# The Active Teaching and Learning Handbook

## 70 *Learner-Centred Teaching Techniques to Engage and Motivate Tanzanian Students*



*A child is like a young tree which can have its growth stunted and twisted or which can be fed until it grows beyond its unassisted height or whose branches can be pruned and trained so that maximum fruit is obtained at maturity. And the people who have the opportunity to shape these infants – who have the power – are the teachers in our schools.*

-Julius K. Nyerere

Morogoro Teachers' College, 1966

## Written By

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# FOREWORD

The Active Teaching and Learning Handbook is a collaborative effort with Project**Zawadi**, Zinduka, and the Tanzania School Leadership Team of headmasters and teachers in Bunda Rural District in Tanzania. In addition, Professor Frances Vavrus from the University of Minnesota in the United States and Allen Rugambwa from Mwenge Catholic University in Tanzania helped to expand and shape the content of this handbook with the material from their collaborative work in Teaching in Action Program. The program promotes learner-centred pedagogy in Tanzania.

Project**Zawadi** (PZ) is a non-profit organization founded in December 2000.  It is active in the Mara region of Tanzania. The mission of the organization is to provide educational opportunities for orphaned and other vulnerable children in Tanzania so they become self-reliant and active members of their communities.  The founder and president of the organization, Brian Singer, is a former Peace Corps volunteer who worked in Tanzania in the 1990s.  Project**Zawadi** partners with Zinduka DIF in Tanzania.  The Project Zawadi website is http://projectzawadi.org/.

Zinduka DIF is a non-profit organization based in Nyamuswa, Tanzania. It provides a range of services including sponsoring students with educational support, constructing classrooms and other educational facilities, operating a medical clinic, providing loans to small businesses, operating a vocational training program and providing other services for the Bunda Rural District.  Zinduka was founded in 2000, and in 2012 it was recognized as the national nonprofit organization of the year by the Foundation for Civil Society.  The executive director of Zinduka is Max Madoro, a civic and political leader in Nyamuswa ward, in Bunda Rural District, in the Mara region of Tanzania.   The Zinduka DIF website is http://zindukadif.org/pages/About.html.

The Tanzania School Leadership Team under PZ and Zinduka Projects is composed of the following teachers and headmasters:

1. Kafwimba Ason – Head Master at Mihingo Secondary School
2. Nicholas Ayaga – Head Teacher at Nyamuswa A Primary School
3. Adrian Maganga – Teacher at Mihingo Secondary School
4. Nelson Makoro – Headmaster at Makongoro Secondary School
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7. Verediana Nchimbi- Headmistress, Kambubu Primary School
8. Amina Rajabu - Teacher, Mihingo Primary
9. Faudhia Mghwira- Teacher, Nyamuswa A Primary
10. Samwel Obogo – Teacher, Makongoro Secondary School


In July 2015, Ian Keith, a Nationally Board Certified Teacher from St. Paul, Minnesota in the United States and a volunteer with Project**Zawadi**, conducted teacher trainings and co-taught in classrooms in the Bunda Rural District.  The Tenda Teachers program and Active Teaching and Learning Handbook project were conceived during this period.  A copy of this handbook is available at the Tenda Teachers website page http://projectzawadi.org/programs/tenda-teachers/  along with information about other Tenda Teachers projects.  In addition, video clips of selected Active Teaching and Learning Techniques and other information about the Tenda Teachers Project are available on Facebook at: www.facebook.com/TendaTeachers/ and You Tube at www.tinyurl.com/tendateachers.  The goal of the project is to provide Tanzanian teachers and pre-service teachers with descriptions and video clips of Active Teaching and Learning Techniques to help them improve their teaching skills.

# AUTHORS' PROFILES

This handbook was written by Ian Keith and assisted by Adrian Maganga. Their work was expanded and refined by Allen Rugambwa and Frances Vavrus using materials written by the two of them for the Teaching in Action program. The final review of the handbook was made by Professor Vavrus.

**Ian Keith** is the principal author of the handbook. He is a 30-year veteran elementary school teacher in St. Paul, Minnesota (USA). He is a Nationally Board Certified Teacher in Elementary Literacy, has served as President of the St. Paul Federation of Teachers, is a board member of Project**Zawadi** and is one of two teacher coordinators for Tenda Teachers. He traveled to Tanzania in July 2015 and trained 120 teachers from 16 schools in the rural Bunda district on active teaching and learning strategies.

**Frances Vavrus** is a Professor at the University of Minnesota (USA) and the author of numerous publications on education in Tanzania. She is co-editor of *Teaching in Tension*, a book focused on how Tanzanian teachers use learner-centred pedagogy. She is a co-founder of Teaching in Action (TIA), a collaborative teacher professional development program based at Mwenge Catholic University in Moshi, Tanzania. Prof. Vavrus also serves on the board of Project**Zawadi**.

**Allen Rugambwa** is Lecturer Assistant at Mwenge Catholic University in Moshi, Tanzania. He coordinates TIA and its School-Based Training (SBT) Program in secondary schools in northern Tanzania. In collaboration with Professor Vavrus and several Mwenge Catholic University lecturers, he has written a number of teacher training guides on learner-centred pedagogy. In the past he facilitated two teacher-training workshops coordinated by Project**Zawadi**. He was also a contributing author to *Teaching in Tension*.

**Adrian Maganga** is the Tanzanian coordinator of Tenda Teachers and co-authored the handbook. He is an English teacher at Mihingo Secondary School in Mihingo, Tanzania and is a member of the Tanzanian School Leadership Team.

# Table of Contents

**CHAPTER FIVE:  Questioning Techniques**……………………………………………………….………**16**

**CHAPTER SIX:  LCTs For Development of New Knowledge and Reinforcement** …………………………....**20**

# ACRONYMS

| | |
|---|---|
| **INSET** | In-service Teacher Training |
| **LCT** | Learner-Centred Teaching |
| **LCTs** | Learner-Centred Teaching Techniques |
| **MOEVT** | Ministry of Education and Vocation Training |
| **PZ** | Project**Zawadi** |
| **SBT** | School-Based Training |
| **TIA** | Teaching in Action |

**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 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.

**CHAPTER TWO**

**BUILDING A POSITIVE CLASSROOM ENVIRONMENT**

Building a positive learning environment in the classroom is the foundation of Learner-Centred Teaching.  It is based on the understanding that positive reinforcement and support is essential for student success in school and life.  As Doug Lemov notes in *Teach Like a Champion*, "People are motivated by the positive far more than the negative.  Seeking success and happiness will spur stronger action than seeking to avoid punishment" (2010, p. 204).

LCT is built on the belief that creating  a positive, supportive learning environment is essential for improving student achievement, encouraging critical thinking and helping young people succeed in school.   Vavrus points out in the Teaching Action workshops that, "Although we cannot control how our colleagues teach, we can become role models for school-wide change by doing small things in our interactions with students that motivate them to want to learn for the joy of learning rather than to avoid punishment" (2014).  In this chapter we look at the attitudes, beliefs, characteristics, and practices of teachers that help create a positive learning climate in the classroom.

**\*\* Technique #1      Teach With Enthusiasm**
There is nothing more infectious and effective than a teacher who is passionate about teaching and learning. Good teachers bring a joyful, creative and positive attitude to their classrooms.  This passion can take different forms, but it inspires, motivates and encourages students to learn. As social beings, we learn a lot by observing others. If a teacher comes to class on time (or early), has a lot of energy, speaks in a clear, loud (but not shouting) voice with a joyful or enthusiastic tone, then students are much more likely to be enthusiastic about the subject, too.  In contrast, when teachers frequently come to class late, appear bored or angry, or put forward very little energy when teaching, students learn non-verbally that this subject is not very interesting or important.  Teachers must model the behaviors, emotional responses and attitudes they want their students to learn.  One way to promote enthusiasm for teaching is to remind ourselves each and every day about the importance of the work we do to educate the next generation.  You might say to yourself before you walk into the classroom, "I'm educating the nation" or "I am proud to be a teacher." You can also start to reflect each day on your practice as other professional do, asking yourself whether you arrived on time for each of your classes; smiled and used an enthusiastic tone with your students; and

spoke in clear and encouraging way to your students.  If you did not today, you can work on improving in this area tomorrow until it feels natural to teach with enthusiasm.

## ** Technique #2        Build On The Positive

Students respond far better to praise than punishment, and humiliation is a particularly difficult form of punishment for adolescents—students between 13-19 years of age—because this is the period when their sense of self-identity is forming.  The opinions of their peers are important, which is why teasing or other forms of harassment can be especially devastating for secondary school students, leading many to drop out of school rather than face being called "stupid" or "dull" in front of others.  One way to assume the best in your students is to begin correcting students' answers or behavior without giving the names of the students making mistakes.   For example, you could simply say, "Class, I need everyone to be quiet before I pass out the equipment," instead of "Robert and Godbless, stop being so loud." If there is still too much talking, you could say, "Some people are still not ready to do our experiment.  I am waiting until everyone is ready to learn."  If, however, Robert and Godbless are still causing a disturbance, you could call them to the front of the room, speak to them quietly about the problem, and move them to separate corners of the room.  The same technique can be applied when students have done poorly on an assignment or exam:   Adolescents, in particular, are more likely to feel you care about their learning if you speak to them privately about their mistakes rather than if you announce to the class that they got the lowest score or if you cane those who did not pass a test.  We should keep in mind that low scores on assignments or bad behavior in class may be due to many factors:  a student's learning disability; problems in his/her home; or our own ineffective teaching.


## ** Technique #3        Express High Expectations

Many successful people attribute their accomplishments to the confidence of one teacher in their ability to succeed.  When students come from families or communities with low expectations for them, as is sometimes the case for girls, physically disabled students, or students from minority groups, then one teacher with high expectations and confidence in them can make a big difference.  However, these high expectations need to be matched by teachers' actions that help students succeed.  High expectations can also be demonstrated through posters on the wall in the classroom or signs around the school with pictures of national universities or good technical colleges, or encouraging phrases on the door to the school laboratory, such as "Quiet please, scientists at work."  Displaying high-quality student work on the walls

or on a bulletin board is also a way to show the students you have high expectations for them and are proud of their good work.

**\*\*Technique #4      All Students Can Learn**

Students bring a wide range of aptitudes, abilities, and interests to school.  Some students are quick learners and others need lots of support to learn.  Learner-centred teachers believe that all children can learn.  This belief is critical.  Some teachers are quick to write off certain students as slow or unable or unwilling to learn.  Learner-centred teachers take the opposite approach. They strive to engage even the reluctant or challenging students.  If a student is not learning something as quickly as you expect, you can meet with him after school and do a simple assessment to determine whether he has a physical problem that may be affecting his learning, such as a visual impairment.  If there is no special education teacher at your school, you can do some simple assessments.  For example have the student go to the back of the room and close his eyes while you write five random letters on the board.  Ask him to open his eyes and read them to you.  If he cannot, he may need glasses or may have a visual processing problem like dyslexia.  You can also do something similar to test the student for hearing loss.  You can get more information from Dyslexia International, including free courses about dyslexia for teachers ([http://www.dyslexia-international.org/our-approach/](http://www.dyslexia-international.org/our-approach/)) and from the World Health Organization ([http://www.who.int/blindness/Vision2020_report.pdf](http://www.who.int/blindness/Vision2020_report.pdf) and [http://www.who.int/pbd/deafness/world-hearing-day/WHD2016_Brochure_EN_2.pdf](http://www.who.int/pbd/deafness/world-hearing-day/WHD2016_Brochure_EN_2.pdf).

**\*\*Technique #5      Celebrate Success**

Another way to create a positive learning environment is to celebrate student success.  This can take the form of "shout outs" where the teacher recognizes a student and shares his or her accomplishment with the entire class.  Teachers should create time during the week or month to recognize each and every student for something they have accomplished.  It is most effective when a teacher recognizes a student for a specific accomplishment.  For example: *Joseph wrote his best essay ever and included a topic sentence, detail sentences, and a strong concluding sentence.*  General praise like "nice job, Joseph" is less effective than specific praise because it doesn't let the student or the class know what was accomplished.  Other ways to celebrate success are to display student work and to ask students to recognize each other's success when working in small groups or with a partner.  For example:  Students can share a piece of work or writing with one another and say what they liked best about it.

## CHAPTER THREE

## PLANNING A LEARNER-CENTRED LESSON

Learner-centred teachers are good lesson planners. They begin with the end in mind. They determine what they want their students to learn and how they will assess them. They create interesting and engaging units and lessons focused on measureable and meaningful learning objectives. They assess student progress throughout a unit. The art of lesson planning is just that – a creative process that can take many forms from discovery learning, to guided lessons and other approaches. This chapter focuses on some lesson planning strategies that have proven effective across different subject areas.

**\*\*Technique #6        High Five Lessons**

High Five Lessons are highly effective directed learning lessons. They include five stages. First, effective teachers begin lessons by activating student interest and knowledge, posing guiding questions, and establishing learning goals. Second, the teacher models and teaches the skills and ideas. Third, the teacher guides student practice. Fourth, once most students have mastered the skill, students work independently on an assignment, while the teacher assists students who still need help. And lastly, the teacher ends the lesson by asking students to think about what they learned and to conduct quick assessments of student understanding. *High Five Lessons* match closely with the five stages of developing a lesson in Tanzania. These stages are Introduction, Development of New Knowledge, Reinforcement, Reflection, and Consolidation.

**Technique # 7        Discovery Lessons**

Discovery lessons are designed to encourage students to work with their peers to answer questions or solve problems **before** the teacher models or teaches a skill or concept. In this approach the teacher poses problems or questions for students to discuss, analyze or solve in order to encourage students to think for themselves and draw their own conclusions. When students finish their work they take turns sharing the information with the class. During this sharing time, the teacher uses the student responses to teach the lesson. For example, a math teacher might pose a challenging problem and ask groups of students to solve it. Then the students share out their solutions and the teacher uses these examples to teach the whole class how to solve the problem

**\*\*Technique #8        Begin with the End in Mind**

Highly effective educators begin lesson planning with the end in mind. In other words, they plan their lessons by starting with what they want their students to learn and how they will assess them. First they

identify the student learning objectives.  Then, they develop the assessments to determine student mastery of the learning objectives.  Lastly, they plan the lessons and activities that will guide students to successful learning outcomes.   For example, a history teacher wants students to explain the important events in the Tanzanian independence movement.  The teacher would start by creating the test for the unit based on this learning objective.  Then the teacher would plan the daily lessons.  Finally, the teacher would assess the students during and at the end of the unit.

**Technique #9        Post Student Learning Goals**

When planning a unit of study, it is important to create meaningful and measureable student learning goals and to post them in the classroom.  Students are more successful when teachers clearly and regularly articulate what they expect from their students and why it is important for students to learn the material.  Posting learning goals on the blackboard and articulating them in student-friendly language, helps students focus their thinking and learning.  Highly effective learning goals are also measureable and meaningful.  For instance, a learning goal for Form 1 English during a unit on verb tenses might be to "use the simple present tense correctly at least 90% of the time in your essays" or "identify correct and incorrect examples of irregular past tense verbs on quizzes and exams at least 75% of the time."  These goals could increase to 100% of the time by the end of the year as students master the verb tenses over time.

# CHAPTER FOUR

## LEARNER-CENTRED TEACHING AT THE BEGINNING OF A LESSON

**Hooks**

A hook is a learning activity at the beginning of a lesson. It captures students' interests. It hints on what students are about to learn, and it connects what they are about to learn to what they already know.

**\*\*Technique #10      KWL Chart**

KWL stands for Know, Want to Know, Learned. It is a good way to help students access what they know about a topic, think of questions about a topic, and keep track of what they have learned. Teachers introduce a topic. Students list what they know about it. Then they generate questions about the topic. Finally, students read or listen to the teacher to answer questions and summarize what they learned.

| K | W | L |
|---|---|---|
|   |   |   |

**\*\*Technique #11      Real-World Problems**

This is about linking the lesson with real-life situations. A teacher may ask the students to solve a problem that connects with the lesson objectives before teaching the topic of the day. For instance, before teaching *parallelogram* a mathematics teacher may ask the students the following question: "Anna, Muhammad, Asha, and Ibrahim live at the four corners of an apartment building. Anna lives 50 meters away from Asha. If each pair of opposite sides of the apartment is parallel, how far apart do you think Muhammad and Ibrahim might live from each other?

**\*\*Technique #12      Tell a Story**

A short but engaging story that relates directly to the main purpose of the lesson is a good way to get students thinking about the topic. It can be particularly useful if the story comes from the teacher's life and shows that s/he has a sense of humor or that s/he, like the students, sometimes makes mistakes but s/he has learned from them. For example, a geography teacher might tell a story about how she got lost

because she did not have a compass, and then she could begin teaching about how students use this important tool for determining direction.

**Technique #13        Quick Write**

This is a short writing prompt that can help tap into students' prior knowledge that is directly related to the topic for the day. For example, the first lesson of a unit on the earth could begin with this Quick Write prompt:  "Has the earth always looked the way it does today? If not, how has it changed? What changed it?"

**Technique #14        Video or Audio Clip**

A teacher may use a video or audio clip connected to the lesson objective to attract student attention, generate interest and help teach the lesson.  For instance, a chemistry lesson could be enriched with a video that shows what happens when sodium reacts with water.

**Technique #15        Social Barometer**

A teacher puts on the board a statement to which the students strongly agree, strongly disagree, or place somewhere in between.  Students form a 'barometer' in the room with their bodies by making one side of the room the 'strongly agree' and the other side 'strongly disagree' and another side "neutral side" after the statement is read out. A statement paused by a teacher should allow 'open-ended' responses. For instance, a civics teacher teaching about democracy may write a statement saying "General elections in Tanzania follow democratic principles." Students then move to the part of the room designated with *strongly agree, agree, disagree*, or *strongly disagree* depending on their opinions.  They talk to the others in their group and then share the reasons they have in common with students who have different opinions.

**Ice-breakers**

These are activities designed to 'break the ice' or to break the silence in a room where people are gathered with those unfamiliar to them.  The activities help students; learn the names of people in the room and something about their backgrounds, dreams, or opinions about a topic to be discussed during the class or seminar. The philosophy underlying the use of ice breakers is that people learn best in an environment where they feel comfortable with the people around them (Vavrus, 2011).

**\*\*Technique #16        Name Chain**

A teacher puts students in groups of 8-10 people. The first person in the group starts by introducing her/his name and what s/he does. For instance, "My name is Anna. I like Physics." The next person in the group repeats what Anna said and s/he adds another sentence. For instance, "Her name is Anna. She likes Physics. My name is Janeth. I like Chemistry."    The third person repeats what the two said and adds the third sentence. "Her name is Anna, she likes Physics.  Her name is Janeth. She likes Chemistry. My name is Benjamin. I like Civics." The game continues with other students in the group.

**Technique #17        Interview Me**

The teacher divides students into pairs, or the students select their own partner about whom they know very little (in other words, they should not interview their close friends).  The students in pairs interview each other for three to five minutes on the first day of class.  The teacher can also provide general guidelines for the interview, as in "find out three facts about your partner's family or about a favorite sport or hobby." After the interviews, the teacher reassembles the group and selects a few students from different pairs to introduce their partners to the whole class.

**Technique #18        Four Facts Game (One is a Lie)**

Each person writes down three to four facts about themselves, one of which is not true. Each person takes a turn reading his/her list aloud and the rest of the class write down one fact they think is the lie. When all are done reading the lists aloud, the first person reads his/her list again and identifies the lie. The rest of the class sees how well they did. The game continues with others identifying the lies in their lists and others checking the correctness of their guessing.

**Technique #19        The Talent Show**

Every student in the classroom selects one talent or special gift that s/he possesses and can demonstrate for the group. They introduce themselves, explain what their special talent is, and then perform their special talent for the group.  In a large class, a teacher could have 3-4 students each day or once a week share a talent throughout the term.

**Technique #20        Circle of Friends Game**

This is a good greeting game for students who are meeting each other for the first time (e.g. Form 1 or Form 5). Students form two large circles, one inside the other. Students in the inside circle face the students in the outside circle. A teacher asks the circles to take one step in the opposite directions, allowing them to meet each new person as the circle continues to move very slowly and as they introduce themselves.

# CHAPTER FIVE

## QUESTIONING TECHNIQUES

Good teachers use a variety of questioning techniques to engage their students and improve student learning. Questioning students is one of the most important teaching methods in a teacher's toolbox. The challenge is to find ways to encourage all students to answer the question either in their heads or with others in the classroom. The traditional and widely used method of asking a question and picking a student with his or her hand in the air is useful, but it should be combined with other techniques to maximize student learning for all students, even those who do not get picked or who do not raise their hands. This chapter includes 13 questioning strategies that effective teachers use to engage students. We encourage you to use at least two different kinds of questioning techniques in every lesson and to try out a new technique at least once in each topic in the syllabus.

**\*\*Technique #21      No Hands**

No Hands refers to picking students who do not raise their hand. Effective teachers use this strategy regularly, either announced or unannounced to the class. This ensures that every student knows that he or she could be picked to answer a question at any time. They can't avoid disengaging from the lesson by not raising their hand. When used regularly, this strategy is highly effective for improving student engagement and listening.

**\*\*Technique #22      Call and Response**

Call and response is a method that teachers have used for generations. The teacher asks a question and the whole class responds at once. Sometimes the teacher will give a clue to the class by asking a question and then saying "Class!" to elicit the whole class response. This strategy encourages and gives opportunities for the entire class to respond to questions.

**\*\*Technique #23      Ask Again**

This is used when a student gives an incorrect answer or replies with "I don't know." The teacher responds by saying, "I will come back to you again for the answer, so listen to the responses of your peers." Once another student gets the answer, the teacher goes back to the original student and asks him or her for the answer. This strategy encourages good listening and sends a message to students that they can and will learn the material.

**Technique #24      Simplify the Question**

This strategy can be used when a student is unable to answer a question.  The teacher prompts the student with an easier question or questions that will help lead the student to answer the original question. Prompting helps students to answer questions successfully, helps build confidence and improves understanding.  Additionally, other students who might not know the answer can also learn in the process. For example: the teacher asks, *Is the word **house** a noun?* The student says *I don't know*.  The teacher could then ask *What is the definition of a noun?*  The student replies *a person, place or thing*.  The teacher asks *Is a house a person, place or thing?*  The student responds *It is a thing*.  The teacher then asks the original question.  *So, is the word **house** a noun?*  The student answers *Yes*.

**Technique#25      Tell Me More**

Tell Me More encourages students to broaden or deepen their thinking about a topic or question.  It is used when a student answers a question correctly.  The teacher then asks the student to *tell me more* about the topic or asks the student a follow-up question that encourages higher order thinking skills – like comparing and contrasting, evaluating, combining ideas, and summarizing.  An example of this is might be in a biology class focused on the causes of water pollution, where a student mentions fertilizers used by farmers that are washed into rivers when it rains.  The teacher could ask the student to evaluate alternatives to fertilizer or to combine ideas about water pollution in this unit with ideas about the use of non-harmful organic fertilizers discussed in a previous unit.

**Technique #26      Agree or Disagree**

This technique starts with the teacher asking a question.  A student answers. Then the teacher prompts the class to agree or disagree. The teacher might say to the class, "If you agree, snap your fingers two times," or "give a thumbs up or raise your hand." Agree or Disagree is used to encourage all students to evaluate an answer and for teachers to gauge understanding.  It is most effective when teachers select students to defend their positions.  This helps to ensure that students don't just put their thumbs up or down like everyone else.

**Technique #27      Question of the Day**

The Question of the Day is a question posted on the board each day that is aligned with the learning goal for the lesson.  It is a question the teacher wants his or her students to answer correctly by the end of the lesson.  The teacher focuses student attention on this question at the beginning of a lesson and closes the lesson by having students answer it.  Here are examples for different subject areas:  Biology:  How does

poaching affect the ecosystem of the Serengeti? Physics: What is the difference between weigh and mass? Civics: What is a Parliamentary system of government?

**\*\*Technique #28      Equitable Questioning**

Equitable questioning means making sure that boys and girls, 'quick' and 'slow' learners, and students from different ethnic groups, religions, and backgrounds get to answer questions. Teachers should be aware of how they spread their questions out when selecting students to answer. They should make sure that all students are called on to answer questions. Teachers should reflect during and after a lesson whether or not they spread questions equitably around the room. Teachers should reflect on whether or not they are favoring some students over others when questioning. It is helpful to have colleagues watch and observe one another to help focus attention on equitable questioning.

**\*\*Technique #29      Higher Order Thinking Questions**

Teachers can engage students with different levels of thinking by asking the right kind of questions. Bloom's Taxonomy recognizes six levels of thinking. What follows are definitions of the levels and words to use when questioning students. **Remembering** (level 1): Students find or remember information. Teachers can use these words in their questions: *list, name, identify, locate, describe, memorize, define, or find ideas.* **Understanding** (level 2): Students understand and make sense out of information. Teachers should use these words in their questions: *explain, summarize, discuss, or paraphrase.* **Applying** (level 3): Students use information in new or similar situations. Teachers might use these words when asking questions: *apply, solve a problem, make a chart or diagram, draw or use information.* **Analyzing** (level 4): Students take information apart and explore relationships. Teachers should use these words in their questions: *categorize, examine, compare and contrast, or organize.* **Evaluating** (level 5): Students examine information and make judgements. Teachers can employ these words when formulating questions: *judge, test, critique, defend, or criticize.* **Creating** (level 6): Students use information to create something new. Teachers should use these kinds of words in their questions: *design, build, construct, plan, produce, devise, or invent.*

**Technique #30      Quick Questions**

This is a fast paced questioning technique where teachers ask questions quickly and students don't raise their hands. When a student answers the question correctly, the teacher moves on to ask another question. If a student answers incorrectly, the teacher immediately goes to another student for the correct answer. This is a good warm up activity or closing activity for a lesson. It is usually a short activity that takes just

a few minutes.  It creates a game-like atmosphere in the classroom and encourages active listening. Students can stand up while doing this activity to make it more active and fun.

**Technique #31        Wait Time**

When asking questions, it often a good idea to give students enough time – typically 5 to 7 seconds - to think about an answer before a teacher provides help.  Often teachers feel rushed or move too quickly to another student to break the silence and don't give students enough time to formulate an answer.

**Technique #32        Get it Right**

This strategy encourages students to answer questions fully and correctly.  When a student answers the question partially right, the teacher says, "You are almost there."  The teacher then follows up with prompts and more questioning to help the student "get it right."  The teacher can also ask other students in the class to help answer the question more fully and correctly.  Get It Right sends a strong message to students to think deeply and clearly about a topic.  It helps create a learning environment with high expectations and standards of learning.

**Technique #33        Review Question**

Effective teachers start lessons with review questions to help students connect with previous lessons.  These review questions are sometimes written on the board for students to answer when they first enter the room. Review questions are also used when preparing students for tests and examinations.  Here are some examples: Science: *What did we learn about water pollution yesterday?*  Math: *What did we learn last week about simplifying fractions.*  English: *Summarize what your learned on Monday about the past tense.*

# CHAPTER SIX

## LCTS FOR DEVELOPMENT OF NEW KNOWLEDGE AND REINFORCEMENT

This chapter presents Learner-Centred Teaching Techniques (LCTs) for the development of new knowledge and reinforcement stages of a lesson. Some teaching strategies discussed in chapters nine and ten can also be used in these two lesson stages.

**\*\*Technique #34       Case Study**

Students are provided with a narrative of a real-life situation that sets up a problem or unresolved tension which students can analyze, research, and resolve. Case study is different from other group activities because it involves a challenging problem that reflect a real life situation.  By using a case-study a teacher has an opportunity to show students how they can apply the information they learn in class. This makes the issues discussed in class more relevant as students relate them to real life situations.  A case study for Form 2 Civics in the unit on gender might include an analysis of a current gender-discrimination case that has been in the newspapers in Tanzania.

**\*\*Technique #35       Everybody Writes**

This strategy encourages students to write their answers before speaking and sharing with others.  The teacher asks a question and instructs the students to write a short answer.  Then the teacher calls on students to share their writing or directs students to do a turn and talk with a partner or form a small group to discuss the answers.  This helps students build stronger writing skills and clarify their thinking.  Teachers can also encourage students to use important vocabulary words or key concepts in their writing.

**\*\*Technique #36       Sentence Starters**

A sentence starter is a partial sentence written by the teacher that students are instructed to finish.  It is used to help students improve their writing and direct their thinking toward a particular topic.   This is very helpful for struggling writers who get stuck starting a sentence.  When done creatively, a sentence starter can also focus student thinking and help students better understand the learning objective.  For example, a Kiswahili teacher introducing the topic of proverbs might put the following sentence starter on the board and ask students to complete it:  "Mtu ni watu manake…"  The teacher could then call on a few students to share their completed sentences with the class.

**Technique #37  Word Walls**

In every subject there are key terms and words that students need to know to master the learning goals. These vocabulary words and concepts should be taught and reviewed every day and posted on the Word Wall section of the blackboard. Vocabulary words can be reviewed or introduced at the beginning of lessons and left on the Word Wall for future reference. Students can be instructed to use the vocabulary in their written responses or when answering questions or working with other students.  Teachers should also include vocabulary questions on tests and quizzes.

**Technique #38  Countdowns**

When teachers give students a time limit for completing an activity it indicates to students that class time is precious and needs to be used as efficiently as possible.  It can also change the pace in the classroom—from slower to faster—by saying, "OK, you have three minutes to solve these three problems.  Ready, steady, go!" Countdowns are also a good way to help students practice tasks that often take a lot of class time, such as passing out class readers or papers, by assigning the student at one end of each row to pass back or across the row the books or papers as quickly and carefully as possible.  The rest of the students in the row must also pass the book or papers as quickly as they can, and, in so doing, they save time by not requiring the teacher to pass out these materials.  The teacher can turn it into a competition the first few times: *Which row can pass out the class readers the fastest and most carefully—no dropping or tearing the books?  Here we go, 10-9-8-7...* The teacher then praises the students in the row that did it the fastest, and, in a few weeks, students will have learned to pass out materials efficiently without the need for much teacher involvement.

**Technique #39  Head Start**

As mentioned above, teachers who want to use every minute of class time to promote learning often put an activity on the board—a question to answer, a term to use in a sentence, a math problem—for students to work on while s/he is putting other information on the board or organizing materials for the day's lesson. A teacher can devote one corner of the blackboard to *Head Start* activities that get students thinking about the lesson as soon as they enter the classroom and, in some cases, before the rest of the students arrive. Teachers can praise students who complete these each day and use them as a quick review of the previous day's assignment or as a preview of the topic to be discussed that day.

**Techniques #40          Interactive/Guided Lecture**

This is one of the best alternatives for teaching new and difficult concepts. Interactive lecturing can be done in different ways, such as: giving students questions to answer at the end of the lecture; leaving gaps in the hand-outs or lesson notes on the blackboard for students to fill while a teacher is explaining the concept; and pausing for 1-5 min and asking students to answer a question, give an opinion, or discuss a concept in pairs, etc. All three options are meant to focus students' minds towards the presented concept. At the end of the lecture a teacher clarifies confusing concepts and corrects incorrect information. If possible, participation points should be given to students who answer correctly questions posed to the class. When appropriate, ask students to explain their answers.

**Technique #41          Posting Student Work For Learning**

This technique involves students working in class or at home to research a topic and prepare materials like a poster, notes or an essay to share with classmates.  This technique provides opportunities for students to learn from one another and to use higher-order thinking skills like evaluation and synthesis.  It can also save class time if the projects are assigned as homework.  For example, in Civics students study democracy. Students are then assigned the task of reading about a democratic country and preparing a poster, a written piece or some notes about democracy in the selected countries.  The next day students share their work with classmates.  This technique encourages individual learning and provides opportunities for students to learn from their peers.

**Technique #42          Learning Stations (Activity Circus or Gallery Walk)**

This is a good strategy to review a lot of topics or to show multiple applications from a single concept or principle in a very enjoyable way for students.  Learning stations are typically prepared by the teacher. Each station has a different task or focus related to the learning goal.  Another approach is to assign peer tutors to create or manage a learning station.  Peer tutors are given time to read and prepare materials like diagrams, models, photos, notes, or projects to explain the ideas for their station.  During the lesson the peer tutors lead discussions, make presentations or provide assistance as their peers move from station to station.   Learning stations require planning and preparation. There needs to be enough space for students to move between stations. Students need to know the task requirement at each station.  Students are placed in groups and each group is assigned a different starting station.  Then when the teacher signals the groups rotate and move to the next station.  It is a good idea at the end of the lesson to discuss what the students learned.

**Technique #43          Independent Practice**

Independent practice is a time for students to work by themselves.  It is also a critically important time for teachers to help struggling students in small groups or individually.  Learner-centred teachers use this independent work time not to grade papers or sit at their desks but to assist students who need help.

**Technique #44          Dictation**

Dictation is a learning strategy that has been used for generations.  The teacher dictates a word, sentence, or entire passage while students write down what they hear.  This provides students with an opportunity to learn new words and practice their listening, spelling, and writing skills.  When finished, the students check their work by comparing it with the original text.

**Technique #45          Question Parking Lot**

In a learner-centred classroom, students are encouraged to ask questions of the teacher and of their classmates to insure that they understand the lesson.  However, a student may ask a question that is not related to the topic for the day or addresses a topic to be discussed the following day.  In some cases, it makes sense to answer the question right away, especially if other students seem to have the same question.  In other cases, it may make more sense to wait until the end of the lesson or until the next day's lesson to answer the question.  In those cases, a teacher can write the question in a corner of the board—and in his/her lesson plan under "evaluation/remarks" so as to remember the question—in a spot called the *Question Parking Lot* where questions are 'parked' until they can be 'driven' back into the class discussion. The Question Parking Lot technique indicates to students that their questions are important and will eventually be answered or addressed in the future.

## CHAPTER SEVEN

## PARTNER AND GROUP WORK

Teachers who use the LCT approach regularly create opportunities for students to work with partners or in groups. Research shows that students can learn from one another and can learn and retain more information if they have opportunities to discuss what they are learning. This helps improve student achievement and, with proper questioning, deepens and broadens student understanding.

### 8.1 Partner Work

Partner work can be done during any phase of the lesson. It can be done in any subject area. Peers can talk with one another, can edit or comment on written work, can read together and help each other with completing an assignment during the guided practice phase of a lesson.

Partner work is most effective when teachers model how to work with a partner and establish routines for forming partnerships. It is helpful if the desks are in pairs or the students are instructed to turn or move to their pre-assigned partners. That way partner work is done efficiently and easily. Expectations like quiet voices, taking turns, talking only with your partner and not others, and following silence signals are examples of behavior expectations for partner work.

### **Technique #46     Turn and Talk

Although some students learn best by listening, others find it easier to learn in more active learning environments. Therefore, it is helpful for many students if the teacher poses a question and then tells students to turn and talk about it with their partner. Students take turns sharing their thinking. Finally, the teacher signals the students to stop talking and asks for volunteers to share their thinking. This strategy gives every student a chance to verbally respond to a question. It also promotes discussion and gives students opportunities to learn from classmates and to ask questions that they may not ask publicly in class.

### **Technique #47     Think-Pair-Share

This technique is similar to the Turn and Talk technique. The teacher presents a topic for discussion in the form of a question and asks the students to discuss possible solutions in pairs. Students are given time to think about the question. Then the teacher gives the signal to turn and talk with a pre-assigned partner. Discussion time can vary depending on the question and how the discussion is proceeding. In the final step, the teacher signals students to stop talking and calls on a few individuals to share their thoughts with the

entire class. The technique is good for generating class discussion, sharing opinions and ideas and consolidating understandings.

**\*\*Technique #48     Partner Work**

Partner work is very useful during the the guided practice phase of a lesson when students need help mastering a skill.  In large classes, teachers can not help all children individually.  So working with a partner gives opportunities for children to learn from one another.  Partner work is effective in every subject.  Here are some examples.

<u>Writing:</u>  Students can brainstorm or discuss their ideas with each other during the pre-writing phase of a lesson where students are thinking about what they will write.  They can also comment on each other's writing at the end of a writing lesson.  In addition, students can read their work to another student who then provides feedback and comments.  There may also be assignments where teachers pair up students to write something together, especially during a guided practice writing activity.  Finally, students can revise and edit each other's work to correct mistakes or provide feedback on the writing.

<u>Reading:</u>  Peer reading is a very effective method for students to improve their reading skills.  Students read to one another.  They take turns being the "teacher" and the "reader".  The "teacher" helps his or her "student" to pronounce words and asks comprehension questions established by the adult teacher.  The partners take turns reading and teaching.  Peer reading also helps students improve their reading fluency – how their voice goes up and down, how quickly and easily they read and how they group words together in meaningful phrases.

<u>Math:</u>  In math students can work together to solve problems, check each other's work, and explain their thinking using key vocabulary words.

<u>Other Subjects:</u>  Students can do partner work in any subject, especially during the reinforcement stage or guided practice part of a lesson.  The pairs guide each other to help learn the material.  They solve the problem together, talking it through as they work. They can take turns explaining and answering a question while the peer listens and provides feedback and assistance or the partners can do each problem together.  It is important for the teacher to establish the expectations so that the students understand how to work together and what they are supposed to accomplish during the time allotted for the activity.

**\*\*Technique #49     Peer Tutoring**

Peer tutoring is an effective method for helping struggling students.  In this approach a stronger student 'teaches' a struggling student.  For example, in reading, a good reader is paired with a struggling reader.

The good reader is a tutor "student teacher" who helps the struggling reader to read the passage or the book. The peer tutor follows along and helps the student sound out words, figure out the meaning of words and asks comprehension questions. Tutors can also be assigned to work with groups of students as well. Students who have mastered a skill or topic can help lead group discussions, present information, answer questions, and assist peers with problem solving. Students sometimes understand concepts better when explained by their peers rather than by a teacher.

## 8.2 Group Work

Learner-centred teachers provide meaningful opportunities for students to work in groups. Working effectively in groups is critically important in school and in life. There are key skills, attitudes, and habits that make for effective group work in school, at a workplace, in civic affairs, and family life. Students who learn to work well with others usually do better in school and are better prepared for life after school. Group work is also an important tool for teachers to focus their instruction on students with similar learning needs and for teachers to assist students in groups smaller than the whole classroom.

In Tanzania, *group work* is one of the most frequently used LCTs (together with q*uestions and answers)*. However, classroom observations conducted in recent years by Mwenge Catholic University lecturers in different schools indicated that pre-service and in-service teachers often do not have the needed skills for facilitating group works for effective learning. This chapter provides techniques and guidelines for how group work should be managed to facilitate effective learning.

## 8.3 Establish Group Work Expectations

Effective group meetings are organized around clear behavior and work expectations. Great teachers teach, model, and guide practice with these meeting expectations. The expectations may vary but some examples include: one person talks at time, people can agree to disagree, value or accept that people have different opinions and ideas, everybody participates, students take turns, students raise their hand before speaking, decisions are made by voting or consensus, people establish roles or jobs, etc. Teachers need to think about what behaviors they want to reinforce and make sure they teach and model these skills. They also need to convey clear instructions about how each student and the team will be graded. This is often done with a rubric explaining how each student and element of the project will be graded.

## 8.4 Creating Effective Groups
Teachers have several different grouping strategies to choose from when planning and executing lessons.

*Teacher-led or Student-led:* The first decision is whether or not the group is teacher-led or student-led. Teacher-led groups are most effective when small groups of students need specific instruction that only the teacher can deliver. Teacher-led review games, where students huddle up in teams to answer questions, are also fun and effective. Student-led groups are useful for practicing skills that have already been taught, discussing learning objective questions, talking about shared readings and books, completing projects, and learning how to work effectively in a group. Book Club meetings are examples of student-led discussions where each student reads the same book or article, develops discussion questions, and meets with the other Book Club members to discuss the questions.

*Leveled or Mixed-Ability Grouping***:** Another consideration is whether the groups are leveled, meaning all the students at the same ability level are in one group, or mixed-ability where higher-level and lower-level students are in the same group. In primary reading classrooms, students are typically grouped by reading level. This allows a teacher to provide targeted instruction to those with similar learning needs. Mixed-ability grouping works well when the goal is to encourage discussions across ability levels or to create opportunities for higher ability students to help the others in the group. These kinds of groups are great for civics or history discussions, writing club discussions where student share and critique each other's writing, and playing teacher-led team review games.

*Flexible Grouping:* Flexible groups are, as the name implies, flexible in terms of student composition. Students are placed or removed from a group depending on their needs. These groups can change from day to day, week to week, or monthly. Flexible groups are often used during the guided or independent phases of a lesson for students who have not mastered the skills the learning goals. For example, in math students who have not mastered the skill of the day are pulled into a small group to work with the teacher during the independent or guided practice work time.

## 8.5 Use of Grading Rubrics for Group Work

Great teachers often use grading rubrics to assess group work. A rubric explains how a project or assignment will be graded and is usually organized as a table with rows and columns marking each grading criterion. Rubrics are typically divided into key skill areas that are individually assessed and assigned a score and then combined into an overall score or level of achievement for the project. Rubrics help students see exactly what the expectations are for the project and how they will be graded as an individual member and as a team. Any effective group project should start with this end in mind – what are the learning

objectives and how are they reflected in the grading rubric so students have a clear learning target in front of them.

**\*\*Technique #50     Student-Led Discussion Groups**

Depending on the size of the class, a teacher may choose to use large or small groups. Once the class is broken into groups, students discuss the topic assigned by the teacher. These discussion groups are an opportunity for students to share ideas and solve problems with peers.  It is important that teachers model and establish group discussion expectations and behaviors. When groups are meeting, the teacher monitors the discussions and provides assistance when needed by moving through the classroom, listening to groups as they talk about the topic, offering suggestions, ideas and corrections if the discussion is going in the wrong direction or misinformation is being dispersed. At the end of discussion, one or more groups can share ideas with the entire class. Then the teacher can help synthesize, summarize, and focus the class on the learning goals and main ideas of the lesson.

**\*\*Technique #51     Class Presentations**

This is done through group work. A teacher breaks the topic—such as characters in novels in the Form 3 English syllabus—into smaller parts (the characters in *Things Fall Apart*, for example). Students in small groups are asked to prepare short (5-10 minute) sub-topics they will present in front of the class. In this example, the teacher might have asked one group to discuss the main qualities of Okonkwo while another presents on Nwoye.  The teacher gives enough time for each group to prepare. Students then make their presentations in a given time that includes answering questions the teacher or classmates may ask. At the end of each presentation a teacher corrects errors or mistakes in the presentation and asks the class questions about the presentations that encourage higher-order thinking, such as comparing and contrasting the character traits of Okonkwo and Nwoye after hearing the presentations. The strategy may work better with Form 3 and 4 students whose English skills are typically stronger, but even Form 1 and 2 students can be asked to work in groups to make short, simple presentations as a way to build their knowledge of a topic and improve their public speaking skills.

**Technique #52     Prior Reading Followed by Group Discussions**

Another strategy is to give students a homework assignment to read and answer questions about a topic that will be discussed the next school day.  When the students return to class, the teacher asks students to sit in groups and answer and discuss the questions about the readings. Having read about it, students are in a better position to discuss and share their understanding, and this makes better use of class time. As

students converse the teacher moves around to help students with difficulties. Then students can make presentations, and the teacher makes corrections and summarizes the main ideas of the lesson.

**Technique #53          Structured Role Plays or Simulations**

This is similar to group discussions but involves the higher-order thinking skills of application and analysis by applying key concepts and principles that the teacher has been focusing on to real-life, day-to-day events. Students are placed in groups and given students cards with information on them about real-life issues.  Each card has different information or roles concerning the lesson topic. Students take their assigned roles in the play as described in the cards. Then they take a few minutes to understand their roles well. When the time comes, each member of the group plays his or her part without reading. Each role reflects a different position or viewpoint on the central concept. The teacher at the end of the simulation or role play may ask students some questions to assess students' understanding of the concepts and 'big ideas' that were being illustrated. For example, a civics teacher may have been focusing on the concept of gender discrimination in class, and s/he could prepare role play cards or a simulation about examples from the newspaper or from contemporary Tanzanian society where there are differences of opinion about how gender discrimination should be addressed, and by whom.

**Technique #54          Taking the Class Outside**

Students in groups move outside of the classroom, such as to the front of the school where there is more space.  This can be particularly helpful when the groups might be talking loudly and would disturb one another in a small classroom. A teacher can ask groups to sit in different locations on the grass, while moving from one group to another helping with difficult questions. This strategy may be useful for schools with many streams and few subject teachers. In either method (inside or outside the classroom), students are encouraged to learn from each other.  Going outside in groups is also a very useful way to make use of the environment, such as in a lesson about insects or plants where the students can find and identify such objects.

**Technique #55          Jigsaw Groups**

This strategy is useful if a teacher wants to cover several pieces of new material that is new but relatively easy to understand. Students in different groups are given the concepts to read and discuss, but each group gets different, and partial, information.  Then a teacher breaks the groups to form new ones with members from different or previous groups. Each member teaches others the concepts discussed in his/her former group so that, together, the students get all of the required information.

# CHAPTER EIGHT

## LCTS FOR ASSESSMENT AND CONSOLIDATION

Learner-centred teachers use not only weekly quizzes and unit tests, but also quick, daily assessments to gauge student understanding, to identify students who need extra help, and to plan future lessons. Similarly, when closing a lesson (typically the last 5 to 10 minutes), the teacher asks students to reflect on what they learned by sharing in a whole class discussion, talking with partners or group members, writing short answers to questions, and completing exit tickets. This step is important for refocusing student thinking back to the daily learning objective and for teachers to assess student understanding.

**Technique #56    Exit Slip**

The exit slip (also known as exit ticket) is a quick, informal assessment that is completed by students at the end of a lesson. The teacher poses a problem for students to solve or a question to answer. The student responses are collected as students exit the class so that the teacher can gauge their understanding. This is useful for planning future lessons and for identifying students who need extra assistance. Exit tickets are often written on slips of paper, in notebooks, or on individual student chalkboards that can be held up in the air.

**Technique #57    Show Me**

In this strategy students show their work to the teacher who quickly scans or moves around the room to gauge student learning. A problem or question is posed and students solve it. Students show the answer by writing in their notebooks, showing small chalkboards or by using their hands. When given the "show me" signal students show their work. This strategy is similar to the exit ticket but is typically done in unison by students showing their work all at once. The teacher then quickly scans the room to get an idea of how well the students understood a concept or skill. Teachers can quickly assess who gets the lesson and who still needs more support.

**Technique #58    Heads Down, Hands Up**

When a teacher thinks that students might be embarrassed or uncomfortable admitting that they do not understand something, the students can be asked to put their heads down on their desks, cover their eyes, and answer some comprehension questions asked by the teacher by raising their hands if they think the answer is yes or no, A or B, 1 or 2, etc. Teachers can assure students that this is not a test but rather a way

to find out how many students in the class understand the topic at that moment and whether there is a need to review before moving to another part of the lesson. After each question, teachers can write down the exact number or approximate number (if it is a large class) of students who answered correctly and estimate whether 20, 40, 60, or 80% of the class is on track. In Tanzania, this assessment technique is very useful for obtaining the information required to fill in the *Student Evaluation* section in the lesson plan template.

**Technique #59      Ball Toss Game**

This is a semi-review and wake-up exercise when covering material that requires heavy concentration. Have everyone stand up and form a circle or something approximating it. It does not have to be a perfect circle, but students should all be facing in, looking at each other. The teacher poses a question for review, such as in a chemistry class learning about the periodic table where the teacher asks *What are different elements in the periodic table?*  The teacher tosses a tennis or paper ball to a student who names one element.  She then tosses the ball to another student who names a different element, and so on.  This technique can also be used for students to give their opinion at the end of a unit, for instance by asking what the students thought were the most important concepts discussed during the unit.  The teacher asks the question, tosses the ball to one student to give her opinion, and she then tosses the ball to another student to give his opinion, and so forth.

**Technique #60      Hat Trick Game**

Ask the students to work in groups and write down questions on slips of paper that are related to the topic discussed in a class. Each group should write one or two short answer questions on a slip of paper and put the slip in a 'hat' in front of a class. Select a small number of students (e.g. six) at random with the help of the class list. Take one question from the hat and ask the six students to answer the question. Anyone who knows the answer among the six can respond. The group gets points if no one among the six can answer their question.

**Technique #61      Demonstration Piece**

This technique is similar to a cold calling, but it instead focuses on a piece of writing.  After writing, the teacher selects a student to read his or her essay, poem, etc., to the class.  The class first provides positive feedback and then discusses how the piece could be improved.  This technique encourages students to do their best writing, celebrates student work, and helps all students improve their writing no matter what their writing level.

**Technique #62      Hot Seat**

Select one or more students to sit in front of the class.  Anyone in the class can ask the student(s) questions about the assignment or the lesson concepts and the students on the hot seat get points for every question they can answer correctly.

**Technique #63      Sum It Up**

This is a type of exit ticket where students sum up what they have learned at the end of a lesson.  They write an answer to a learning objective question or sum up what they learned in a whole class discussion or with partners or in a small group.  When students are summing up their learning with partners or small groups, the teacher circulates to listen and gauge student understanding.

**Technique #64      Chain Checking**

Students can also help check each other's work.  One method is called "Chain Checking."  When the first student completes an assignment, he or she takes the work to the teacher.  The teacher checks it for errors and then that student becomes a "checker."  As other students complete the work, they get checked and become checkers if they complete the assignment correctly.  If a student misses a problem, the checker circles it and that student goes to the teacher or a student tutor to help them with the problem.  This is a method that can be used to check answers quickly and it frees up the teacher to assist students who need help.  Students get immediate feedback on the assignment, and teachers are able to focus their attention on struggling students.

# CHAPTER NINE
# CLASS MANAGEMENT

Learner-centred teachers must be strong classroom managers. They train their students to transition from one task to another quickly, easily, and orderly. They teach, practice, and maintain daily routines so that students know what to do throughout the day. They maintain high standards of conduct in the classroom.

**\*\*Technique #65      Establish Routines**

There is nothing more important at the beginning of school year than establishing routines – how students enter and leave the classroom, how to line up, how to ask permission to use the bathroom, how to raise their hand to speak, how to work with partners, how to work in a group, how to work silently or quietly and all of the other daily routines in a class. Establishing these routines through practice and enforcement creates a safe and orderly learning environment. These routines often need to be revisited throughout the year in order to maintain high standards of conduct.

**\*\*Technique #66      Consequences – Fair, Logical, Consistent**

When students misbehave, teachers are often faced with choices. Do I send the student to the headmistress or discipline master's office? Do I use some form of punishment in the classroom? Do I contact the parent? For less serious offenses it is important that the consequence is **quick** with the aim of helping a student learn from the mistake, holding them accountable and returning them to the learning activity as soon as possible to avoid lost learning time. For example, a teacher might simply say, "Amina, you need to stop talking with Rose." The consequences also need to be **logical and incremental**. That is to say, they should fit the offense and start from a less severe consequence to more severe steps if the offenses are repeated. If Amina continues talking with Rose, the teacher could tell Amina to move her chair and sit next to Felix. Teachers also need to be **consistent and fair**.  Students should be treated equally, such that any student, not only Amina, is reminded not to talk to her neighbor during the lesson. Finally, teachers need to gauge the effectiveness of disciplining students publically versus talking with them privately. When disciplining students in front of the class, learner-centred teachers often maintain a firm voice with controlled emotions and when finished continue teaching as if nothing had happened. This conveys a message to the other students that their learning is important and that the teaching and learning will continue as usual.

**\*\* Technique #67     Silence Signals**

In active learning classrooms, students are talking with partners and other students during different parts of the lesson.  It is critical that teachers use effective silence signals to quiet the classroom. There are many signals for silencing students including chants, clapping sequences that students repeat, simple commands to listen, and other techniques.  What follows are some examples of silence signals.

*"If You Can Hear Me Clap Once"*

The teacher says in a regular voice, "If you can hear me clap once."  Then s/he waits to hear the class clap in unison one time.  If students are still talking, the teacher says "clap your hands two times" and waits for silence.  If any student is still talking, the teacher says "I can still hear someone talking" and then waits for silence.  If necessary, any student who continues to talk can be identified by name and told to stop talking.  Stopping and waiting between claps lets students hear the room get quiet and encourages the remaining students who are talking to stop.

*Clap, Clap, Clap*

This silence technique uses a simple clapping sequence started by the teacher and joined in by the students.  Once the teacher stops clapping so do the students and there should be silence.  Again, the teacher waits to hear the silence between claps and can clap again if necessary.

**3, 2, 1**

The teacher raises his hand and stretches out his five fingers.  He then slowly says "Five", then lowers one finger and says "Four", and then lowers one finger and says "Three," and so forth.  By the time the teacher has only one finger left in the air and says "One," the students should be silent.

*Give Me Five*

The teacher put his or her hand in the air and says "Give Me Five".  Then he or she waits until all of the students have their hand in the air and waiting silently for instructions.

*Class, Class, Class … Yes, Yes, Yes*

The teacher says class, class, class in any voice he or she wishes – regular voice, funny voice, whisper voice or some other voice and then the students say in unison "yes, yes, yes" in the same kind of voice used by the teacher.  When they finish saying yes, the students are silent.

**\*\*Technique #68     Everybody Does It**

The "Everybody Does It" strategy is critically important for maintaining high standards and expectations in the classroom.  So, when doing a silence signal, the teacher waits until every last child has stopped

talking.  Teachers can say "I am looking for 100%" or "this sounds like 100%" to let students know that even in classrooms with large numbers of kids, every student is held accountable.  The same is true for directions and routines.  Learner-centred teachers establish high expectation for 100% of their students.  No excuses.  No exceptions.  They set the tone with a firm and warm approach.  They avoid yelling at students and instead send a clear message to students that this is how we do it in our classroom.

**\*\*Technique #69      Firm Voice and Square Up**

Learner-centred teachers often use a strong, firm voice when disciplining or redirecting students.  They also square up and face the misbehaving student, particularly when addressing more serious behavior problems.  It is very important for teachers to keep their emotions under control as much as possible and deliver their message in a firm, no nonsense approach that conveys a message that misbehavior is unacceptable in this classroom.

**\*\*Technique #70      3/5/1**

This strategy is used during independent work time when the teacher moves around the room to reinforce the lesson concepts and monitor student works.  The teacher begins with a 3-minute explanation of what the students are expected to do during the work period.  Once the teacher observes that all students have started to work on the assignment, he or she circulates around the room to help students.  Then the teacher helps a student (or students) for around 5 minutes.  After that he or she stops to monitor the whole class for 1 minute to ensure that all students are working and engaged.  Then the teacher goes back to help individual students for 5 minutes and then stops for 1 minute to monitor the whole class or to comment on the common misconceptions observed in groups. This is repeated throughout the independent work time.  This technique is designed to help teachers balance individual student assistance with whole class monitoring.  If a teacher spends too much time and attention helping one or two students and other students get off task, this can cause problems.

## CONCLUSION

Teachers who apply LCT strategies have the mindset and skills to help students learn and succeed. The LCTs in this handbook have proven successful in classrooms around the world. It is our hope that you, as a professional teacher, will try some of these techniques and continue to improve your teaching skills. We understand that there are many effective strategies not included in this handbook. Some of these strategies may be included in future volumes of the handbook. We recommend that you try one new strategy at a time and then reflect on what worked and did not work well in the lesson. It is this process of trying new strategies, reflecting on them, and creating your own tool kit with effective strategies that builds a learner-centred teacher. We hope this handbook inspires and provides practical ideas for teachers who want to make a difference in the lives of their students.

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