unacceptable reliability. Trustworthiness of the qualitative data was ensured by triangulation, member checking and prolonged engagement in the data collection and analysis.

### **3.5 Data Analysis Procedures**

Descriptive and inferential statistics were used for quantitative analysis of data. Summary of data was presented in frequencies, percentages and means. Hypotheses were tested at 0.05 significance for T-test of independence and one way ANOVA. Qualitative data was analyzed by transcription of data from the interviews and observations. Coding of data was done accordingly and themes, categories developed and interpretation was done according to the context.

## **4. Findings and Discussions**

### **4.1 Extent to which Assessment Procedures are Aligned with the Learner Centered Approaches In Kilimanjaro Region**

The aim of this research was to determine the extent to which the assessment procedures match with the requirements of learner centered approach and in relation to the new syllabus. Specifically the researcher was interested in the relationship between assessment and the syllabus, assessment strategies and assessment domains for both internal and external assessments.

#### **4.1.1 Relationship between Assessment and Syllabus**

Learner centered pedagogy demands that in assessing students, the teachers or an examination board should consider both content and construct validity. It should cover the three domains of objectives namely cognitive domain, psychomotor domain and affective domain (Krathwohl, Bloom & Masia, 1973) and substantial coverage of the syllabus. Previously, most of the exams focused on cognitive domain and particularly on lower order skills of recalling knowledge. As to whether or not the national exams were related to syllabus objectives the findings indicated that majority of the teachers 61% said that national exams were related to the objectives in the syllabus. Only 39 % considered national exams not to be focused on the set objectives in the syllabus. When one head of private secondary school was asked about the national exams, he had this to say: What, I can say, as from last year the exams were set according to the new

syllabus. But the problem is, the new syllabus was not used in time in most of the schools, and that might have affected the performance of the students in the recently announced results. There is an indication that to a great extent the national exams are set according to the set objectives in the syllabus.

#### **4.1.2 Coverage of Assessment Domains**

The researcher was also interested in analyzing the examination papers to assess whether or not they demonstrate cognitive domains, psychomotor domains and affective domains. Document analysis of selected biology form four national exams were sampled from 2011 to 2013.

The findings indicate that most of the questions asked in biology national examinations were mainly testing knowledge, comprehension and very few questions on application and analysis. In 2011 biology exam, the big percentage of the questions 66% was assessing knowledge while in 2012 the questions on knowledge were 61%. In 2013, the number of questions on knowledge went up to 67%, while application and analysis comprised 3% each. Again, the national exams did not demonstrate the assessment of affective domains, though there were little of psychomotor assessments in practical examinations. There was an indication that the procedures on how to prepare the national exams were not focused on learner centered assessment.

Analysis of internal exams also indicated that most of the questions were simplistically set to assess a portion of learned content but the questions were mostly testing knowledge and comprehension of concepts. This could be a serious challenge because if students were not used to the new standards of doing assessments based on learner centered approach, it might be difficult to know whether or not students could address critical questions of higher levels. Unfortunately, there was no clear policy with NECTA as to whether or not the continuous assessment scores were used during the final grading of students in their national exams. When the NECTA official was asked about this concern, he said:

*“Sometimes we use them but as you know they are very unreliable since those scores do not depict the reality. In most cases, they are manipulated to give a good image of the students but they are never reliable. If we are to use them, then we have to standardize them.”*

#### **4.1.3 Assessment Strategies Based on LCP**

Learner centred approach values specific assessment methods or strategies. Both students and teachers were provided with assessment methods/strategies to which they were to respond the extent to which they are being used by choosing either: Very often (5), Often (4), Sometimes (3), Rarely (2) or Never (1). These strategies included: Diaries,

Portfolios; Peer assessment; Learning contracts and negotiated assessment; Projects; Group work and Performance assessment to assess particular skills.

The findings indicated that majority of teachers 64% confirmed that assessment based on diaries was rarely used or not used at all. The findings from the students data indicated that the majority of them, 72% confirmed that diaries were rarely used or never used at all.

According to Pearson (1994) in diaries, students are asked to write about their learning experiences and provide feedback on their experiences. Among the benefits of keeping a diary, it gives students the opportunity to become more involved in their own learning process and can focus their entries in specific ways. Diaries are important but majority of the students in secondary schools in Kilimanjaro region were missing this important learning and assessment tool.

Again, the findings indicated that good number of the teachers 44% use portfolios sometimes, rarely or never at all. When compared to students, the researcher observed similar trends of the responses. Majority of the students, 61% never used portfolios as part of assessment. This is an indication that portfolios are not commonly used as assessment tools in secondary schools in Kilimanjaro. During the observation and interaction with students, no students were seen to have either portfolios or diaries. Students were busy copying notes in their exercise books. According to Montgomery (2001), portfolios are often described as a more authentic means of assessment than the traditional classroom test. Rather than showing that the learner knows what has been taught, the portfolio demonstrates that the student can do what has been taught. This important assessment tool was rarely used in secondary schools in Kilimanjaro region and students miss its benefits.

Another aspect of LCP assessment method is peer assessment. Van Den Berg, Admiraal, and Pilot (2006) defined peer assessment as a process in which students assess the quality of their fellow students' work and provide each other with feedback. This helps to reduce teachers' biases about certain students and a way of empowering students in assessing their peers. The findings indicated that good number of the teachers (51%) rarely use his method. Data from Students indicated that majority of them 56% have never applied peer assessment in their learning process. According to Heywood (2000), student assessment of other students' work, both formative and summative, has many potential benefits to learning for the assessor and the assessee. It encourages student autonomy and higher order thinking skills. This important method is also rarely used in secondary schools in Kilimanjaro region.

Learning contracts and negotiated assessment is considered as one of the strategies in enhancing learner centred pedagogy. From the teachers' responses, the majority of the them 51% thought that learning contracts are used sometimes, or rarely or not used at all. Majority of the students 63% concur with what the teachers affirmed

that contracts were rarely or never used in the process of assessment. During the interview with one biology teacher after a class observation, the researcher inquired about peer assessment and assessment contracts. Some of teachers were not in support of it and considered it to be a total insubordination of a teacher who is to determine the assessment procedures. According to Oregó (2007), using a learning contract in education encourages the student to take an active role in all stages of their learning. It provides the student with the flexibility of individualizing their learning by establishing meaningful goals which reflect their own strengths and weaknesses.

Again, teachers were required to indicate the extent to which they use projects as assessment tools. The findings indicate that, majority of the teachers (56%) use projects as a part of assessment. The same question was asked to students and the findings indicated that 22% said never, 23% said rarely, and 26% said sometimes. García and Pearson (1994) considered projects important since they increase students' ability to access information, organize ideas and share information with others, to provide opportunities for students to read a variety of reference materials and resources, to involve students in setting learning goals and in determining the scope of units of study. Therefore, teachers should be encouraged to use projects as a part of assessment of students.

Another method of assessing students is through assigning marks to the work they do in groups. Learner centered approach requires students to work and interact in groups during the teaching and learning processes. The teacher is supposed to assess students based on the various activities assigned to them in groups. The findings indicated that 81% of the teachers have used the method often or very often while 53% of the students confirmed that assessing group work was done often. During the observations in class the researcher witnessed some of the group work activities which are latter awarded marks as a part of continuous assessment. However, lack of a follow up by the teachers makes lazy students not to take it seriously or dodging the work and pro-active students find themselves doing the bigger portion of the work.

Generally, it can be considered that both internal and external exams have challenges not only on the part of the students but also the teachers who do not know what will happen in the final performance of their students as the examinations remain very unpredictable. When the zonal education inspector was asked, what might have contributed the poor performance at national form level had this to say: The bad results might have been contributed by many factors... Mixing of curriculum and politics have led to many failures. The findings align with what Tilya and Mafumiko (2010) found on the compatibility between teaching methods and competence-based curriculum in Tanzania. According to them, examinations designed by teachers and implemented in Tanzania do not reflect real life situations that demand more complex skills than memorization. Tanzania examinations demand a great deal of rote learning, and very



few higher order cognitive skills. Similar studies done by Haki Elimu (2012) and World bank (2008) confirmed the same. In fact, there is a lot to be desired if learner centered approaches are to be realized in assessment. That means that there is a gap between theories and the real practice in secondary schools.

#### **4.2 Attitude of Teachers and Students toward Learner Centered Assessment**

Theory of Reasoned Action suggests that a person's behavior is determined by his/her intention to perform the behavior and that this intention is, in turn, a function of his/her attitude toward the behavior and his/her subjective norm. The best predictor of behavior is intention. Intention is the cognitive representation of a person's readiness to perform a given behavior, and it is considered to be the immediate antecedent of behavior (Ajzen, 1991). The researcher assumes that positive attitude towards the learner centred assessment may be a good ground for its implementation while the opposite is also true. The researcher used Likert scale questions to determine the attitude of teachers and students on Learner Centred Assessments. The question had 15 sorted items and the respondents were to respond either by choosing strongly agree (5), agree (4), neutral (3) disagree and strongly disagree (1). All negative statements received reverse coding.

The findings indicated that both students and teachers were negative about assessment procedures used in their schools to reflect learner centeredness. The general composite mean score of the statements was 2.4 and 1.9 for teachers and students respectively. The negativity about the use of learner centered assessment is based on its low rate of application and unfamiliar with the learner centered assessment procedures.

#### **4.3 Hypotheses Testing**

A hypothesis was also tested to determine whether or not there was a significant differences between teachers and students on their attitude towards learner centered assessments. An independent sample T- test was used and found that  $T(645) = -4.96$ ,  $P = 0.00$  there was statistically significant differences between teachers and students on rating the use of learner centered assessment procedures.

One way ANOVA was also used to determine if there was a statistical significance differences on attitude mean score of teachers from different areas of specialization. The findings (ANOVA  $(F,102) = 3.43$ ,  $p = 0.07$ ) indicated that there was no significant differences between their attitude based on their area of specialization.

### **5. Challenges of Implementing Learner Centered Assessment**

The respondents were asked to indicate the challenges in applying learner centered assessment. The findings indicated that 85% of the teachers and 79% of the students

considered lack of skills to set learner centered questions to be a big challenge. Most of the teachers who had passed through colleges before the new curriculum might find it challenging to prepare learner centered assessment.

Majority of the teachers 89% and 97% of the students considered big classes to be a challenge to the use and assessment of the students. Moreover, 78% of the teachers and 67% of the students thought that lack of interest is a problem to the implementation of learner centered assessment.

Majority of the teachers 70% were of the opinion that mindset is a problem that there were traditional teachers who thought that the old style was the best. Interview with one head of school said, “...*there are teachers who want to maintain status quo, and they will never change even if they are given training*”.

Moreover, lack of enough resources was considered as one of the challenges. Majority of the teachers 76% and 87 % of the students considered lack of resources as a hindrance to the implementation of learner centered assessment. Their implementation of learning centered assessment is still wanting because of the challenges encountered.

## 6. Recommendations

This study recommends:

- Schools and the Ministry of Education need to organize in-service training or other capacity building programmes for teachers on learner centered assessments.
- Teacher training colleges have to ensure that teacher’s trainees are well trained to how to apply learner centered assessment.
- Teachers should change their mind set and be open to embrace new approaches in assessment procedures.
- Educational inspectors need to ensure learner centred assessment procedures are implemented in schools.
- NECTA should also align exams according to the new assessment procedures.

## References

1. Ajzen I (1991). *The Theory of Planned Behaviour*. *Organ. Behav. Hum. Decis. Process.* 50: 179-211.
2. Association for the Development of Education in Africa (ADEA) (2012, February). *Triennale on Education and Training in Africa –A Case Study of Learning Materials Used to Deliver Knowledge and Skills– or Competency–Based Curricula in Tanzania: Triennale on Education and Training in Africa* (paper presented at Ouagadougou, Burkina Faso).

3. Creswell, J. W. & Clark, V. P. (2007). *Designing and Doing Mixed Method Research*. London: Sage Publications.
4. Drew, C. (2009). *Insights into Social Constructivist Theory*. Retrieved on 20/3/2012 from: <http://www.aisr.org/school/newsflash/402-insights-into-social-constructivist-theory.html>.
5. García, G. E.; Pearson, P. D. Assessment and Diversity. In Darlinghammond, L. (Ed.). *Review of research in Education* (pp. 25-49). Washington, D.C.: American.
6. HakiElimu (2010). 'Who Decides What Our Children Learn? A research report on the relationship between curriculum quality and education quality. Dar es Salaam: Hakelimu.
7. HakiElimu (2012). *School Children and National Examinations. Who Fails Who? A research report on the relationship between Practice and curriculum objectives in Tanzania*. Info. Dar es Salaam: Hakelimu.
8. Heywood, J. (2000). *Assessment in Higher Education*, London: Jessica Kingsley Publishers.
9. Kerlinger, N. & Lee, H. (2000). *Foundations of Behavioural Research*. South Melbourne: Thomson Learning.
10. Krathwohl, D. R., Bloom, B. S., & Masia, B. B. (1973). Taxonomy of Educational Objectives, the Classification of Educational Goals. *Handbook II: Affective Domain*. New York: David McKay Co., retrieved from <http://www.nwlink.com/~donclark/hrd/bloom.html>.
11. Montgomery, K. (2001). *Authentic assessment: A guide for elementary teachers*. New York: Longman. ISBN: 0321037820.
12. Orego, E. (2007). *The Teaching Effectiveness Program Academic Learning Services*, 65 PLC, University of Oregon, retrieved on 2/2/2013 from Eugene <http://wsddifferentiation.wikispaces.com/file/view/Learning+Contract.pdf>
13. Tanzania Institute of education TIE (2014). *Revised Curriculum of Secondary Education*. Dar es Salaam.
14. Tillya, F & Mafumiko, F. (2010). "The Compatibility between Teaching Methods and Competence-Based Curriculum in Tanzania", Papers in Education and Development, University of Dar es Salaam.
15. Salema, V. (2009). *An evaluation of the implementation of Secondary education Plan (SEDP) in Rombo District*, Tanzania. Published thesis submitted in partial requirement for the degree of M.Ed., Catholic University of Eastern Africa, Nairobi.
16. Van Den Berg, I., Admiraal, W. & Pilot, A. (2006). Peer assessment in university teaching: Evaluating seven course designs. *Assessment & Evaluation in Higher Education*, 31(1), 19-36.

17. World Bank. (2008). *“Curricula, Examinations, and Assessment in Secondary Education in Sub-Saharan Africa.”* World Bank Working Paper no. 128, World Bank, Washington, DC.

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