

Assessment Status of Learner-centred Learning in Tanzania in the Context of the Competence-based Curriculum

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Abstract:

Learner-centred assessment is a result of a paradigm shift from the teacher-centred approach to the learner-centred approach to teaching. In this shift, assessment is intertwined with learning, whereby various methods are used to collect evidence about students' learning. In this paradigm shift, feedback plays a substantial role in supporting students' learning. It serves as a mirror showing students' understanding of their strengths and weaknesses. When incorporated with suggestions for improvement, feedback can play an important role in motivating students to learn.

Introduction

Meaningful learning does not occur simply by receiving information from someone else, but rather it is what the learner does with that information that leads to learning. Learners use that information to build on existing knowledge to construct new knowledge for themselves. This suggests why the learner-centred approach is needed rather than teacher-centred approach.

The purpose of this paper is threefold. First, it provides a brief description of what learner-centred teaching entails. Second, it provides the rationale for using learner-centred techniques in a classroom. Third, it briefly highlights the challenges of implementing learner-centred assessment in Tanzanian schools.

Learner-centred teaching

Learner-centred teaching is an innovative concept of education aimed at cultivating students' ability to solve practical living problems. It is a paradigm shift from teacher-centred teaching

where the teacher is the main source of knowledge and learners are regarded as passive recipients of knowledge. On this issue, Chickering and Gamson (1987) say that “Learning is not a spectator sport. Students do not learn much just by sitting in class listening to teachers, memorising packed assignments, and spitting out answers. They must talk about what they are learning, write about it, relate it to past experiences, and apply it to their daily lives. They must make what they learn part of themselves.”

What is learner-centred teaching then? The term "learner-centred" refers to environments that pay careful attention to the knowledge, skills, attitudes, and beliefs that learners bring to the educational setting (Gibbs, 1992). This term includes teaching practices that have been called "culturally responsive," "culturally appropriate," "culturally compatible," and "culturally relevant" (Ladson-Billings, 1995). The term also fits the concept of "diagnostic teaching" (Bell, 1982): attempting to discover what students think in relation to the problems at hand, discussing their misconceptions sensitively, and giving them situations to go on thinking about, which will enable them to readjust their ideas (Bell, 1982). The concept can also be viewed as an instructional practice that “couples a focus on individual learners (their heredity, experiences, perspectives, background, talents, interests, capacities and needs) with a focus on learning (the best available knowledge about learning and how it occurs and about teaching practices that are most effective in promoting the highest level of motivation, learning, and achievement of all learners” (Biggs, 1999; Stiggins, 1999). Teachers who are learner-centred recognise the importance of building on the conceptual and cultural knowledge that students bring with them to the classroom. The teacher acts as the facilitator with the student assuming a greater role in the search for and utilisation of knowledge that enriches, including its internalisation.

Learning is the focus and ultimate goal of the learner-centred paradigm. In this regard, assessment plays a key role in shifting to a learner-centred approach. When we assess our students' learning, we ask ourselves the questions, “What have our students learned and how well have they learned it?” “How successful have we been in what we are trying to accomplish?” Because of this focus on learning, assessment is sometimes referred to as outcomes assessment or student outcomes assessment.

Learner-centred assessment

Learner-centred assessment is defined as the process of gathering and discussing information from many different sources in order to develop a deep understanding of what students know, understand, and can do with their knowledge as a result of their educational experience; the process culminates when assessment results are used to improve subsequent learning (Huba & Freed, 2000). A key feature of the learner-centred approach to assessment is that it is linked tightly to the teaching and learning process (Huba & Freed, 2000; Masters, 2002). Its purpose is not so much to make a judgement on how a student, class or school is performing, to evaluate an instructional programme, or to provide information that can be used for the selection of those to be awarded of scholarships, but to provide teachers, students and parents with information that can be used to guide individual improvement in the learning process. The underlying question in the learner-centred approach is: *where is this student up to in his or her learning and what can be done to facilitate further development?*

According to Masters (2002), underlying learner-centred assessment is an assumption that every student is actively engaged in ongoing development and has the potential for further growth. The important question is not so much on how one student is performing in relation to another, but where each individual is concerning his or her development, and what can be done to facilitate further learning. The notion of individual development is a fundamental concept of learner-centred assessment, the objective of which is to establish where an individual is on a development continuum as well as how much progress he/she has made since the previous assessment. According to the Australian Council of Education Research, this development continuum is called a “progress map”. A progress map describes the development, progress or growth in an area of learning and so provides a frame of reference for monitoring individual development. By definition, a progress map is a picture of the path students typically follow as they learn. It is a vertical map that provides a description of the skills, understanding and knowledge in the sequence in which they typically develop: a picture of what it means to improve in the area of learning.

Why learner-centred assessment?

Although classroom teachers usually assume full responsibility for all aspects of the testing process, each phase offers valuable opportunities to involve learners (See Table 1). The teachers' role should be to decide which area(s) are appropriate for student involvement as well as to design and monitor activities in which students take responsibility for certain aspects of the assessment.

Table 1: Comparison of Teacher-Centred and Learner-Centred Paradigms (Huba & Freed, 2000)

Teacher- centred paradigm	Learner-centred paradigm
Teacher's role is to be the primary information giver	Teacher's role is to coach and facilitate Teacher and student evaluate learning together
Teaching and assessment are separate.	Teaching and assessing are intertwined.
Assessment is to monitor learning.	Assessment is used to discover and diagnose learning needs.
Emphasis is on right answers.	Emphasis is on generating better questions and learning from mistakes
Desired learning is assessed indirectly through the use of objectively scored tests.	Desired learning is assessed directly through papers, projects, performances portfolios, and the like
Culture is competitive and individualistic	Culture is cooperative, collaborative, and supportive.

Advocates of learner-centred teaching methodologies and curricula argue that involving learners enhances motivation, which in turn heightens achievement. Learner-centred approaches offer additional benefits for the classroom teacher including constant needs analysis, reduced preparation time through the use of student-generated materials, peer-teaching and correcting, increased group solidarity, a decentralized teacher role, increased understanding of student concerns and problems, learner-training benefits, and finally, increased maturity and responsibility of students (Coombe & Kinney, 1999). Classroom teachers can expect similar benefits from adopting assessment practices that utilize learner-centred techniques. Classroom teachers who involve their students in the development, administration, and marking of tests may find their students becoming more motivated and responsible. Learner involvement in classroom assessment can also raise the awareness of both teacher and learner of learning and test-taking strategies. Involvement will additionally help students to identify their own strengths and

weaknesses (Coombe & Kinney, 1999). Finally, a learner-centred approach to assessment will promote student autonomy and independent learning skills.

Generally one can summarise by stating that strategic learner-centred assessment is primarily intended to inform students and teachers about how students can improve their learning. By using a range of assessment types all students can demonstrate what they know and what they can do.

Assessment methods

As the classroom paradigm shifts from being teacher-centred to being learner-centred, student assessment methods evolve from typical paper and pencil testing to other methods of evaluation. Students should be probed concerning their understanding, reasoning, and critical thinking abilities rather than their ability to regurgitate memorised facts.

Learner-centred approaches to assessment use a variety of methods. In collecting information, it is important that the methods are not limited to students' performance of passive, reproductive tasks (Masters, 2002). Students must be observed creating their own solutions to problems. The context in which they are observed should, whenever possible, also be meaningful to students and interesting in their own right. Before focusing on assessment methods, let's briefly look at that factors that should be considered for effective assessment.

Factors for effective assessment

Stiggins (1999) suggests a number of factors that should be considered for effective assessment to take place. Firstly, effective assessment practices begin by clearly understanding the purpose they are supposed to serve. More specifically, one should answer the question "why assessment?" Secondly, there must be clear objectives. In this regard, one is required to ask questions such as "What are the characteristics of clear and effective learning objectives?" "What are the categories of learning objectives into which one's own subject falls?" Thirdly, it is important to make a wise choice of appropriate methods, if assessment is to be effective. Gibbs (1999) argues that appropriate assessment engages students in exactly the kind of learning activity that needs to take place. The assessment method should be appropriate for specified learning objectives, the purpose of the assessment and the intended audience. Fourthly, one

should be careful to control bias. Bias in assessment produces results which give one group an advantage over other groups because of factors such as language, gender, or race, resulting in the assessment representing different outcomes for different groups. In order to overcome the problem of bias, the following guidelines should be taken into consideration:

- To select appropriate assessment methods for specified learning objectives.
- To use written records rather than relying on memory.
- To create rubrics with specified criteria and scoring scheme.
- To assess students' work or performance closely, following completion of the task.

Finally, assessment is effective when an appropriate sampling method is used. One should bear in mind that all the assessment we do is only a sample of what students know or can do. Therefore, one is required to ensure that assessment questions and tasks match specified learning objectives; to use a variety of assessment methods, i.e. to collect information about students' abilities, achievements, and performance; and to ensure that students are assessed and provided with feedback at various intervals.

Categories of learner-centred assessment methods

As pointed out earlier, learner-centred assessment ought to use a variety of assessment methods so as to gather enough evidence about students' achievement. These methods include written examinations, performance, products, portfolios, practical tasks and oral examinations.

Written examinations. There is a misconception among a number of educators that by resorting to learner-centred assessment, written examinations are no longer useful. In contrast, written examinations and tests, which are popularly known as paper-and-pencil examinations, can efficiently assess students' mastery of a body of knowledge, their ability to reason logically about a range of problems and their ability to apply procedures such as mathematical algorithms. These areas cannot be measured successfully by other assessment methods. Examples of written examinations are multiple choice items and essay questions.

Performance assessment. Performance assessment is useful for assessing skills in manipulating apparatus, operating machinery, playing musical instruments, cooperating with others in a team activity, and so on.

Product assessment. This assessment focuses on the development of a tangible product. The product itself, the process, and quality of reasoning are assessed.

Portfolio. A portfolio is a purposeful collection of work by students that exhibits efforts, progress and achievements in one or more areas of the curriculum, assembled over a period of time. The portfolio includes evidence of a student's reflection and self-evaluation, the reasons for selecting its content, and the criteria used for judging the quality of the work. The portfolio can also be used to assess the ability to write for a range of audiences and purposes.

Practical tasks. Practical tasks involve laboratory-based tasks in physics, chemistry and other natural and applied sciences. Included in this category of tasks are research projects.

Oral examinations. These are administered through spontaneous questions put to students by teachers or experts. In this case, students must think critically, draw upon relevant facts, theories and/or perspectives, and speak in a coherent, organised manner.

The mentioned categories of assessment have been given relative emphases in different education institutions in Tanzania. Written examinations are the most popularly used forms of assessment at all levels of education, especially in the formal education system. In technical institutions, besides written examinations, product assessment and practical tasks are given great emphasis due to the fact that, to them, competence relates to the ability to carry out a specific task in the real world of work (NACTE, 2004). Portfolios and oral examinations are sparingly used in Tanzania. To ensure that these assessment techniques become popular in the country, they have been included in the new teacher education programme (cf. MoEVT, 2009).

Qualities of learner-centred assessment

It is argued that assessment influences students' academic prospects, career opportunities and even success on the job in the world of work (Rutayuga & Kondo (2006). Further, it helps to provide an accurate prediction of further professional competence. The quality of assessment is of paramount importance for preparing competent people. A number of assessment qualities are appropriate in a learner-centred environment, most prominently reliability, validity and usability. Assessment in learner-centred teaching is said to be reliable when its processes and procedures

are accurate, consistent and trustworthy. This means that the stakeholders (students, internal and external moderators) and other interested parties have full confidence in its outcome. Validity in the context of learner-centred teaching means that assessment tasks assess what they intend to assess. In other words, validity is about the appropriateness, meaningfulness and usefulness of inferences made from assessment results (Gonlund & Linn, 1990). Assessment is said to be usable when the tasks and procedures are accessible, and have been clearly explained to and understood by all stakeholders, including prospective and current students, funding agents, teachers and related staff, professional bodies and employers.

The Role of Feedback in the Learner-centred Approach

One of the important criteria of learner-centred assessment is that it is responsive (Gerdy, 2002). In other words, it provides continuous feedback to students that leads to improvement. Continuous feedback is an important factor in the promotion of learning through assessment. Traditional assessment methods such as final examinations generally provide little information to students to enhance their learning. Continuous assessment also helps us to understand the conditions in which students learn best so that we can improve the learning experience to maximise learning. To improve learning, assessment should be more than a measure of the outcomes of learning but should be an evaluation of the process of learning and the experience of the student along the way.

To be most effective, feedback needs to go in both directions – from teacher to student and from student to teacher. Feedback to students can be in verbal or written form, but it should be timely, intimate and individual, empowering, opening doors and manageable. It primarily serves as a mirror, showing students the substantive merits of their work (Huba and Freed, 2000), and in so doing feedback deepens students' understanding of the substance of the material. As a mirror, feedback from the teacher identifies areas where the student has succeeded in meeting the objectives of assessment and where the student has made mistakes or has deficiencies. By examining what has been fed back to them by the teacher students are able to recognise the strengths and weaknesses in their performance. Such feedback, particularly when given with suggestions for improvement, can also play an important role in motivating students and helping them identify their progress in the learning process. Such feedback also motivates teachers to

reflect on their teaching. "When we observe students while they are learning, and collect frequent feedback from them, we can learn much about how they learn, and more specifically, about how they respond to particular teaching practices" (Angelo & Cross, 1993).

Learner-centred assessment for competence-based curriculum

In 2005, the Tanzania Government decided to transform the newly revised secondary school curricula into competence-based curricula with the aim of equipping school graduates with sufficient knowledge and life skills for them to survive, academically and socially, in the modern world. The new curricula emphasise what someone with a particular qualification should be able to do in the world of work in typical context. The new curricula focus on the importance of the learner-centred and activity-oriented approach (MoEVT, 2005), rather than the teacher-centred approach to teaching and learning. This shift was partly necessitated by the expansion in knowledge and the need to have more competent graduates in the world of work in a typical context.

By competence the MoEVT meant the combination of knowledge, skills, attitudes and behaviours which will enable individual students to consistently carry out tasks to a designated standard. Competencies are statements of the characteristics that graduating students should demonstrate to indicate that they have been trained to perform and function independently in professional practice. Competency-based teaching is all about active learning, helping students learn how to learn, rather than just covering the content. The revised curricular documents include a set of learning objectives that are clearly specified so that their accomplishment can be understood in the form of specific learner behaviours and knowledge. Also included is a set of competencies linked directly to corresponding objectives. However, no minimum levels of achievement of these objectives have been established as the criterion of success.

As clearly demonstrated above, assessment is one of the essential steps towards effective teaching and learning. Competency-based assessment is the collection of evidence for making a judgement on someone's progress towards achieving the standard of performance laid down or expected learning outcomes (Burke, *et al*, 1975). At the appropriate point, judgement is made as to whether competency has been achieved. Competency-based assessment is largely activity-

based and practical. However, competence also implies that an individual demonstrates an understanding of the knowledge that is the basis of the practical task being carried out. Traditional assessment tools such as written tests and assignments may also be useful when assessing a student, as they can be used to gather supplementary evidence about a student's grasp of key terms, concepts and knowledge. All aspects of the assessment process, that is, validity, reliability, fairness and flexibility have to be observed (Glatthorn, Bragaw, Dawkins, & Parker 1998).

Competency-based assessment is conducted by measuring the evidence against the performance criteria. In an ideal situation student assessment is expected to:

- Be designed to measure the achievement of the intended learning outcomes and other curriculum objectives;
- Be appropriate for their purpose, whether diagnostic, formative or summative;
- Have clear and published criteria for marking;
- Be undertaken by people who understand the role of assessment in the students' progress towards achieving the knowledge and skills associated with their intended qualification;
- Where possible, not to rely on the judgment of a single examiner.

However, this type of assessment is yet to happen (e.g. Shemwelekwa, 2008) in the classroom for reasons given in the next paragraph.

Practical Implications of competence-based curriculum

- Teacher training institutions have done many things concerning how to teach, how to develop materials, how to test, and so on, in a very traditional way but they have done very little if anything on WHAT (the competence) they are trying to develop and how. The competence issue tends to be overlooked or taken for granted, probably because people assume that it is automatically understood.
- Teachers need to adjust their mindsets to the new way of looking at teaching and assessment by way of the competence-based curriculum.
- School management and other related parties need to be knowledgeable on how to use the competence-based curriculum.

- Book publishers now have the opportunity of writing textbooks that claim to be based on the competence-based curriculum.

The MoEVT is making an effort to revise teacher education curricula to accommodate this paradigm shift from content-based to competence-based curricula (see MoEVT, 2009). However, a number of challenges still need to be addressed to make the implementation of the competence-based curriculum a success.

Challenges in Using Learner-centred Approach in Tanzania

Tanzania is among the countries that are striving to change from a teacher-centred paradigm to a learner-centred paradigm so as to maximise learning among students, and make them problem solvers rather than information absorbers. A number of studies have been conducted to support both teachers and students to achieve this goal. Studies done by Tilya (2003) and Kitta (2004) aimed at fostering the learner-centred approach through activity-based teaching in physics and mathematics. Similarly, studies by Mafumiko (2006) and Kafanabo (2006) dwelt on supporting Chemistry and Biology teachers. Also many efforts were made by the MoEVT in collaboration with different development partners to support teachers in these endeavours. A number of collaborative projects, especially in science and mathematics, have been instituted. Examples of these projects are TEAMS (Teacher Education Assistance in Mathematics and Science), SESS (Science Education in Secondary Schools) and STIP (Science Teachers Improvement Project). All these studies and projects concentrated on supporting teachers and learner-centred teaching, whereas very little attention has been paid to supporting teachers carry out learner-centred assessment. Therefore, moving towards the learner-centred approach is a challenge not only for teachers but also learners when it comes to assessment. The MoEVT and other education stakeholders need to address the following challenges if the benefits of learner-centred assessment are to be fully realised.

- Teachers require the basic competencies on how to develop and use appropriate learner-centred assessment methods.
- For enhancement of these abilities, teachers need training. Because of limited financial resources, this may take a long time to realise.

- Teachers need to be aware of the gaps in their skills and knowledge, as well as their weaknesses and strengths in developing learner-centred assessment methods and how they could be handled.
- Teacher preparation programmes need to change from training teachers to use traditional assessment methods to introducing trainees to authentic learner-centred assessment methods.
- Class sizes in our schools, especially primary schools, pose a big challenge to carrying out learner-centred assessment, since the focus is on the individual learner and not learners as a group.
- The curriculum is overloaded, which means that neither teachers nor students get enough time for interaction, the aim being “to finish the syllabus”.
- The existing culture among students, teachers and parents that teaching should focus on preparation for examinations or tests and not knowledge acquisition needs to change.
- Emphasis in the summative assessment carried out by examinations boards such as NECTA should focus on questions that foster thinking skills rather than memorisation.

Conclusion

The paradigm shift from content-based curricula to competence-based curricula requires a change in assessment techniques that enable learners to acquire appropriate skills, knowledge, understanding and other attributes that will enable them to solve real-life problems. The implementation of the approach and the use of a range of assessment methods and techniques require that learners' outcomes be assessed using appropriate assessment methods. Moreover, a number of challenges need to be addressed to ensure smooth implementation of the new paradigm. The MoEVT and other stakeholders ought to ensure that teachers acquire the appropriate skills and knowledge for carrying out learner-centred assessment in this new paradigm.

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