

CHAPTER ONE

INTRODUCTION

Background

Great teachers change lives. They inspire. They motivate. They strive to perfect their craft – the art of teaching. Great teachers around the world use learner-centred teaching strategies (LCTs) to engage their students. These teachers understand the limitations of the traditional lecture style of learning where a teacher leads the entire lesson and the students quietly take notes, answer a few questions and go home to study. Teacher-centred teaching like this may expose students to topics in the national syllabus, but students are unlikely to understand the content if they are not actively engaged in the learning process. In contrast, LCTs encourage students to talk about what they are learning, to learn from one another and to improve their understanding and retention of the subject matter.

This handbook is for teachers who want to make a difference in the lives of students, including academic performance on national examinations. It is a practical guide with 70 learner-centred teaching strategies. The handbook is meant to help the teachers make use of different LCTs in order to improve their teaching and the learning of their students. Some of the strategies are presented in the form of video clips created in different classrooms in Tanzania so that teachers can see how to use these strategies when there are many students and limited teaching and learning materials.

It is the recommendation of the authors that teachers select one technique at a time to practice with their students. It may take several days or weeks to master a technique and feel comfortable with it. The techniques with two asterisks (**) in the table of contents and body of the handbook are recommended for teachers who are just beginning to use LCTs in their classrooms.

Use of the Term Learner-Centred Teaching

In Tanzania different terms are used to refer to *constructivist learning*, a view of learning that is shared by many educational researchers who believe that knowledge is created through social interaction and that learning takes place most effectively when people are actively involved in discovering new information. These terms based on constructivist learning include: learner-centred teaching; student-centred learning; inquiry-based learning; discovery method; participatory teaching; active learning; and competence-based learning. In this handbook the term learner-centred teaching (LCT) is adopted. LCT was the term used in previous Project **Zawadi** teacher training workshops and guides. Moreover, the term LCT is used by the

Teaching in Action (TIA) program, an intensive LCT program based at Mwenge Catholic University that has trained secondary school teachers in more than 100 schools in Arusha, Kilimanjaro, Tanga, and Tabora. For these reasons the term LCT is adopted in this handbook to maintain the consistency of terminology.

Definition of LCT

LCT is an instructional approach in which students actively participate in lessons by working and talking not only with the teacher but also with their peers in the classroom. This approach recognizes that students learn more when they talk about what they are learning with others. In LCT classrooms students spend more time working independently and working with their peers during a lesson on the knowledge and skills they need to know for the national examinations, for mastery of the school's curriculum, and for life after they finish school.

Principles of LCT

- Students should be actively involved in the learning process and should be active, rather than passive, in the classroom.
- Students should be provided with multiple opportunities to develop higher-order thinking skills in each class.
- Students should be engaged in critical inquiry by teachers who provide them with puzzling or unexpected problems they want to investigate or with question for which they must search for an answer to understand (Vavrus, 2014).

Advantages of LCT

In the traditional approach to teaching, the teacher is solely responsible for conveying knowledge to students. Although students may profit from having this knowledge, they rarely understand *why* that knowledge is important, *how* it relates to the real world, or *what* can be done with the knowledge to improve one's society. In contrast, LCT challenges students to ask what, how, and why a question must be understood in today's complex world. In this way students are more likely to remember the knowledge discussed in the classroom, understand it deeply, and be able to apply it to new, real-life situations in which critical thinking is necessary (Vavrus, 2014). Properly implemented, LCTs can lead to increased motivation to learn, greater retention of knowledge, deeper understanding, and more positive attitudes towards the subject being taught (O'Brien, 2003). Some other advantages attributed to LCTs include:

- It promotes self-confidence in students.
- It encourages inquiry and discussion.

- It enhances students' critical thinking.
- It makes the learning environment more friendly, helping students to relax and learn.
- It raises students' interests and makes them active throughout the lesson.
- It promotes meaningful learning that facilitates retention and application of knowledge. This is different from traditional teaching that primarily promotes memorization.
- Students learn on their own, and they learn to be independent and make their own decisions.
- It develops teamwork and helps students to learn to value the ideas of their peers.
- Students learn important communication and collaboration skills through group work.
- Students learn to direct their own learning, ask questions and complete tasks independently.

LCT in Tanzanian Government Policies

It is not only educators but also policymakers who recognize the importance of LCT to improve the learning process and educational outcomes. For example, the *Tanzania Development Vision 2025* states the following:

Education should be treated as a strategic agent for mindset transformation and for the creation of a well-educated nation, sufficiently equipped with the knowledge needed to competently and competitively solve the development challenges which face the nation. In this light, the education system should be restructured and transformed qualitatively with a focus on *promoting creativity and problem solving*. (p. 19; emphasis added)

Policies and syllabi from the MOEVT also specify that teachers should be using LCTs in the classroom, such as “critical and creative thinking,” and teachers should be able to “apply learner friendly teaching and learning practices in the classroom [and] interactive and learner centred methods in their teaching” (MOEC, 2004, p. 15). These recommendations are consistent with reports about Tanzanian education by the World Bank and HakiElimu, among other organizations, which recommend that critical thinking and problem-solving methods be used whenever possible in secondary schools.

Characteristics of Learner-Centred Teachers in a Tanzanian Context

- A learner-centred teacher encourages students to work in small groups to maximize participation and cooperative learning.

- Using the LCT approach, the teacher assumes the role of a facilitator to promote, guide and help students' learning activities.
- The whole teaching and learning process is participatory and interactive where the student learns by doing a series of logical activities, such as simulation, role play, discussion, problem solving, demonstration, experiments, etc. (MoEVT, 2007).

Theories Guiding LCT

A number of theories support learner-centred approach to teaching. Constructivist theories of learning, Bloom's taxonomy of learning domains, and Gardner's theory of multiple intelligences are discussed in this section.

Constructivist Theories

The concept and practices of LCT are rooted into constructivism, a perspective on learning in which learners are viewed as capable of constructing knowledge for themselves - each learner individually and through interaction with others constructs knowledge and imposes meaning as he or she learns. There are two consequences for teachers of this view of learning. First, teachers have to focus on the learner and his or her process of producing knowledge and making meaning from what is taught rather than thinking only about the subject or topic to be taught. Second, teachers must recognize that knowledge is not a 'thing' that can be deposited into students' minds (Freire, 2000); students make meaning of what they are taught based on their experiences and interactions in a community of learners (Hein, 1991).

There are different principles guiding constructivist theories of learning. They include:

- a) Learning is an active process in which a learner uses sensory input and past experience to construct meaning.
- b) People learn to learn as they learn: learning consists both of constructing meaning as one takes in new information and as one engages with it.
- c) The crucial actions of constructing meaning are mental-- it happens in the mind—and also social through our interactions with our teachers, our peers, our family as well as casual acquaintances. Teachers need to provide activities that engage the mind, such as reflective activities students can do by themselves, as well as activities that engage the body and promote interaction.
- d) Learning involves language, and, therefore, the language we use in the classroom and throughout the school influences learning. The more comfortable students are with the language of the school, the more they are able to interact and produce and make meaning of new knowledge.

- e) Learning is contextual. We learn in relationship to our prior knowledge (both formal and informal), our beliefs, our prejudices and our fears (Hein, 1991).

These principles of constructivist learning imply that teaching can lead to effective learning if it is centred on activities that help students make meaning from what is taught through reflection and interaction with peers and with the wider the society around them.

Bloom's Taxonomy of Learning Domains

Fifty years ago, Benjamin Bloom and colleagues came up with a taxonomy, or classification of learning to describe three types (domains) of learning that educators should focus on in their teaching. The domains are psychomotor (skills), affective (attitudes), and cognitive (knowledge).

First, **psychomotor learning** usually focuses on improving students' ability to use some kind of physical skill, such as how to use a compass or handle laboratory equipment in making scientific measurements.

Second, **affective learning** has to do with students becoming more aware of emotions, attitudes, and feelings. This might include moving from responding somewhat passively to a topic in class to valuing the topic by deciding what one believes and feels about a topic.

Third, **cognitive learning**, which is often what we promote in schools, has to do with knowledge acquisition and comprehension of a given topic. The cognitive domain classifies learning into levels, from the lowest to the highest:

- *Knowledge*: Most basic level of learning – it requires the recalling of facts, terms, dates, etc.
- *Comprehension*: Understanding concepts and explaining them.
- *Application*: Making use of acquired knowledge and skills in other situations.

These three cognitive levels are called lower-order skills because they tend not to be as cognitively complex or demanding as higher-order skills. The more complex, higher-order skills include:

- *Analysis*: A complex kind of thinking that involves students doing many different kinds of tasks, such as comparing, contrasting, prioritizing, and relating two or more concepts or objects.
- *Synthesis*: Demands a higher level of learning because students must incorporate, organize, produce, and revise their work based on multiple sources of information.
- *Evaluation*: A complex form of thinking whereby students must be able to argue for or against something, make their own decisions, interpret, and predict.

Multiple Intelligences

This is a theory developed in the early 1980s by Howard Gardner to explain how intelligence is pluralistic; it is not a 'thing' or a single set of skills. The theory suggests that *there is more than one way to be smart*. Therefore, a student shouldn't be labeled "dull" but rather should be helped to improve the intelligences that she or he has and does not yet have fully developed through appropriate teaching methods (Vavrus, 2014).

Here are succinct definitions of the nine *intelligences* drawn from Gardner's research:

1. LINGUISTIC INTELLIGENCE - ability to perceive and generate spoken or written language;
2. LOGICAL-MATHEMATICAL INTELLIGENCE - ability to appreciate and use numerical, abstract and logical reasoning to solve problems;
3. MUSICAL INTELLIGENCE - ability to create, communicate, and understand meanings made out of sound;
4. SPATIAL INTELLIGENCE - ability to perceive, modify, transform, and create visual and/or spatial images;
5. BODILY-KINESTHETIC INTELLIGENCE - ability to use all or part of one's body to solve problems or make things;
6. NATURALIST INTELLIGENCE - ability to distinguish among features of the natural environment;
7. INTERPERSONAL INTELLIGENCE - ability to recognize, appreciate, and contend with the feelings, beliefs and intentions of other people;
8. INTRAPERSONAL INTELLIGENCE - ability to understand oneself, including emotions, desires, strengths and vulnerabilities, and to use such information effectively in regulating one's own life; and
9. EXISTENTIAL INTELLIGENCE (POTENTIAL) - ability to be sensitive to, or have the capacity for, conceptualizing or tackling deeper or larger questions about human existence (Christodoulou, 2009).

The theory of multiple intelligences can be seen in the popular saying, *If you judge a fish by how well it can climb a tree, it will live the rest of its life thinking it is stupid*.

Conclusion

Tanzanian teachers can transform their teaching by using LCT techniques in their classrooms. However, some of the techniques are easier to understand and implement than others, so it is best to start with one technique at a time. Try to master it. Then move on to others. The authors also recommend that teachers use our Facebook site at <https://www.facebook.com/TendaTeachers/> to access video clips and the latest news about LCTs in Tanzania. Finally, change in our schools starts one teacher at time. These techniques, when used effectively, can change the learning experiences and the lives of your students to help build a better Tanzania for all.