INSTITUT CATHOLIQUE DE KABGAYI
FACULTY OF EDUCATION

Module Code: EDU6314

Module: METHODS AND TECHNIQUES OF LEARNING AND TEACHING

Academic Year 2023-2024

Lecturer: NKUNDIMANA Jean Pierre

Tel: 0783183317

Email: nkundajp5@gmail.com

HANDOUT OF METHODS AND TECHNIQUES OF LEARNING AND TEACHING

Brief description

The module aims to allow students to develop their understanding of all the techniques, strategies and methods of teaching and learning as well as their application in classroom. **Learning outcomes**

Having successfully completed the module, students should be able to demonstrate knowledge and understanding of:

1. Apply the basic concepts underlying the systems approach to teaching and learning
2. Apply a variety of methods in providing for individual learning differences in the classroom
3. Use various teaching methods in lesson planning, design, delivery and assessment 4. Devise teaching strategies adapted to different learners

Indicative content

Chapter 1: Introduction to Teaching

1.1. Definition of teaching
1.2. The concept of effective teaching
1.3. Role of Teacher for conducive learning environment
1.4. The concepts of teaching methods, strategies and techniques

Chapter 2: Principles to teaching

2.1. Creating an active learning environment

2.2. Establish a rapport between the students and the teacher

2.3. Feedback and communication

2.4. Inclusivity

2.5. Helping students to manage time

2.6. Motivation and inspiration

2.7. Adaptability and betterment

2.8. Concretization

2.9. Transfer

Chapter 3: Teaching approaches, methods, and techniques

3.1. Teacher-centered approaches

3.2. Learner-centered approaches

3.3. Distinction between two approaches

3.4. Teaching styles and related methods

3.5. Teaching and learning techniques

Chapter 4: Taxonomy of learning objectives

4.1. Types of Educational objectives

4.2. Bloom's Taxonomy of cognitive objectives

4.3. Krathwohl's Taxonomy of affective objectives

4.4. Dave's Taxonomy of psychomotor objectives

Chapter 5: Making scheme of working and lesson plan

5.1. Scheme of work

5.2. Lesson plan

References

Chapter 1: Introduction to Teaching

After the successful completion of this chapter the students will be able to:

- Have a clear understanding of the concept of teaching.
- Define teaching in more effective terms - Debate on aspects of effective teaching.
- Discuss various ways of effective teaching.
- Describe the role of teacher in making the learning environment more conducive.
- Analyze your own role as a classroom manager.
- Compare your teaching methods, strategies and techniques with model teachers' methodologies.

1.1.Definition of teaching

A child's learning depends on the ***talent and skills*** of the person leading his or her classroom, the teacher. Teachers are the persons who work in an applied discipline and face the reality of nature in the form of growing minds before them, their students.

Teaching is an art and an academic process. In this process students are made motivated by a number of ways to learn. A teacher begins with the student's view about different things, what do they know and think about the topic. The teacher keeps in mind the prior knowledge of the students. Teaching positively influences the way students think, act and feel.

Teaching is defined as a process in which students are prepared for learning by providing initial structure to clarify planned outcomes and indicate derived learning strategies. The teachers provide sufficient opportunities in the classroom for students to practice and apply what they are learning and give improvement-oriented feed-back (Good, T.; Brophy, J. 2000).

The teachers provide assistance to enable the students to engage in learning activities productively (Meichenbaum, D.; Biemiller, A. 1998). In the process of teaching the teachers take their students from a level of unknown to a level of understanding the new concepts.

Therefore an effective teacher is one who contributes to the learning environment by increasing keen interest of the students.

For the purpose of teaching the teacher has to play five major roles, namely:

a) As a subject matter expert

Teachers possess thorough knowledge of subject matter and go beyond the standard textbook materials. Teachers develop important and original thoughts on the subject matter. They tackle issues related to the discipline on the basis of their knowledge.

b) As a pedagogical expert

Teachers set appropriate learning goals and objectives and communicates them clearly. They show a positive attitude towards the subject, work to overcome difficulties that might hindrance in learning. They evaluate and mark students' work fairly. They guide students through critical thinking, and problem solving processes and help them to develop their own understanding.

Teachers provide feedback to students about their progress in learning.

c) As an Excellent communicator

A Teacher demonstrates effective oral and written communication, good organizational abilities and planning skills. He/she helps students learn to use effective communication skills; utilizes teaching tools appropriately and effectively.

***d)* As a student-centered mentor**

A Teacher tries to encourage each student to learn through a variety of methods and encourages student participation. Take his/her students to higher intellectual levels.

e) As a systematic and continual assessor

A Teacher makes an appropriate procedure for student outcome assessments in order to improve student learning experiences. He/she systematically assess his/her own teaching, keeps the class material fresh and new. He/she uses new teaching style to achieve the objectives of successful student learning by identifying his/her own weaknesses and shortcomings in the teaching process.

1.2. The concept of effective teaching

The concept of "Effective Teaching" is considered as a range of factors that collectively work together and result in effective learning. Most of the people agree that the basic purpose of teaching is to ***enable learning***. An elaboration to this concept is required to fulfill the needs of today's youth in a knowledge-driven society where information rapidly increases at great scale. Therefore the concept of teaching should move beyond the lower order skills of acquisition and reproduction of knowledge and facts.

The students require equipping them with more recent and advanced body of knowledge, and enabling them ***to apply, upgrade and create knowledge***. There are various aspects of effective teaching, such as:

1. Effectively managing a classroom,
2. Starting each class with a clear objective,
3. Engaging students with questioning strategies,
4. Consolidating the lesson at the end of a period, and
5. Diagnosing common student errors and correcting them that can be systematically measured by observing classrooms and by asking students.

1.3. Role of teacher for conducive learning environment

Teaching is a multifaceted profession. The teachers have to perform many roles other than the process of teaching and imparting information to the students. They take up vital places in the lives of the students in their classrooms. Mainly they set the tone of their classrooms, build a warm environment, and take care of students by looking for any sign of trouble. They become role models for the students.

The role of a teacher in the classroom as a leader is to lead students, and families. The classroom teacher is responsible for creating a positive and disciplined learning environment:

- In the classroom

- In co-curricular activities
- In interacting informally with students

In this way, each student is challenged to grow in knowledge and maturity, according to his life.

1.3.1. Redefining the role of the teacher

Teaching has become different from the old concept of "***show-and-tell***" practices. So as the role of teachers in a child's education has also been fundamentally changed. From the modern perspectives of the technical world, instruction not only consists of primarily lecturing to students, but offers every child a rich, rewarding, and unique learning experience. Students are no more required to sit in rows at desks and dutifully listen and record whatever they hear. Now they are more active and need to participate in the teaching and learning process by sharing knowledge with their peers and teachers. The educational environment has now been extended from the classroom to the home and the community and even around the whole world. Information is also not only bound to the specific text books but it is available everywhere. Schools are the centers of lifelong learning. In this changing era the teaching has been taken as one of the most challenging and respected career because whole of our nation's social, cultural, and economic health depends on it.

Hence every part of the teaching process and the role of the teachers should be reconsidered such as teacher students' relationship, teaching tools and techniques, rights and responsibilities of teachers, the form and content of curriculum, standards of assessment, preparation and professional development of teachers and structure of the schools as a working environment. So that teachers themselves and their occupation better serve schools and student.

1.4. The concepts of teaching methods, strategies and techniques

(1) Teaching approach = Assumption. An Approach is a set of correlative assumption about the nature of language and language learning. An approach is treating something in a certain way. Teaching approach is your own personal philosophy of teaching. Approach is a set of assumption (why). An approach is something that reflects a certain model or research paradigm. Approach is a set of theories and principles. Learning approach is the way teacher view the learning process, in which there are learning strategies with all his theories.

Learning approaches can be divided into two approaches are student-centered approach and teacher-centered approach.

Teaching Approach is set of principles, beliefs or ideas about the nature of learning which is translated into the classroom.

(2) Teaching strategy:

Strategy usually requires some sort of planning for setting goals. Learning strategies is a teacher of learning activities undertaken with the aim of the learning process that takes place in the classroom can achieve (goals) to effectively and efficiently. In principle, the learning strategy of conceptual plans that will decisions be taken in the learning process. Viewed from the side of the strategy, can be grouped into two general categories: exposition-discovery learning, and group-individual learning. Learning strategy is still conceptual, necessary for the implementation of certain teaching methods.

Teaching Strategy is a long-term plan of action design to achieve a particular goal.

(3) Teaching methods: Method can be considered as a way of learning that must be taken to realize the plan that has been a teacher in real and practical activities in the classroom to achieve learning activities. Thus, the strategy is "a plan for achieving goals" while the method is "a way for achieving goals". Method is a settle kind of procedure, usually according to a definite, established, logical, or systematic plan. Method is general way in which activity is conducted. A method is a plan for presenting the language material to be learned and should be based upon a selected approach. Teaching method: refers to how you apply your answer from the question stated in teaching approaches to your day to day instruction in front of your students.

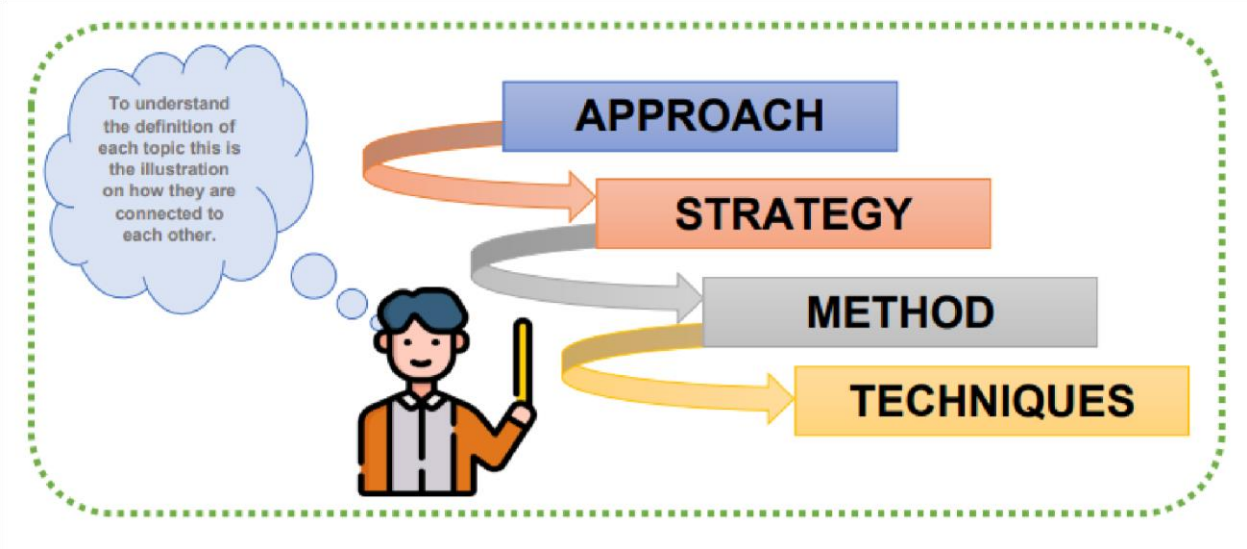
Method is defined as a habitual, logical, or prescribed practice or systematic process of achieving certain and results which accuracy and efficiency, usually in a preordained sequence of steps.

A method is how to carry out these assumption and theories (how). A method is a set of procedures that describe how to teach a language. A method is the way you apply these theories and principles. A method is an overall plan for the orderly presentation of language material, no part of which contradict, and all of which is based upon the selected approach.

There are many methods of learning: lecture, demonstration, discussion, simulation, laboratory, field experience, brainstorming, debates, symposium, and so forth.

Teaching Methods: A systematic of doing something it implies an orderly logical arrangement of steps and its procedure.

(4) **Teaching techniques** Technique is the various methods and process developed through knowledge, skill, and experience. Technique is a very specific, concrete stratagem or trick designed to accomplish an immediate objective. Technique is a procedure or skill for completing a specific task. Teaching technique: these are little sneaky tricks we all know and use to get the job done in the classroom. Technique means a systematic procedure, formula, or routine by which a task is accomplished. Techniques are steps to achieve certain



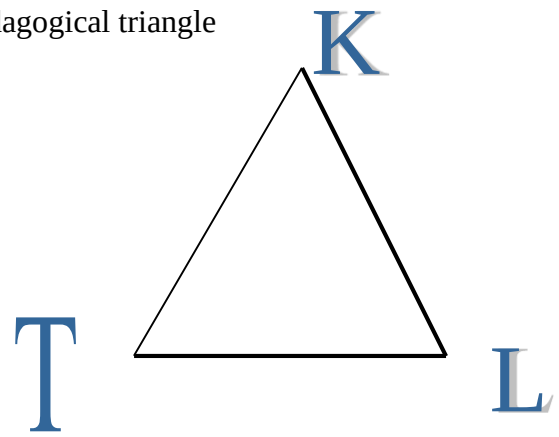
goals. Technique is a classroom device or activity and it is more specific than method. A technique is the tools and task you use to make your method succeed. A technique is implementation. Techniques must be consistent with a method and therefore in harmony with an approach. Technique is a practical method or art applied to some particular task or skillfulness in the command of fundamentals deriving from practice and familiarity. Learning techniques is the way in which teacher in carrying out the method of learning.

(5) **Teaching strategy** is well – defined procedure uses to accomplish a specific activity or task. Teachers' particular techniques, style or trick to accomplish a one objective.

1.5. Didactic triangle

It has become classic to analyze every pedagogical situation through a triangular diagram. According to Houssaye (1996), the pedagogical situation can be defined as “a triangle composed of three elements: i.e. knowledge, teacher and learners”.

Illustration of the pedagogical triangle



Source: J. Houssaye (1996, p.15)

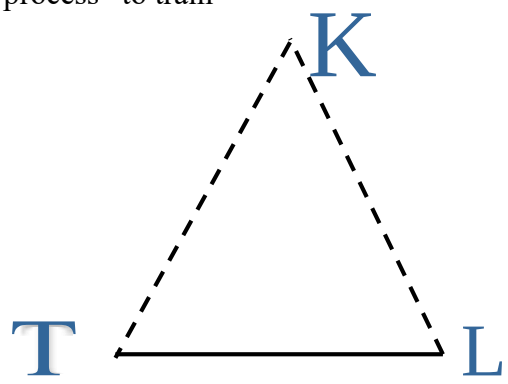
On this triangle, knowledge (K) represents the content, disciplines, programs, etc. Learners (L) refer to pupils, trainees, students, etc. The teacher (T) refers to the lecturer, facilitator, trainer, educator, initiator, accompanist, etc.

There are three pedagogic processes: to “teach " that privileges the axis teacher - knowledge, to " train" that privileges the axis teacher - pupil, to " learn " that privileges axis pupils - knowledge. Knowing that one cannot take these three axes as equivalent, it is necessary to remain with one. The process "to ***teach***" is founded on the privileged relation between the ***teacher and the knowledge***.

When teaching is taking place, it could be believed that the pupils and the teacher constitute important elements. This is however not true. The real motor of the pedagogical situation is the privileged relation between the teacher and his knowledge.

Generally when the interaction knowledge - teacher is privileged, the teaching is teacher-centered and the pedagogical model used is of the lecture type whereby the teacher must transmit the content.

Illustration of the process “to train”



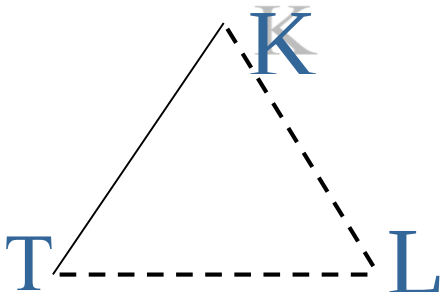
The process "to train" privileges the relation teacher- pupils. This axis concerns the didactic contract, meaning that the relation that determines implicitly what every partner has the responsibility to manage and of which he will be responsible in front of the other.

It is a “reciprocal waiting system that describes the teacher and pupils expected behaviours about knowledge acquisition" (De Corte, 1996, pp.18-19).

This contract is not negotiated between two equal partners, it remains fundamentally dissymmetric. The educator occupies here an irreplaceable place, since he anticipates the right side of the other. Thus, among the two partners, the teacher is the sole to have a legal obligation towards the pupil, but, he is also the one who, implicitly or not, determines what will be the pupil's responsibilities. The class pedagogical environment (programs, methods, strategies, manual, learning activities, and redefine the two others which are excluded according to it.

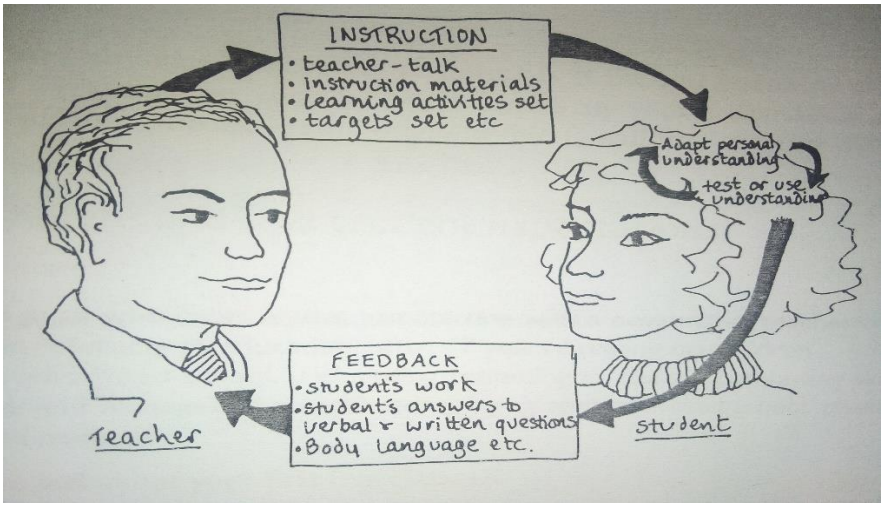
Illustration of the process “to teach” :

Geoff, P. (2004) confirmed that if teaching was one-way process, we would learn perfectly satisfactorily from books and videos, and teachers would just be an unnecessary frustration. The



student communicating directly with the teacher, and the teacher checking the students’ work, are

both examples of feedback for the teacher. Without this feedback the teacher cannot know whether or not understanding or learning has taken place.

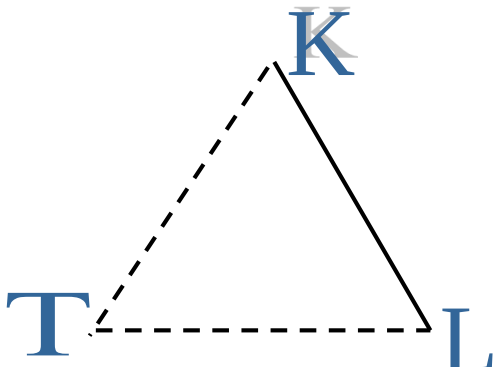


Communication and learning requires that the following chain works perfectly:

What I mean ⟶ *what I say* ⟶ *what they hear* ⟶ *what they understand*

One cannot finish this process without indicating that the relation between the teacher and the learner must be analyzed with reference to the targeted objective that is the diagnostic of pupil's learning difficulties and the understanding of the content.

Illustration of the process "to learn":



The process "***to learn***" is based on the privileged relation between the ***pupils and the knowledge***. In this process, the teacher waits for the pupils to access the knowledge directly without his forced mediation. They can access knowledge which is immediately accessible to them without

the teacher. The teacher is not absent as such but he plays another role, that of preparer, accompanist of the learning situation.
Learning is a hidden mental process over which the teacher has no direct control. Learners develop a personal understanding of the material studied, and the abilities to be acquired.

In brief, during the teaching/learning process the learners improve by correcting misconceptions and adding to their understanding, thus achieving a closer and closer approximation to the ideal learning outcome. This process requires corrected practice, but it is not enough for the teacher to correct the student's work: learners must correct their own understanding. Learning is a private problem-solving process, the student's problem being to create a personal understanding of the skills and knowledge to be learned.

Self-assessment questions

1. What is your understanding of teaching as an art and an academic process? Discuss how these two aspects contribute to effective learning.
2. In what ways can a teacher positively influence a student's thinking, actions, and feelings? Share examples from your own experiences or observations.
3. Why is it important for a teacher to know a student's prior knowledge before starting a lesson? How can this knowledge shape the teaching process?
4. What are the key roles of a teacher as a subject matter expert? How do these roles impact students' learning experiences?
5. How does effective communication contribute to a teacher's success in the classroom?
6. Discuss the importance of both oral and written communication skills.
7. Why is it essential for teachers to assess their teaching methods regularly?
8. How can this practice improve student learning outcomes?
9. Explain the Didactic Triangle and its significance in the teaching and learning process.
10. How does this model influence the interactions between teachers, students, and knowledge?

CHAPTER 2: PRINCIPLES OF EFFECTIVE TEACHING

Teaching is a complex profession and it would be chaotic if it works without taking into account the major principles of teaching and learning. The principles of teaching are the basic guidelines or foundations that say how teaching should be carried out and how it must be catered. We will be discussing the basic principles of teaching and how to teach effectively.

After the successful completion of this chapter the students will be able to:

- Understand the basic principles that guide effective teaching
- Apply the principles of effective teaching

The principles of teaching include and are not limited to:

2.1. Creating an Active Learning Environment

A classroom must never be monologue in nature. It should be a platform for dialogues where the students and teachers are equal participants. In order to foster an active learning environment, teachers can incorporate activities. If they are teaching online, before beginning the online class, they can post a trick question or assignment and then discuss it in the class later on. An active environment is essential to make learning effective and efficient.

In **active methods**, the teacher creates a learning environment where the learners take part and communicate among themselves in the group.

The purpose of active methods is to give to the learner more autonomy, more initiative, more personal motivation and to develop his/her creativity.

How can he/she use his/her creativity, critical thinking and sense of responsibility? The learner is thus placed in the heart of the teaching activity; the teacher is someone who organises and manages the learning.

We tend to remember

- 10% of what we read
- 20% of what we hear
- 30% of what we see
- 50% of we hear and see
- 70% of what we say
- 90% of what we both say and do

2.2. Establish a rapport between the students and the teacher

One of the most overlooked things when it comes to teaching and learning is the rapport between the teacher and student. Imagine you are strapped into a chair with a plaster on your mouth and someone hands you a book. If you were asked to memorize or learn what is in the book, would you be able to do it? Running a tight ship is not a principle of effective teaching. The students must feel at ease and they should feel comfortable. They shouldn't feel as though they are strapped to the chair.

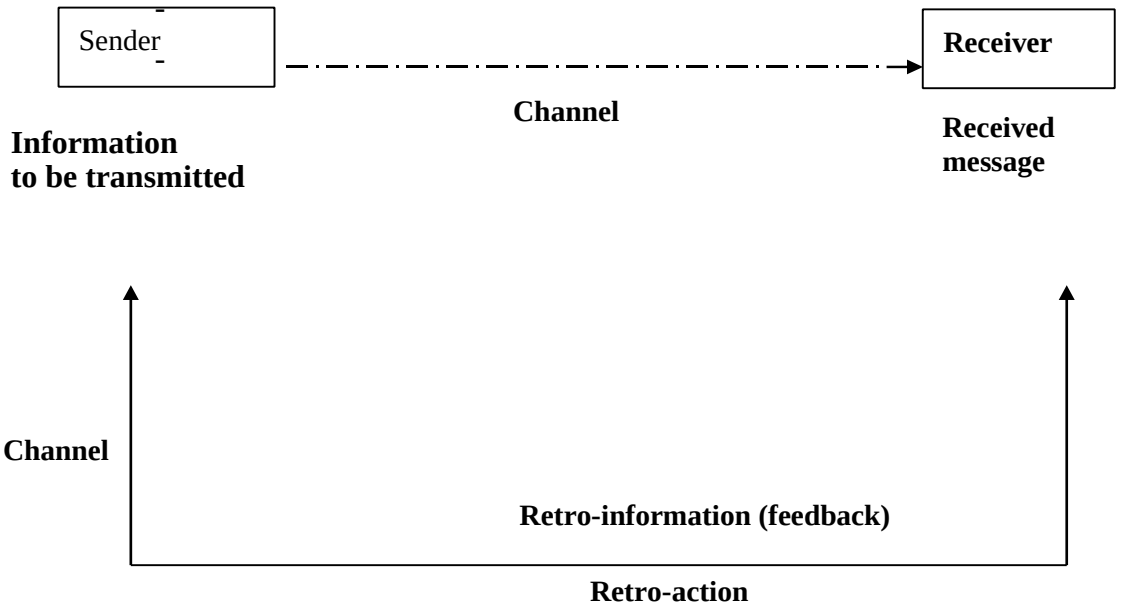
2.3. Feedback and Communication

Communication lies at the heart of effective teaching and learning. It is impossible to talk about the principles of teaching without highlighting the importance of communication and feedback. How would you know if the students have understood a concept or not without gathering feedback? Evaluations and assessments are different. That encompasses a lot of other things like learning ability, capacity, and likewise. To ensure that your teaching methods are effective and the approaches are appropriate, teachers must talk to their students at regular intervals. This can happen only if you follow the first two principles.

Diagram of didactic communication

Didactic communication is composed of the following essential elements:

- The teacher is the sender-receiver
- Learners are receiver-senders
- The information provided by the teacher is a sent message
- The information from learners is feedback
- The means or resources used during the teaching/learning process are the channel.



Barriers to didactic communication and techniques to overcome these barriers

Examples of "noises"	**Techniques to overcome these "noises"**
The information provided by the teacher is complex and not clear	The teacher should provide information which is clear and simple. For instance, he/she should use short sentences and simple words that the learners can understand.

Both the teacher and the learner can't hear properly.	Oral techniques to help learners to hear properly: - Speak clearly and loudly so that the whole class can hear what is said; - Do not read the summary of your lesson plan, look at your learners in their eyes while speaking and keep eye contact; - Be enthusiastic while teaching; - Speak clearly and loudly so that the whole class can hear what is said;
	- Use gestures and mime to support your teaching, but avoid a behavior which can distract/disturb students, such as a funny physical appearance, the way of dressing; - Use eye contacts to support your verbal language; - Invite students to ask questions; The three techniques the teacher should use in order to listen better are the following: - To identify, organize the key words uttered by the learner; - To be able to summarize the main points presented by a learner; - To fight against any form of absent-mindedness and to keep full control of his/her class, the teacher must always keep discipline and silence.

The teacher lacks efficient ways of asking questions.	**To improve ways of asking questions**, the teacher must: - Think about key-points of the lesson before teaching that lesson. Classify them according to the order of priority but be ready to bring any necessary change as you take into account learners' answers; - Match the type of question with a given part of the lesson; - Draw learners' attention for the forthcoming lesson, ask open questions at the end of a lesson and allow learners to give their point of view, for making some guesses about the outcomes for the discussion; - Distribute questions to all the students, give them some time to reflect upon, call upon a learner to give his/her answer; - Listen carefully to the learner's answer; - Encourage correct answers as follows: « yes », "correct", "that is it";
	- Do not laugh when a learner gives a wrong answer and do not allow the learners to laugh; - Give the questions to all the learners so that they may provide their answers; - Encourage even those who are not eager to participate so that they too may have opportunity to give their answers; - Rephrase the question, that is, ask the same question to other learners so that you may get many answers; - Use inciting techniques in order to put your learners in the right track once they encounter problems or fail to answer.
Ineffective interaction between the teacher and the learner.	The teacher should always try to create an adult-adult interaction between him/her and his/her learners.

Discrimination, low esteem, lack of attention vis-à-vis a group of learners (e.g girls).	The teacher should neither favour any group of learners. All the students should benefit from equal opportunities (e.g.: the teacher should avoid using any form of language which denotes bias or discrimination).
Failing to manage time	The teacher should know how to manage his/her time

2.4. Inclusivity

Every child is different. The type of learning, the pace at which they learn, their understanding, everything varies from one person to the other. It was also found that the previous learnings and understandings of the students affect their studies. Accepting all kinds of learners and catering to each of them is one of the principles of teaching that cannot be sidelined. The last thing that a teacher should be is judgmental and it is beyond criminal to make a student feel as though they don't belong in the classroom. Make everyone feel welcomed and as mentioned in the previous points, try and make the classroom a safe space where every student feels heard and valued.

Key Terminologies / Concepts used in Inclusive and Special Needs Education

- ***Assistive devices***: these are equipment and materials used to facilitate or aid the functionality of a person with impairment.
- ***Child-Friendly School (CFS)***: It is an educational setting characterized as inclusive, healthy, and protective for all children, irrespective of their differences in abilities, gender, social status, background, and others.
- ***Disability***: it refers to the difficulties faced by an individual because of impairment. It is also referred to as activity limitations or participation limitations. Examples of disabilities are visual disability, hearing disability, physical disability, communication disabilities, intellectual disabilities, and multiple disabilities. Some disabilities are mild, or moderate while others are severe. Disabilities can be seen or not seen.
- ***Habilitation***: Habilitation refers to a process aimed at helping individuals with disabilities attain, keep, or improve skills and functioning for daily living.
- ***Handicap***: Handicap is a failure to perform tasks because of impairments, disabilities and community influence towards the child.

- ***Impairment***: This is a damage to a part of the body (organic system) caused by genetic factors, disease, accident, or other factors which may cause a certain disability. It is a partial or complete loss of use (or ability) of certain part of the body.
- ***Inclusive Education***: It refers to an educational process that addresses all learners' educational needs. It is based on the principle that every learner is unique, can learn, develop differently, and get individualized support.
- ***Integrated education***: It refers to the process of bringing children with disabilities into an ordinary school with focus on the individual child needs and fitness into the existing school system. The child can adapt to the existing system or fail.
- ***Learning difficulties***: Learning difficulties refer to a group of disorders involving significant difficulties in listening, speaking, reading, writing, reasoning or mathematical abilities.
- ***Rehabilitation services***: Rehabilitation refers to regaining skills, abilities, or knowledge that may have been lost or compromised because of illness, injury, or acquiring a disability.
- ***Resource room***: This is a room/place equipped with specialized resources, in a school, for supporting and teaching learners including learners with SEN.
- ***Special Educational Needs (SEN)***: These refer to the specific needs that a learner requires in schooling. This learner requires specific support from the teacher.
- ***Special Needs Education (SNE)***: Special Needs Education is an education for Learners with disabilities, in consideration of their individual educational needs. For instance, in Rwanda, some children learn in specialized settings with trained teachers who provide adjusted educational programmes or services known as "Special Needs Education" (SNE).
- ***Special Needs***: Special needs are any of various difficulties (such as a physical, emotional, behavioral, health, ultra-poor or impairment) that cause an individual to require additional or specialized services or reasonable accommodations (in education or recreation).
- ***Children from Very poor families***: These are children that are living in extreme poverty. Learners who are brought up in low-income families are at risk for academic as well as social problems, poor health and well-being which can in turn undermine their educational achievements.

2.5. Helping students to manage time

Assignments, tests, notes, homework, examinations, evaluations, attendance, there are a lot of things that the students have to take care of and not just for one subject. While all this is for the betterment of the students, the teachers should understand that the day is just 24 hours. Teach your students the importance of time management and how it can be implemented to make them stress free.

More often than not, teachers use statements like “we were also students and we managed to do all this.” Avoid making such statements because it makes the students think as though everything they do is unimportant. Use more affirmations like “I understand it might be difficult, who cannot try to do it this way?” Such statements will help the students and make them believe in themselves.

2.6. Motivation and inspiration

More often than not, students feel demotivated. They don’t feel like studying or doing the work. Teachers must reaffirm their faith and inspire them to do better. This is another important principle of teaching. When it comes to principles of teaching, motivating and inspiring students, makes it to the chart because one of the primary concerns of teachers is to shape the future generation. Motivating the students even when they fail and fall down must be the root of the concern for teachers. Motivated learners develop behaviour which pleases the teacher:

- Learners are interested in what has been taught
- They are constantly attentive
- They put more personal efforts
- They do not get tired and they never get discouraged
- They are interested their progress and achievements
- They learn more quickly than other learners and understand better.

How can we make a student want to learn? Below are most common reasons that students have for wanting to learn:

1. What I am learning is useful to me

Some students want to be able to do like their friends, or to be able to do their own tasks. But we have to recognize the fact that most school and college learning has little everyday application for most learners.

2. The qualification for which I am studying is useful to me

It is generally recognized that schools in areas of high unemployment have a great deal of trouble motivating their pupils. Young people often do not see the point of working for qualifications that they believe will be of no use to them when they leave school. Without a long-term goal for their studies, students become demotivated.

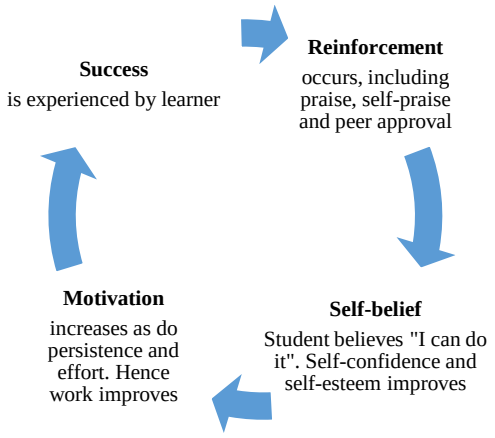
To be convinced of the purpose of learning, students must look at the world outside their college or school. Work experience, trips, visits and visitors can all help to make learning seem relevant and purposeful. Students need frequent reminders of the short-term and long-term point of studying what you are offering them. You need to "sell" what you are teaching.

3. I find I usually make a success of my learning, and this success increases my self-esteem

This motivator is the most powerful. It is dominant even when the other motivators are involved. It is the engine that drives the learning process. But it can work both ways.

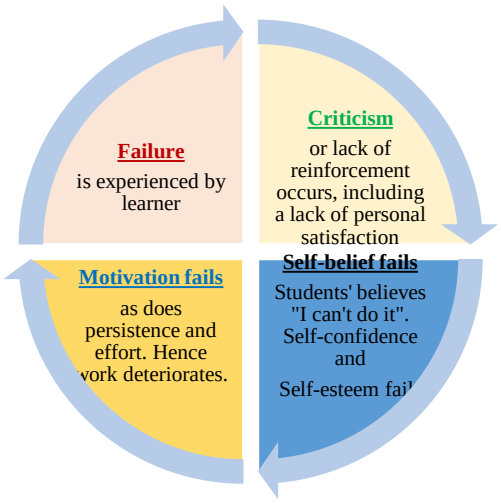
In the same way, if a student completed the work in your last lesson satisfactorily, and was given some praise or recognition for this, success will make them approach your next lesson more positively. If they are usually successful in their learning, they will develop a positive belief in their ability to learn in your classes. Beliefs are permissions which switch on our capabilities.

This is the engine that drives all learning: success breeds success.



Source: Geoff (2004, p.47)

Failure to get this engine going will mean that learner is going nowhere. However, engines can work in reverse:



4. I will get the acceptance of my teacher, and/or my peers, if I learn effectively

Some students may be motivated by a need to be approved by the teacher. This is more likely to occur if the teacher has a good relationship with the student. Students also want approval from their peers, or at least enjoy being successful in measuring themselves against their peers. This is why **competitions or challenges can often produce strong motivation** in a class of students.

5. I expect the consequences of not learning will be unpleasant

Teachers must already mention how important **checks and tests** are in ensuring that learning really has taken place; however, they are also very important as motivators. Do not underestimate the

motivating effect of an anticipated test. Failing a test can motivate if the learners believe in their own ability to succeed eventually. Persistent failure is a huge **demotivator**. Deadlines are good motivators, but you must be consistent to manage them.

6. What I am learning is interesting and appears to my curiosity and I find that the leaning activities are fun

Students like most people, find something more interesting if it relates directly to their own lives or to their own enthusiasms. The idea is to aim for student relevance in preparing work for them. Here are some ways of increasing student interest:

- Show interest yourself, be enthusiastic
- Focus on curiosity
- Show the relevance of what you are teaching to the real world: bring in real objects, show videos of applications, go on visits, have visitors, etc.
- Make use of student creativity and self-expression
- Make sure students are active
- Change the students' activity regularly
- Make use of surprises and novel activities
- Use of group competitions and challenges
- Make the learning directly relevant to the students' lives
- Give the subject human interest

2.7. Adaptability and improvement

The education background is ever-changing and ever-evolving. If a tree refused to spread its roots as it grew, it would be relocated before we know. The same would happen if the teacher stops learning. No matter how learned you think you are, there are still things that you are unaware of. Be informed about the changes that are happening in the field and employ what you can in your classroom. If you are teaching online, use innovative teaching methods and approaches and cater to your students accordingly.

Teaching is a profession with a lot of covers. It is not just about subject knowledge or presentation skills. A good teacher knows how to make the classroom think outside the four walls of the classroom (be it virtual or traditional).

Online teaching is the new normal and it looks like it is going to be the reality. Since it makes quality education more accessible and brings ease and efficiency to the table, this alternative is here to stay. Keeping one of the main principles of teaching, adaptability in mind, teachers should opt for a good online teaching app and start educating.

2.8. Concretization

Effective teaching always starts with something **tangible**, **existing**, **concrete**, which means that the teaching focuses on a **real context**. Reality gives meaning to the context and allows the learner to understand any context, referring it to a well-known and familiar context.

There are two classical approaches of a lesson: **induction** (to move from the specific to the general or from concrete to abstract) and the **deductive** argument (begins with the general and ends with the specific).

The two approaches have their proponents. Even if until now research has not yet stated the best approach, experienced teachers support the **inductive argument** because a learner can integrate a new element only if it is, in one way or another, a solution to his/her problem.

School activity must be placed in a context of life. It must be placed in a meaningful context, a network of realities experienced by the learner or which are alive for him/her.

A **meaningful context** arouses the learner's interest and motivation. For an adult to accept training, it must bring a solution to his/her problems, in the context he/she is living in.

He/she hopes to benefit from it through the improvement, which will take place in his/her life.

The most significant motivation factor for an adult is the **guarantee** that the training will contribute to the improvement of his/her professional and personal status".

This is valid not only for adults, but also for all learners in general. All the New School trends developed in block 1 are based on the child's interest pedagogy.

However, this concern for pedagogic realism should not hamper the analysis of abstract concepts and problems solving. The learner needs to have higher intellectual capacity so that he/she can be able to carry out true transfer of learning through generalisation and therefore deal with other mental activities.

If the capacity to analyse abstract concepts constitutes one of the main goals of education, learning activity must aim at the organisation of successive stages in order to help the learner grasp the contents gradually make and master these concepts.

2.9. Transfer of learning

Generally, in the psychology of learning, we talk about transfer when preliminary learning has an impact on the acquisition of new behavior. According to Legendre (1993, p. 1370), transfer refers to the application of classroom "acquisitions" in a new situation. BONWELL, C. & EISON, J. (1991) clarify that transfer of learning occurs when learning in one context or with one set of materials impacts on performance in another context or with other related materials.

For example:

- Learning to drive a car helps a person later to learn more quickly to drive a truck;
- Learning mathematics prepares students to study physics;
- Learning to get along with one's siblings may prepare one for getting along better with *others;*
- Experience playing chess might even make one a better strategic thinker in politics or business.

Transfer includes:

a) Near transfer: refers to transfer between ***very similar contexts***, as for instance when students taking an exam face a mix of problems of the same kinds that they have practiced separately in their homework, or when a garage mechanic repairs an engine in a new model of car, but with a design much the same as in prior models.

b) Far transfer: refers to transfer between contexts that, on appearance, seem ***remote and unfamiliar to one another***.

c) **Reflexive** or **low road transfer:** involves the generating of well-practiced routines by stimulus conditions similar to those in the learning context.

d) **Mindful** or **high road transfer:** involves deliberate effortful abstraction and a search for connections.

Usually, the context of learning (classrooms, exercise books, tests, simple streamlined tasks) differs clearly from the ultimate contexts of application (in the home, on the job, within complex tasks). Consequently, the ends of education are not achieved unless transfer occurs.

✓ **Positive versus negative transfer**.

- **Positive transfer**: occurs when learning in one context improves performance in some other context. For instance, speakers of one language find it easier to learn related than unrelated second languages.
- **Negative transfer**: occurs when learning in one context impacts negatively on performance in another. For example, despite the generally positive transfer among related languages, contrasts

of pronunciation, vocabulary, and syntax generate uncertain blocks. Negative transfer typically causes trouble only in the early stages of learning a new domain.

Here are eight discussion questions based on Chapter 2: "Principles of Effective Teaching" that you can ask your students:

Self-assessment questions

1. What does it mean to create an active learning environment, and why is it important for effective teaching?
2. How can a teacher build a strong rapport with students, and what impact does this have on learning?
3. Why is feedback crucial in the teaching and learning process, and what are some effective ways to provide it?
4. In what ways can inclusivity be implemented in a classroom, and how does it benefit all students?
5. What strategies can teachers use to help students manage their time effectively, especially with multiple assignments and tests?
6. How can teachers motivate and inspire students, even when they face challenges or setbacks?
7. Why is adaptability an essential quality for teachers, especially in a rapidly changing educational environment?
8. How does the concept of "transfer of learning" apply to real-life situations, and why is it a critical principle of effective teaching?

CHAPTER 3: APPROACHES AND METHODS OF TEACHING

"A thousand teachers, a thousand methods." (Chinese Proverb)

Teaching and learning approaches are mainly either **teacher- centered approach** or **student-centered approach.**

In ***teacher- centered approach*** the teacher is perceived to be the only reliable source of information in contrast to the learner-centered approach.

In learner-centered approach in which it is premised on the belief that the learner is also an important resource because he/she too knows something and is therefore capable of sharing something.

After the successful completion of this chapter the students will be able to:

- Different approaches to having good study skills
- List the various methods of teaching and where each is applicable
- The difference between teacher centered and student centered approach to learning

3.1. Teacher- centered approaches

In the traditional approach to college teaching, most class time is spent with the professor lecturing and the students watching and listening. The students work individually on assignments, and cooperation is discouraged.

Teacher-centered approaches are regarded as traditional because they have been used for many years. They can still be used effectively in certain situations by a skilled teacher. There are three teacher-centered approaches: ***individual teaching, team teaching and deductive approach***.

In these approaches, the teacher dominates the class or is the most active, allowing learners little or no participation. Every learner in the class is taught the same thing at the same time and at the same speed regardless of the varied capacities of learners. The teacher does a lot of talking, and often uses the question and answer method, and chalkboard illustrations.

3.1.1. Individual teaching

Individual teaching is also known as ***direct teaching***. It refers to academically-focused, teacher – directed classrooms using sequenced and structured materials. There are clear objectives, a time bound period for instruction, extensive coverage of content, monitoring of performance and immediate feedback. The teacher, therefore, controls instructional objectives, chooses materials that are appropriate for the learners' ability and places the content in perspective. The following are elements of individually teaching:

a) Orientation of learners

The teacher should orientate learners to the material to be covered in a particular lesson. This is done by:

- Stating the objectives of the lesson
- Linking previous learning to the content of the lesson by reviewing homework, re-teaching bits of prerequisite information or simply reminding the learners of the concepts taught in the previous lesson.

The main purpose of orientating learners is to focus their intention on the content and make it more meaningful.

b) Lesson presentation

The teacher may make the lesson presentation in the following ways:

- Checking learners' understanding of the lessons by asking questions at regular intervals. - Focusing on the lesson content using illustrated charts.
- Frequent use of relevant examples
- Interchanging slow and quick instruction methods to sustain learners' interest. **c) Guided practice**

In guided practice, learners are requested to demonstrate their understanding during a lesson under the guidance of the teacher. For example, in a mathematics lesson, the teacher may provide guided

practice by asking learners to demonstrate the steps of a computational rule on the board as the teacher observes and provides a feedback. This keeps learners alert and focused on the task.

d) Independent or individual practice

In independent practice, learners are expected to complete worksheets or exercises specifically related to the lesson content. The teacher's role is to monitor progress, check assignments, and generally ensure that learners complete the task. This is done to hold learners accountable for their learning.

e) Lesson review

Lesson review involves revisiting the content of the previous lesson. It should be done frequently and systematically by:

- Testing old material or content
- Independent practice on content of prior lessons
- Re-teaching

The main aim of lesson reviews is to ensure that learners have transferred the content covered.

3.1.2. Team teaching

Team teaching is a cooperative approach to teaching in which a group of teachers take responsibility for the education of a large group of learners. Patterns of teaching differ significantly from conventional class teaching as each teacher's work programme is determined by the team. The teaching programme is planned in relation to:

- The nature of topics to be taught.
- The composition of the learner group.
- The resources available. - The skills of the teachers.

a) Characteristics of team teaching

The characteristics of the team teaching approach include:

- The teachers make use of their varied skills in the best possible manner.
- It gives teachers sense of accuracy as they face teaching problems as a team.

- The content of a lesson can be presented in a variety of ways.

3.1.3. Deductive approach

Deductive approach is a more traditional approach that involves teaching that begins with a general rule, moves to a number of particular examples and ends with a conclusion. In this approach, the teacher is the centre of the class and is responsible for all the presentation and explanation of the material.

The teacher begins by stating the rules. For example, in an English lesson, the teacher may state the rule that all naming words are nouns.

- **Sano** is a naming word.
- **Spoon** is a naming word
- **Kigali** is a naming word.

3.2. Learner-centered approach

Student-centered teaching approaches shift the focus of activity from the teacher to the learners. These methods include **active learning**, in which students solve problems, answer questions, formulate questions of their own, discuss, explain, debate, or brainstorm during class; **cooperative learning**, in which students work in teams on problems and projects under conditions that assure positive interdependence; and **inductive teaching and learning**, in which students are first presented with challenges (questions or problems) and learn the course material in the context of addressing the challenges.

3.2.1. Characteristics of learner-centered approaches

The learner-centered approaches have the following characteristics: The learner is the focal point of learning as teaching is based on the nature of the learners, stages of development, interests and talents.

- The teacher provides an environment that enhances the perception of concepts by the learners.
- The learners are more active than the teacher, thus learning is activity or play oriented.
- Learners advance at their own pace;
- There is room for a variety of teaching activities and creativity.
- There is less memorization as there is room for plenty of teaching and learning aids, and learners' displays.
- Teachers know learners individually, and their strengths and weaknesses - Learners take responsibility for their own learning.

3.2.2. Aims of learner-centered approaches

- To make learners happy at school, and interested in their work.
- To make learners experience a sense of achievement in their day-day life.
- To enable learners to engage actively in the learning process
- To enhance a sense of self-worth in the learners and to make them feel understood and appreciated.
- To provide plenty of opportunities for creativity and self-expression.
- To foster a sense of responsibility and cooperation in learners.
- To teach the learners how to appreciate beauty, art, music and literature, as well as value nature.
- To enable the learners use their leisure time properly.
- To avail opportunities for the learners to be helpful and generous
- To develop the whole person so that learners grow into decent, good citizens.

3.2.3. Types of learner-centered approaches

There are four types of teacher-centered approaches: Peer teaching, individually teaching, groupteaching and Inductive method.

a) Peer teaching

Peer teaching is also known as the monitorial system. In peer teaching, some learners are involved in communicating skills or knowledge that they have already mastered to their fellow learners.

These learners act as '***little teachers'*** to supplement the work of the teacher. The method can be used by learners to teach their counterparts although it is more often used by older learners to teach the juniors. Learners used in this method are those who have worked well in their own studies and have maintained high grades in their performance.

b) Individually teaching

In individualized teaching, each learner works alone and the finished work is usually the outcome of unaided effort. The approach requires learners to do some activity or exercise, for example, writing a composition, tackling a mathematical problem or working on an assignment. The teacher assesses and criticizes each learner's individual work.

c) Group teaching

Group teaching can be described as a collective enterprise. The learners work together on a single project. For group teaching to be effective, the teacher should ensure that:

- Planning and organization of learning activities are done for each group.
- All the material required must be ready for each group before the lesson begins.
- There is good class control.
- Groups are flexible enough to accommodate a learner who has been absent for some reason.
  - The timings for group work are appropriate.
- Groups have members of mixed ability as well as a representation of gender and racial differences within the class.
- Each group has a well-defined task with a clear testable outcome.
- Immediate feedback is provided followed by further discussion with the teacher.
- Learners who perform very well receive recognition through a reward system. **Factors to consider when grouping learners**

When grouping learners for group teaching, the teacher should consider the following factors:

- Age and gender
- Ability and experience
- Friendship and interest and willingness to work together
- Learner preferred learning styles
- Previous experiences
- Nature of task or project
- Optimum size of the group
- Availability of facilities and resources
- Personality traits with reference to compatibility

d) Inductive approach

The inductive approach is a more modern method of teaching whereby a number of examples from the normal daily lives of the learners are given and a general rule is formed.

It involves studying things, processes and events to discover a common element, general principle or rule.

The teacher's role in this approach is to provide a meaningful context to encourage demonstration of the rule while the learners deduce the rule from the examples of its use. For example: when teaching series and sequences in mathematics;

34+5= 39 14+5= 19

54+5=59 94+5=99

The general principle or rule is that when 5 is added to two-digit number ending in 4, the first digit remains unchanged and the second digit always becomes 9.

3.3. Distinction between teacher-centered learning and student-centered learning

The traditional method leaves the learner in a **submissive (passive)** role of following the teacher's instructions while the teacher remains in **absolute control**. Researchers maintain that this mode of teaching is geared towards "***effective teaching and not effective learning***

Learner-centered education places the student at the center of education. It begins with understanding the educational contexts from which a student comes. It continues with the teacher evaluating the student's progress towards learning objectives. By helping the student acquire the basic skills to learn, it ultimately provides a basis for learning throughout life.

It therefore places the responsibility for learning on the student, while the teacher assumes the responsibility for facilitating the student's education. This approach strives to be individualistic, flexible, competency-based, varied in methodology and not always constrained by time or place. The ultimate aim of learner-centered education is to create an environment where the learners are encouraged to interact with:

- The content,
- One another, and
- The teacher.

Student-centered learning is a broad term that is used to describe ways of thinking about teaching and learning that emphasize student responsibility and activity in learning rather than content or what the teachers are doing.

Traditional learning	**Student-centered learning**
Students often passive (No role in planning learning; sitting in lectures)	Students have responsible and active role (in planning their learning, interacting with teachers and other students, researching, assessing)
Most decisions made by the teacher	Students required to make choices about and how to learn
Emphasis on learning this subject only	Emphasis on integrating learning across the curriculum
Emphasis on receiving information	Emphasis on enquiry-type activities
Teacher as expert dispenser of knowledge and controller of activities	Teacher as guide, mentor and facilitator of learning
Extrinsic motivation (Grades, teacher praise)	Intrinsic motivation (Interest, curiosity, responsibility)
Individual learning and competition between students	Focus on cooperative learning
Learning confined to fixed teaching venues (Lecture rooms, libraries, labs)	Learning can occur anywhere

Relatively inflexible arrangements	Greater flexibility in learning and teaching
Assessment seen as the responsibility of the teacher with examinations as an important focus	Greater flexibility in assessment with self and peer assessment becoming more common
Short-term perspective: emphasis on completing assigned work and learning for the examination	Long-term perspective: emphasis on lifelong learning

3.4. Teaching styles and related methods

3.4.1. Methods related to “transmissive teaching style”

Lecturing is certainly the most familiar method to all the learners. This is what we usually mean when we talk about the "traditional method". Typically, the teacher stands in front of the class, he/she speaks and the students take notes; the lecture can be interrupted by questions.

The teacher controls everything during his/her lecture which takes the aspect of a conference. It becomes more important as the size of the group increases. In fact, the lecture becomes more formal as the group grows, that is, it becomes more authoritative, the students listen passively and they are not fully involved in the learning process.

In a small group, the learner feels free to ask questions or to make comments during the lecture: it is therefore an informal lecture.

In a big group, the learners are often more reluctant, they hesitate to interrupt the teacher’s lecture by asking questions or giving comments.

The use of visual aids to supplement the lecture is a factor which enriches the lecture. Knowing the fact that we remember only 20% of what we hear and 50% of what we see and hear, the teacher should resort to these means, making use of visual aids in addition to what the learners hear. If learners continue to think about and discuss the lecture long after it was delivered, then it was a good lecture. If as a result of the lecture, learners are encouraged to search for more knowledge related to the topic taught, then the desired goal has been achieved.

To improve the effectiveness of the lecture method, the teacher should:

- Have good diction, correct pronunciation and proper intonation while speaking.

- Use facial expression and gestures which are effective in developing learners' enthusiasm. - Maintain eye contact with the learners.
- Check on the learners' understanding by consciously observing their reactions.

Advantages and disadvantages of ex cathedra presentation

Lecture presents the following advantages:

- It is appropriate to teach large groups (hundreds of students)
- It facilitates communication in a short period of time
- It spares learners' efforts and time
- It allows free discussion about the topic or to apply the newly acquired knowledge (recent discoveries, statistics…)
- Both the teacher and the learners feel more secure: the teacher has full control over the content he teaches and the way of presenting it. As for the learner, he trusts the content taught by the teacher.

Here are the limits (disadvantages) of a lecture:

- Lecture presentation does not allow learners to share their knowledge and experience
- If lecture is given too much importance or if it is too long, it can be boring
- During the lecture, it is not easy to evaluate the content which the learners have understood and others which require more details
- Lecture relies more on teachers and learners' competence and skills: only some teachers are able to communicate orally while keeping the attention of their audience; all the learners are not able to focus their attention on topics which are taught orally
- Lecture does not easily allow to achieve major psychomotor or cognitive objectives
- Lecture can develop a feeling of isolation among learners and between teacherlearner
- In lecture, learners do not take full responsibility for their learning. They develop a negative attitude of listening passively, they do not develop critical thinking and they do not develop any spirit of initiative.

3.4.2. Inciting teaching methods

This method is commonly known as the questioning or question and answer method. They aim to transmit information while taking into account the way the learners receive the information.

The questions asked by the teacher checks or assesses whether the learners have understood or facilitate understanding / learning.

Here, questioning does not consist in asking such questions as has everyone understood? Who is the author of…? How do you explain such and such a phenomenon? Questioning does not consist in asking unrelated questions whose sole aim is to check whether a problem for example a grammatical rule, has been understood. We know that the fact of asking questions is one of the oldest and commonest practices. Moreover, the results of several studies have shown that the learners ask very few questions compared to the great number of questions the teachers of the primary and secondary education ask to their learners. Some studies have established that:

- In one-hour class, the teacher has asked about 84 questions while the learners have asked 2 questions only;
- A learner asks one question per month throughout the whole school year.

Questioning is an intellectual activity carried out by the teacher with the aim of helping the learner to find out the answer himself/herself and therefore allow him/her to go further in his/her search for knowledge. The teacher asks questions he prepared before, he/she asks other questions after receiving one or more answers so that the learners can understand better. Instead of considering a question as something which is only used to check the new knowledge, it is used to reinforce the knowledge. It helps the learner to understand better. It helps the learner to use his/her own knowledge and apply it to find a solution to the problem.

Very often, the teacher will not answer the question of the learner. He/she will ask the learner the same question he has been asked so that he/she can find the answer himself/herself. This approach was initiated by Socrates who compared himself to a midwife. He believed that his questions would help his interlocutor to raise the hidden knowledge and therefore become clear. We know very well how happy a learner is when he/she finds the answer through his/her own efforts. For Socrates, questioning does not mean that the teacher intends to prove that the learner is ignorant. Questioning allows the teacher to convince his/her interlocutor that he/she has got the answer. One of the best known tools for the classification of questions is the revised Bloom's taxonomy (see chapter 3).

The greatest advantage of this questioning method is the fact that it allows the learner to be convinced that he/she has understood. **The disadvantage of questioning** lies in the fact that the approach is long and the answers are given directly. The teacher must provide appropriate explanations so that the learners can understand his/her method much better. If he/she does provide enough explanations, the learners may refuse to answer.

3.4.3. Associative teaching methods

Associative methods refer to what is commonly called group or teamwork: 3 to 8 learners work together to carry out a precise task, at a given time.
We may not always appreciate the relevance of group work even if the learner discovers many qualities in his/her peers who constitute useful resources to use for learning purposes.

It is important to distinguish group work from peer teaching. Peer teaching refers to the process whereby learners help each other and in turn learn by teaching. On the other hand, with group work, there is no tutorship; each team member has the same status and the same role: to get involved in the completion of the task.
Group work requires that the teacher explains to the learners the task to be carried out and gives them the clues or guidelines to carry out the task (allocated time, constraints...). The teacher supervises the activity, he/she moves from one group to another to clarify few things or to encourage individual participation.
You can ask all the groups to carry out the same task, each group can work on its own; this is a parallel work. In this case, the outcome of the work carried out by each group is a combination of the individual efforts depending on the number of groups.

Another way of organizing group work consists of sharing a portion of the task to be carried out to each group; this is complementary work. The contribution of each group is necessary for the completion of a common task to the group.

Moreover, the tasks can be linked sequentially in such a way that the work of a group can start only when that of another one is finished (the output of group A is an input for group B, the output of

group B is an input for group C...); this is an assembly-line work. This type of work organization requires a serious planning.

Advantages of group work:

- The learner is in direct contact with his/her peers, group work encourages sharing of information and experience
- It encourages the timid learner to get more involved in activities more than larger groups
- It creates strong links which have a positive impact on the classroom environment
- Learners become more responsible, group work encourages learners to undertake new tasks on their own, they become more autonomous as they work
- It promotes a sound emulation among the teams
- Group work offers excellent opportunities to organize formative (continuous) assessment; the teacher can adjust the comments and constructive criticisms to particular needs emerging from each group
- It allows the teacher to develop a more personal relationship with the members of each group.

Disadvantages of group work:

- It can be inefficient for the learners who cannot work without the continuous guidance of the teacher
- Some learners can be frustrated when the groups are being formed
- It does not allow objective assessment of each learner
- It can disturb the teacher who finds it difficult to act as a counselor
- Problems such as finding out a suitable place can occur when trying to organise group work
- Problems such as the use of resources can occur (costs, replacing and bringing new equipment…)
- It is not convenient for all the learners; some do not want to get involved in the task, others are not ready to welcome new ideas from their peers.

3.4.4. Permissive teaching methods

Permissive methods are related to what is called « guided research ». This approach allows the learner to discover more through observation, analysis, verification and generalization of concepts, notions or rules.

Guided research is about learning the process of learning. At the primary and secondary levels of education, guided research often refers to rediscovery. In fact, the learners discover what already exists, but it is the way of learning, which differs in this case. They discover, for example, that by mixing two colours you get a new one, as you browse through books and magazines, you can classify animals, and so on.

In guided research or what you can practically call guided discovery, the teacher determines the real/true problem. Then, the learners have to use the data and carry out the observations by applying the theories of a given subject.

Advantages of guided research:

- ♣ Guided research is a very motivating method for learners.
- ♣ The learner develops self-study, self-criticism and self-assessment skills.
- ♣ Guided research develops higher cognitive skills such as analysis, synthesis and generalization.
- ♣ Guided research favors the acquisition of methods of work which can be applied to other learning projects.
- ♣ Guided research allows learners to go further in the study of some phenomena or notions as a result of increase in interests, which enables them to discover new things.
- ♣ Guided research can be very helpful in peripheral learning which prepares the learner to get easily involved in professional life.

Disadvantages of guided research include the following:

- ♣ The teacher should have enough time.
- ♣ Some learners may get de-motivated during the learning process.
- ♣ According to research carried out it can take a new orientation the teacher did not plan before.
- ♣ It can require much time but the learning outcome can remain very poor**.**

Didactic methods used by various teachers can prove to be more or less effective. Teachers must learn how to use more effective methods. In addition, there is no good method in all situations; methods must be chosen with regard to particular contexts.

3.4.5. Criteria for choosing suitable teaching methods

Every day you make decisions about the teaching methods to use in your classroom. Think for a moment about the criteria you use for choosing them. Write them down in the space provided below. Then compare your answers with ours provided in the text below.
Here are 5 factors which determine the choice of teaching-learning methods:

- ♣ Knowing who the learners are
- ♣ The teacher's personality
- ♣ The learning objectives
- ♣ The subject contents
- ♣ The environmental constraints

(1) Knowing who the learners are

No doubt the **learner** ought to be the **main focus** of the teacher when deciding the best teaching method to use. If teaching means to facilitate learning, then it is necessary to keep in mind the **learner's needs**, **area of interest, age, aptitudes**, preferred style of learning and study timetable.

Learners have several needs such as **socialization, self-esteem** ... They also have their areas of interest. Learners can be more motivated in some contexts than in others. They may prefer to express themselves orally or in writing, they may prefer lectures to question and answer method or group work.... Bright students for instance, prefer well-structured presentations while dull students prefer Socratic questioning. In the same way, some methods are good for primary school learners and lower secondary schools while others are good for upper secondary schools and university students.

The teacher must also consider the stage where the learner is: introduction, acquisition, improvement, demonstration, new learning.

The number of learners is also a significant factor. The psychology of a large group differs from that of a smaller group. The same learners can adopt different behaviors according to whether they are in a large group or a small group. For example, the one who expresses himself/herself readily in front of 8 classmates may hesitate to do it in front of about 30. The size of the group is undoubtedly one of the factors mostly called upon to justify the unused of certain didactic methods.

(2) The teacher's personality

The teacher, like the learner, has also his/her own interests which inevitably have an impact on teacher's enthusiasm in teaching. In addition to the teacher's interest, his/her aptitude to use a particular teaching method is another significant element.

Some teachers do not have the skills to use effectively some methods. Although others have the aptitudes to use these methods in an efficient way, they do not find any satisfaction in using them. In either of these cases, the teacher may perform poorly.

Finally, if the teacher does not know how to apply the methods this could limit his/her performance.

(3) The learning objectives

Here again, the teacher must know the nature, how to formulate, the importance and the end-results of the learning objectives.

The nature of objectives deals with cognitive, socio-affective or psychomotor domains. The choice of the didactic methods will depend to a great extent on the domain under consideration.

The setting of objectives can focus on knowledge, reproduction of a procedure or a predetermined behavior, developing originality or creativity. If the teacher wants his/her learners to report a historical fact (objective aiming at reproducing facts), he/she will be obliged to use a method which is different from that of essay writing (objective aiming at developing cognitive skills, creativity)

It is necessary to acknowledge that the achievement of some objectives requires more time and energy than others.

Finally, an objective can be reached at various levels, from minimum success to perfect mastery.

(4) The subject contents

In theory, all methods are appropriate to teach any discipline. But, the amount of information to be taught in a course can be more or less significant. When the subject contents are too big, teachers will try to allocate appropriate time to some parts of the contents. The content to be covered is another element which must lead the teacher to the right choice of the best teaching methods to use.

Preferably, the contents of a more practical nature will be associated with the didactic methods which give priority to application and manipulation, while the contents of a more theoretical nature will be associated with the didactic methods which require understanding.

(5) The environmental constraints

Pedagogical tools also play a major role in the choice of didactic methods. In his efforts to achieve the objectives, the teacher must know how to manage his/her time when he/she uses pedagogic tools.

The budget allocated to a course or a programme can also limit considerably the choice of didactic methods. The teacher may not use useful methods because he/she lacks financial resources. He/she has to resort to other methods, which require modest budget.

Lack of equipment (audio-visual, data-processing or other material) may prevent teachers from using useful teaching methods. Even when there are facilities and equipment, it is not always easy to benefit from these resources. The planning of schedules, the distribution of resources and the use of material constitute a significant activity which must be done in collaboration with other education stakeholders.

Finally, the school environment, the choice of a suitable classroom, the dimensions of the classroom, the number of learners, the possibility to modify and arrange furniture, the acoustics, the possibility to black out windows for projections... are some elements to be taken into consideration.

3.5. Teaching and Learning Techniques

In order to practice any of the above-stated teaching and learning methods, there are techniques that the teacher or the learner may combine with different teaching-and-learning resources/aids so as to develop appropriate teaching-and-learning methods and strategies/tactics according to specific situations.

The following are examples of such techniques:

- Explanation;
- demonstration;
- observation;
- questioning and answering or dialogue;
- oral or written expression;
- repetition;
- review or rehearsal;
- reflection;
- experiment;
- analysis & synthesis;
- induction and deduction;
- brainstorming;
- debate;
- individual or team work;
- individual non-supervised work or assignment;
- supervised work;
- simulation,
- role playing or dramatization;
- field trip; etc...

Teaching and Learning Resources/Aids

Basically, the main teaching-and-learning resources/aids **are the learners and the teacher themselves**. In contrast to those, **additional resources/aids** that assist them for a better teachingand-learning process are **called auxiliary teaching-and-learning resources/aids** and may be distributed into the following **three major categories:**

- **Concrete resources/aids** or *realia* (i.e. real people, genuine things, situations or problems);
- **Semi-concrete or audio-visual resources/aids** (e.g. moving or fixed pictures, photographs, images, drawings, and/or recorded sounds);
- **Abstract resources /aids** such as verbal descriptions.

Self-assessment questions

1. Discuss the key differences between teacher-centered and student-centered approaches. How do these differences impact student engagement and learning outcomes?
2. What are the advantages and disadvantages of the individual teaching approach? In what situations might it be most effective or least effective?
3. How can team teaching benefit both teachers and students? Discuss the strategies for ensuring effective team teaching and how it can be implemented in a classroom setting.
4. Compare and contrast the deductive and inductive approaches to teaching. How does each approach influence student understanding and retention of the material?
5. What are the benefits of peer teaching for both the "little teachers" and their peers? How can peer teaching be effectively incorporated into the classroom?
6. Discuss the advantages and challenges of group work in the classroom. How can teachers address common issues associated with group work to enhance its effectiveness?
7. What are the key features of permissive teaching methods like guided research? How can these methods be used to foster independent learning and critical thinking?

8. How do different teaching styles, such as lecturing and questioning, affect student learning? Discuss the importance of adapting teaching methods to meet diverse learning needs.

CHAPTER 4: TAXONOMY OF LEARNING OBJECTIVES

The word taxonomy is derived from two Greek words "taxis" which means arrangement or classification; and "***nomos***" which means law, science. Thus, literally, the taxonomy is the science of classification. Taxonomy is about classification of behavior.

To do the taxonomy is to make a list of elements that form categories concerning a particular domain, a particular science or discipline.

This is the reason why in educational sciences, taxonomy is defined as a science of classification of behaviors. Specifically in the teaching domain, it is about the expected behaviors of the student after he/she has learnt a given content of knowledge.

During the teaching and learning process, the teacher constantly assesses the expected students' behaviors. Generally, these behaviors are classified into three categories referring to the aspects or domains of manifestation of human behavior which are cognitive, affective and psychomotor domains. Therefore, there are cognitive behavior, affective or emotional behavior, and psychomotor behavior.

Having successfully completed this chapter, students should be able to demonstrate knowledge and understanding of:

- Types of Educational objectives
- Bloom's taxonomy of Cognitive objectives
- Krathwohl's taxonomy of Affective objectives
- Dave' Taxonomy of Psychomotor objectives

3.1. Three types of educational objectives

The three categories of behaviors mentioned above correspond to three categories of educational objectives. Consequently, the taxonomy of educational objectives is simply the classification of educational objectives in relation to a hierarchical plan which allows analysis of a general pedagogical intention so that diverse levels of achievement can be identified.

1. Cognitive objectives

Cognitive objectives correspond to a learning that refers to an intellectual orientation. They refer to mental ability to solve problems, i.e. intelligence. These objectives are the expression of knowledge acquired by the learners. These objectives are related to the content taught, that requires the remembrance of knowledge as well as the development of intellectual abilities and capacities.

2. Affective objectives

The domain of affectivity concerns what is related to pleasure and displeasure. This domain is also called the domain of attitudes. An attitude is understood as an internal disposition of the person that is expressed through learned and moderated emotional reactions and then felt every time when that person faces an object, a situation, an idea or an activity. These emotional reactions make the person to be favourable or unfavourable towards that object.

An attitude cannot be developed if the knowledge expressed in the form of conviction or beliefs, and approach or avoidance behaviours are not learnt but at least influenced. Attitudes are learnt and can be modified.

The objectives of a learning that is affective concern “the modification of interests (make them interested), attitudes, values, as well as the development in judgment and adaptation” (MINDER, 1999: 66).

3. Psychomotor objectives

This domain concerns objectives related to motor capacities or manipulation (ability of doing something). This domain refers to body movements or motor orientation.

There are various taxonomies which correspond to three aspects of human behavior even if this distinction is arbitrary as mentioned above. The same aspects correspond to the domains of learning. Therefore, when determining the objectives that learners should achieve at the end of their

learning, the teacher must set these objectives with reference to these domains of learning because, obviously, he/she must evaluate his/her educational action.

3.2. Bloom's taxonomy of cognitive objectives

In this section, we are going to study successively the general context in which Bloom's taxonomy was designed, the importance of this taxonomy and finally different levels of Bloom's taxonomy.

The context of Bloom's taxonomy of cognitive objectives.

In 1948, following the congress in which a discussion was engaged about the content and the form of exams, a team headed by B. S. Bloom undertook a critical study on a number of examination subjects. The first classification was produced in 1951 and was sent to educators for critics and comments. After so many modifications, they came up with the taxonomy of objectives in the cognitive domain.

3.2.1. Importance of Bloom's taxonomy of cognitive objectives

It allows the acquisition of a true knowledge, knowledge that is sustainable and transferable into day to day situations.
Firstly, the learner is strongly motivated and the progression respects the pace of the learner's evolution.
Secondly, the teacher helps the child to participate in the elaboration of his own knowledge and skills through the discovery method.
Bloom's taxonomy has a double role. It invites to clarify the behaviours to be adopted, installed and encouraged; to be preferably more reinforced than others on the one hand, and serve as source of inspiration for new objectives on the other hand. It is an indispensable tool for the formulation of operational objectives in education.

3.2.2. Different levels of Bloom's taxonomy

In order to establish various levels of taxonomy, Bloom identified mental processes that learners could use to learn the content, to solve a problem, or to answer a question. The teacher should assess these processes in order to verify at what degree the didactic action has contributed to their achievement. There are six mental processes which are hierarchically ordered from the lowest to the highest level as follows:

Source: REB, (2020)

(1) Knowledge

Knowledge is the memorization and restoration or reminder of information that an individual has felt or perceived because any knowledge is acquired through sensation and perception.

In Bloom's hierarchy, knowledge is the first level. For example, we mention:
Knowledge of particular data: terminologies, particular facts, date, etc.
Knowledge of means to use data: conventions, tendency, sequences, classification, etc.
Knowledge of abstract representations: principles and laws.

(2) Comprehension: is about how you understand something**.**

This level and those which follow in Bloom's hierarchy emphasizes mental processes that the learner uses in order to achieve a particular result. Comprehension is the integration of new knowledge into a set of prior knowledge.
The comprehension of oral or written language for example results from the integration of words or phrases into a set of semantic knowledge that the child has had the opportunity to memorize.

This comprehension aims at constructing the significance and supposes the conceptualization as well as the awareness of what is to be understood.

(3) Application: Is about how the knowledge given is utilized**.**

After the teacher has verified the acquisition and comprehension of knowledge in the lesson, he must ensure that learners have the capacity to utilize this knowledge in real situations. In fact, teaching must prepare an individual for life. If knowledge acquired does not allow the person who acquired it to live well his life, if he is not able to use it in order to solve several problems encountered in life, the teaching-learning will have been useless.

Application is the use of abstract representations in particular and concrete cases. These representations can take the form of general ideas, rules, principles, and theories that must be remembered and applied. Students apply the learnt and understood notions in the preceding levels of the hierarchy.

To apply is to transfer what is known to another situation that is different from the learning situation. The student uses the acquired knowledge in a new situation. This allows him/ her to adapt him/herself to his/her environment and this is one of the main characteristics of an intelligent person.

(4) Analysis

To analyze is to differentiate elements, to search for elements, relations, organizational principles of a situation or a document knowing the conditions and criteria. For G. DELANDSHEERE and V. DELANSHEERE (1984), analysis is the separation of elements or constituting parts of communication in the way of elucidating the related hierarchy of ideas and the relationships between expressed ideas.

Analytical behaviors consist in searching for organizational structure of a given material, but which is new. The emphasis is put on the decomposition of the material into its different constituents and the relationships that unify them.

Students' level of analysis is evaluated by questions such as why? How does it happen? etc. You can also give the following theme: analyze the Rwandan education system and show its strengths and weaknesses.

(5) Synthesis

The level that follows analysis is ipso facto the synthesis. In fact, analysis without synthesis is an incomplete science as the synthesis without analysis is imaginary. Thus, after you have verified the analysis, you verify the synthesis which consists in reunifying elements and parts in order to remake the whole.

To synthesize is to organize and express in an individual way various elements of the situation. This leads us to understand that synthesis embeds creativity. It is a matter of producing an original and personal work, to combine elements in the way that you create structure that was not there in the beginning which fits with fixed requirements.

Example: Having studied the light reflection and the light refraction laws, construct an apparatus based on these laws.

(6) Evaluation

Evaluation is the highest level of Bloom's taxonomy. Evaluation is the formulation of critical judgment on the value of the material and methods used for a clear goal. An evaluative behavior is a behavior that, following the analysis process, consists in making a critical judgment based on the value of the material in accordance with certain criteria.

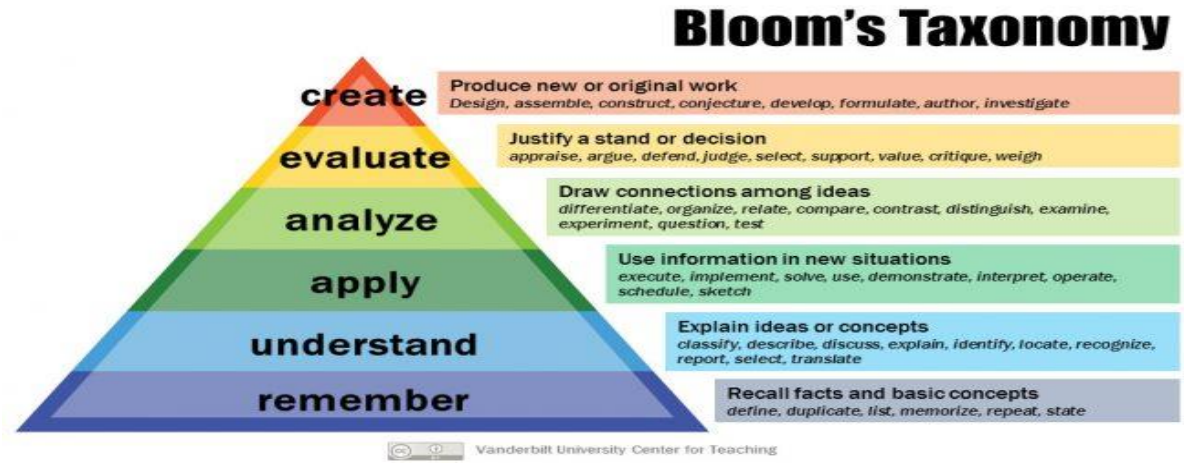
N.B: According to Benjamin Bloom, the below percentages represent the suggested distribution of cognitive emphasis at each level. Keep in mind that these % are not strict rules but rather serve as a conceptual framework for educators to consider when designing learning objectives and assessments.

Remembering = 10%, Understanding = 20%, Applying =30%, Analyzing = 15%, Evaluating = 15%, Creating =10%

In the decades since Bloom first introduced his taxonomy; his work has been the source of both inspiration and criticism. In 2002, Anderson and Krathwohl offered a revision of the original taxonomy, and made the following changes:

- By removing the word, knowledge: since all of the cognitive processes listed are versions of knowledge (increasingly sophisticated or expert versions of knowledge we might even say), the revised version seems more accurate.
- By converting the levels to verbs, which underscores that these levels involve actions, cognitive skills to be demonstrated, rather than states of being.
- Culminating in creating, moving evaluating down a level. This strikes many disciplinary experts as appropriate.

The pyramid of the revised Bloom's taxonomy by Anderson is here below:



Constraints of Bloom's taxonomy of cognitive objectives

Firstly, in Bloom's taxonomy:

- The difficulty to find specific exercises for each category or sub-category of the taxonomy.
- Lack of similarity in the classification which results, on the one hand from the fact that objectives are not operationally defined, and categories are not mutually exclusive on the other hand.

Secondary, Bloom himself has recognized the artificial separation of domains, the persistence of unprecized zones that causes important limitation, vagueness of categories, etc. In the same way,

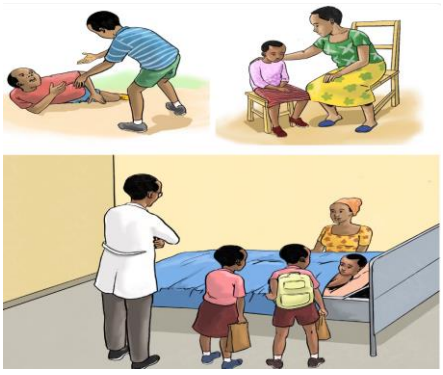
DELANDSHEERE (1984) criticises this taxonomy for considering knowledge as the first while there are other levels like cognition and memory which serve as preliminary to knowledge.

Thirdly, there is lack of reliability in Bloom's taxonomy. This lack is related to discordance between users in the classification mostly the lack of precised concepts. This taxonomy has a mental character that often leads to subjectivity. This is true given the fact that comprehension and evaluation for example are difficult to measure.

Finally, Bloom's taxonomy gives more importance to the memory instead of superior mental processes. It is however worth noting that memory is essential for the exercise of superior faculties because previous experience remains stored in the memory and influences the level of taxonomy at which individual operates at a given moment in a given situation.

3.3. Taxonomy of Affective Objectives according to KRATHWOHL

Affective domain includes the manner in which we deal with things emotionally, such as feelings, attitudes, values, appreciation, enthusiasms, motivations and attitudes.



In the field of education, the objectives of an affective learning deal with the modification of interests, attitudes, values, as well as the progress in the judgment and capacity of adaptation.
KRATHWOHL, in his taxonomy, put up five processes in the acquisition of attitudes which correspond to five taxonomic levels to be evaluated in the learners in order to ensure the achievement of affective objectives.

(1) Receiving

The learner is here sensitized about the existence of certain phenomena and stimuli. He/she is incited to receive them and pay attention to them. For example, learners receive sounds, and get knowledge of the existence of the school regulation, etc.

(2) Responding

The learner reacts beyond the simple attention aiming at discovering more and feels the pleasure to go deep. He/she is sufficiently engaged in the object, a phenomenon or an activity in order to discover it. For example, students give a clap after a speech or they accept that the school regulation be respected.

(3) Valuing

It is the behavior which is solid and stable to be characterized as belief or attitude. The learner manifests the behavior with sufficient coherence in appropriate circumstances to be esteemed as being linked to the internalization of the value. The behavior is motivated, not by the desire to please or to obey, but through the individual engagement to the fundamental value determining the behavior. For example, to respect the school regulation at all occasions.

(4) Organization

It is about arranging values in a system, determine interrelations that exist between them, establish those that are dominant and deeper as well as differences.

(5) Characterization (Internalizing values)

At this level, a student has value system to the extent that represents a philosophy of life. For example, the school will be bound by the school rules and regulations at all times.

3.4. Taxonomy of psychomotor objectives according to Dave

This taxonomy concerns the objectives that are related to the motor capacities, coordination and physical movement or manipulation.

Psychomotor domain deals with gestural or motor dominance. This taxonomy has five levels:

(1) Imitation

The pupil repeats here an observed action but the neuromuscular coordination is still poor. For example, the child takes a paper, ignorantly imitates a friend's drawing.

(2) Execution/manipulation

The pupil now follows *instructions*. It is no longer a simple spontaneous imitation but rather, he/she becomes capable of imitating the teacher's example. He/she starts differentiating movements and choosing the adequate behavior. He/she reaches a certain level of ability in handling certain objects.

(3) Precision

The pupil duplicates the model with accuracy and precision. He/she reproduces the required letter, and perfectly. He/she manages then to replicate this action in the absence of the model. He/she directs the action, and can modify its speed of execution with regard to the situation.

(4) Coordination/articulation: is about how to coordinate the things.

The pupil manages to structure a set of actions to form a sequence. He/she associates several letters for example ones after others. Then, the pupil harmonizes his/her action while being at the same time capable to adjust the speed, the duration, and the other factors, so that actions articulate well.
The pupil associates several words and knows how to write a text within a minimum time.

(5) Naturalization

It is the automation, the internalization, the habit or the second nature. With a minimum psychic energy, the pupil develops a quick and personalized writing.

Self-assessment questions

1. Explain the concept of taxonomy in the context of educational objectives. Why is it important to classify behaviors into cognitive, affective, and psychomotor domains?
2. Discuss Bloom’s taxonomy of cognitive objectives. How do the six levels “Knowledge, Comprehension, Application, Analysis, Synthesis, and Evaluation” contribute to effective teaching and learning?

3. Compare and contrast Bloom’s original taxonomy with the revised version by Anderson and Krathwohl. How do the changes from "Knowledge" to "Creating" affect the interpretation of cognitive objectives?
4. What are the main goals of Krathwohl’s taxonomy of affective objectives? How does this taxonomy address the development of attitudes and values in learners?
5. Analyze Dave’s taxonomy of psychomotor objectives. How do the stages from Imitation to Naturalization reflect the progression of motor skills in learners?
6. Discuss the limitations of Bloom’s taxonomy as mentioned in the chapter. How might these limitations impact the application of the taxonomy in educational settings?
7. How can teachers effectively use Bloom’s taxonomy to design assessments and learning activities that cater to different cognitive levels? Provide examples for each level.
8. Reflect on the role of affective and psychomotor objectives in a well-rounded educational program. How can teachers balance cognitive, affective, and psychomotor goals in their lesson plans?

CHAPTER 5: MAKING SCHEME OF WORKING AND LESSON PLAN

5.1. Scheme of work /Unit Planning

5.1.1. Definition

Planning refers to the process of creating a detailed programme for doing or using something in advance.

A scheme of work is an outline of what should be taught in a given period, such as a week, a month, a term or a year.

A scheme of work is a detailed analysis and subdivision of the syllabus into weeks, terms, and periods for the purpose of orderly and systematic teaching or learning. It indicates the amount of work or ground a teacher or student-teacher is likely to have covered during a week, a month, a term or a whole year. In other words, a scheme of work is simply the survey of the work a teacher intends to cover during a prescribed period. In order to do this, the teacher must be familiar with the content of the subject or she is planning to prepare a scheme of work.

A scheme of work can also be defined as the logical breakdown of the teaching syllabus into topics and sub-topics to be covered per week. It is a planned teaching/learning process over a given period and with references to the syllabus.

A scheme of work is a plan which organizes course content, and the learning of important skills such as reasoning and assignment writing, breaking them up into teaching weeks or lessons, and putting them into a logical teaching order. The best schemes suggest active teaching and learning strategies that require the students to develop an understanding of the content, but also make them use important skills.

5.1.2. Reasons for making a scheme of work

- Makes the teacher to read ahead and therefore becomes more firm and steady in the content and methods to be used;
- It helps a teacher to provide continuity in the lessons and sequence in the learning in an orderly matter. This approach gives students a sense of order in whatever they are learning;

- It makes the teacher confident in his work because he will have consulted a variety of relevant sources of information, selected suitable media and materials for instruction and prepared the appropriate instructional objectives;
- The scheme of work ensures that the syllabus is completed or covered with in a given period of time. This is made possible by the use of a topic schedule. Without a scheme of work, a teacher may take a lot of time on one or a few topics leaving him with little time to attend to other topics;
- Helps the teacher to cater for the needs of his particular class.
- Use of a scheme of work helps the teacher to exhaust the syllabus in details, hence striking a balance between examination requirements and the educational value of the topics he/she has planned to teach.
- By the end of the course or specified period, a teacher can study the scheme of work to see what he/she taught well and what he/she did not teach well; what he/she covered and what he/she might have left out. This will help a teacher make adjustments in his/her instructional design and methods.

5.1.3. The main steps involved in unit planning

- Teachers consult the National Syllabus (official curriculum), the school calendar as well as the time table for a given subject;
- Teachers set up learning objectives and competences that lessons within the unit should achieve in a given period of time;
- Teachers set up learning activities in advance which will effectively achieve the intended learning objectives.

Teachers should know well in advance, what learning they wish to take place and how subsequent lessons will facilitate that learning. For effective unit planning teachers should keep in mind the following:

- The learning objectives and competences that lessons within the unit should achieve;
- How lessons within the unit will be identified and prepared;

- The type of activities (for all learners, individually or in small groups) to be used on the order and timing of each of these activities;
- Identification of the content and materials to be used by learners;
- Preparation of all the instructional materials (materials, audio visual equipment, apparatus, worked out examples, etc.);
- How they will monitor and assess learners' progress to know if learning has happened.

NB:

There is a need to be flexible about the implementation of a plan. Effective teaching depends on the ability to monitor, adapt and develop what goes on in the classroom in light of how learners behave during instruction. Any unit planning should take this into consideration.

5.1.4. The main activities in unit planning

Step (i): Checking the number of available periods in each term

- ✓ Compare the number of available periods in each term with the number of proposed periods in the syllabus

Step (ii): Writing out the Key unit competency

- ✓ Copy a Key Unit Competency from the national syllabus (each unit has already a predesigned Key Unit Competency to achieve)

Step (iii): Identifying and arranging lessons for each unit

- ✓ Considering the national syllabus, divide the unit in lessons to be taught in a period of time
- ✓ Arrange lessons in a sequence / order in which they will be taught, from the simplest to the complex
- ✓ A lesson is a set of inseparable content which can help learners to acquire a certain competence
- ✓ Each lesson can be taught in one or more periods

Step (iv): Grouping similar lessons which will facilitate to reach one objective

Topic area	**Subtopic area**	**Units**	**Bunch of lessons**	**Lessons**	**Lesson plans (one for a 40 or 80 min session)**
Topic area 1	Subtopic area 1	Unit1	Bunch of lesson 1	Lesson 1.1	Lesson plan 1.1
				Lesson 1.2	Lesson plan 1.2
				Lesson 1.3	Lesson plan 1.3
				Lesson 1.4	Lesson plan 1.4
			Bunch of lesson 2	Lesson 2.1	Lesson plan 2.1
				Lesson 2.2	Lesson plan 2.2
				….	…
			Bunch of lesson 3	Lesson 3.1	Lesson plan 3.1
				….	…
			….		
		Unit2	Bunch of lesson 1	Lesson 1.1	Lesson plan 1.1
				….	….
			Bunch of lesson 2	Lesson 2.1	Lesson plan 2.1

				….	….
			…..		
		Unit3	Bunch of lesson 1	Lesson 1.1	Lesson plan 1.1
				….	….
			…..		
		……			
	Subtopic area 2	Unit1	Bunch of lesson 1	Lesson 1.1	Lesson plan 1.1
			….	….	….
		Unit 2	Bunch of lesson 2	Lesson 2.1	Lesson plan 2.1
			…..	….	….
		Unit3		….	…
		Unit4			
	Subtopic area 3	Unit1	Bunch of lesson 1	Lesson 1.1	Lesson plan 1.1
		Unit2	….	…	….
		Unit3			
		Unit4			
	Subtopic area 4				
Topic area 2	Subtopic area 1	Unit1			
		Unit2			
	Subtopic area 2	Unit1			
		Unit2			

	Subtopic area 3	Unit1			
		Unit2			
	Subtopic area 4	Unit1			
		Unit2			
….	…				

Step (v): Writing learning objectives for each group of lessons

- ✓ Each bunch of lessons should have learning objective (aim/general objective)
- ✓ An aim is a general statement of what is to be taught in a unit. Sometimes, aims are referred to as general objectives
- ✓ After writing learning objectives for each bunch of lessons, the teacher should make sure that the intention of the aims can be met at the implementation stage
- ✓ Each aim/general objective should have at least 3 components (maximum, four components):

a) Determine WHO is the focus? (Audience)
b) Behaviour/Action/Competence you're looking for evidence of learners 'actions (choose from the list of verbs in the tips and aim for higher levels of comprehension).
c) Include the ***Content*** including the competence you want the learner to learn.
d) Therefore, a fourth component can be included: the ***Conditions***, or how the learner will accomplish the task.
e) The fifth includes Standard of performance (criteria for acceptable performance)

Examples:

(a) Learners should be able to (b) define (c) biology

(a) Learners should be able (b) to describe the (c) key aspects of analyzing prose (d) appropriately using critical thinking.

(a) Learners should be able to (b) appreciate the (c) value of selecting reading materials (d) independently and responding creatively.

Although the above three examples are all general objectives statements, the first one has only three components while the two others have four

Each learning objective statement should have ONLY one BEHAVIOUR/ACTION /COMPETENCE in a statement.

By designing general objectives, teachers SHOULD NOT always directly copy them from the syllabus, but SHOULD adapt those objectives from the syllabus.

An element of Attitudes & Values should always appear.

Step (vi): Time allocation

- ✓ Considering the classroom timetable and the school calendar, assign periods within the time
- ✓ Determine the number of weeks for the unit
- ✓ Consider the content to be taught as well as the evaluation time
- ✓ Allocate the required time to cover each bunch of grouped lessons ✓ Fill the scheme of work template

Step (vii): Identifying teaching methods and evaluation procedures for each unit

- ✓ This should be based on learning objectives and learning activities
- ✓ More than one method may be selected for one activity
- ✓ Determine pupil characteristics e.g., ability, interest, age, sex, background, etc.
- ✓ Propose the methods for formative evaluation
- ✓ Determine how each Key Unit Competency will be evaluated
- ✓ Depends on nature of content e.g.; observation in class, marking written work, short answer items
- ✓ Practical activities may include demonstration
- ✓ Identify what learners need to do to help them learn (relevant activities e.g., read a passage; doing an exercise; demonstrate a skill; discussion group, creating a product, etc.)

Step (viii): Identifying instructional resources as well as relevant references for each lesson within the unit

- ✓ For each lesson, determine relevant teaching materials
- ✓ Ascertain availability and the cost of those teaching materials
- ✓ Be ready to improvise
- ✓ Write down reference books to be used in each lesson (textbooks, dictionaries, encyclopedias …)

Step (ix): Reserve a place for observation / self-evaluation

Leave a blank space to be filled as self-evaluation after a certain period of time (week, month, term)

This space may be also used by the School Director or the Director of Studies

Format of Unit Plan/Scheme of work

Academic year: …….. Term: …… School: ……

Subject: …….. Teacher's name: ……. Class + Combination: ……

Dates & number of lessons (periods) in a week	Units + Key Unit Competences	Lessons + Evaluation	Learning objectives	Teaching methods & techniques + Evaluation procedures	Resources & References	Observations
From January 11 (Mo) to January 15 (Friday) **3 periods**	**Unit 1**	Lesson 1 Lesson 2 Lesson 3	General Objective 1			
From January 18 (Mo) to January 22 (Friday) **3 periods**	Unit 1	Lesson 4 Lesson 5				
		Lesson 6	General objective 2			
From January	Unit 1	Lesson 7 Lesson 8				

25 (Mo) to January 29 (Friday)		**Summative Evaluation 1**		Evaluation procedures		
3 periods						
From Feb 01 (Mo) to Feb 05 (Friday) **3 periods**	Unit 1	Lesson 9 Lesson 10 Lesson 11	General objective 3			
In this week, the 3 periods will be: last lesson of unit 1, *evaluation for unit 19 and first lesson for* *unit 2*	Unit 1	Lesson 12				
		Summative Evaluation 2		Evaluation procedures		
	Unit 2	Lesson 1	General objective 1			
	Unit 2	Lesson 1 Lesson 2 Lesson 3				
	Unit 2	Lesson 4 …	General objective 2			

5.2. Lesson plan

Planning requires the teacher to make decisions about the pupils' needs, the most appropriate goals and objectives to help meet those needs, the motivation necessary to attain their goals and objectives and the most appropriate strategies for attainment of those goals and objectives.

The planning function occurs when the teacher is alone and has time to consider long-term and short-term plans: pupils' progress; the availability of resources, equipment and materials. Too often teachers do not have a plan for teaching. They may have a few ideas, but not an actual plan. This lack of planning can create a chaotic atmosphere in any classroom. Planning involves setting realistic objectives for the class as a whole and for individual students.

Planned experiences encourage initiative and creativity. In planning for student growth, you should consider learning options and identify necessary resources to meet individual needs of your students. A lesson plan is the most critical part of a teacher's instructional activities. It is a well prepared, systematically arranged programme through which the desired message or information is conveyed to the target audience through the appropriate media. It is a short, carefully developed and, usually, written outline designed to help the teacher to achieve the objectives of a specific topic, skill, or idea.

It can also be described as the breakdown of the school syllabus components of Social Studies into a complete but sound outline which is to be followed in the teaching-learning process. During the process of planning a lesson, a teacher maps all the activities proposed to take place in a classroom situation or during outside activities. He or she produces an instructional guide to the topic and sub-topic to be delivered to the learning audience in addition to mapping out of the learning audience. It involves a lot of mapping out of the strategies, methods and resources needed to present a lesson within a given situation, class level and time. It requires you to visualize all the available resources, room allocations, during and after the session.

Lesson plans are:

- A tool to help a teacher structure and plan activities in a lesson
- An important element within classroom management
- A crucial aspect of facilitating learner learning

- A step-by-step procedure for delivering a lesson

5.3. Reasons for making a lesson plan

It is necessary that a teacher or a student-teacher prepares a lesson plan due to the following reasons:

- ♣ A lesson plan acts as a form of reminder of what a teacher or a student-teacher is going to teach and how he/she tends to teach it.
- ♣ The actual layout of the lesson makes it necessary for a teacher to consider factors which might otherwise ignore or skip.
- ♣ The lesson plan encourages a logical development and preparation.
- ♣ To avoid instant planning or off-cuff teaching, this because it lacks a good foundation, often results in poor teaching.
- ♣ To use as future reference, to reinforce the strengths and improve the weaknesses revealed in the previous plan and the teaching of it.
- ♣ It helps in creating a systematic or structured learning environment.
- ♣ A teacher who has a good layout of the lesson plan teaches with confidence, knowing that in case of any difficulty he/she can fall back on the plan.
- ♣ A well-thought out lesson plan directs the teacher to the appropriate method of teaching a particular topic. The teacher thinks out the best way of putting the information across to the learners.

5.4. Aspects to be considered in lesson planning

Lesson planning has many aspects including:

- Identifying lesson objectives
- Selecting appropriate teaching methods and aids to achieve the stated objectives
- Allocating time to various lesson activities
- Producing a lesson plan and lesson notes (if appropriate)
- Identifying appropriate methods for evaluating whether learning has taken place, (i.e. whether the lesson objectives have been achieved).

Definition of an objective:

An instructional objective is a precise statement of what a learner should be able to do at the end of a lesson. Instructional objectives always contain a verb which denotes what action a learner is expected to do. An **action verb** e.g., read, write, explain, discuss.

A behavior is an action/activity (i.e. doing or saying something) which can be observed and measured objectively. Learners should be able to demonstrate a measurable behavior (knowledge, skills, competences, attitude, and values) by the end of the time period set for the objective.

An instructional objective should contain only one measurable behavior (and thus one action verb) since it is not possible to say whether or not a learner has achieved an objective if the learner meets the first part (action) but not the second.

Bloom's Taxonomy has objectives which fall in 3 domains, namely:

- Cognitive domain (Intellectual development /(knowledge)
- Psychomotor domain (manipulative skills)
- Affective domain (attitudes and values acquired, judgments formed)

Rationale:

Objectives are important because they:

- Provide the teacher with guidelines for developing instructional materials and teaching methods **(lesson planning)**
- Enable the teacher to design assessment for learning (**formative assessment**, and assessment of learning (**summative assessment**)
- Give direction to the learners and assist them to make better efforts to attain their goals (**motivation**).

Formulating and stating lesson objectives (Instructional Objectives)

The objectives written for a lesson have several names such as instructional objectives, performance objectives, operational objectives, behavioral objectives or lesson objectives.

Instructional objectives are to be used for **one lesson** (with single or double periods). They should have 5 components (it is better to respect the order in which the components are listed below):

- Reflect on the CONDITIONS, or how the learners will accomplish the task
- Determine WHO you're talking about
- Note the BEHAVIOUR/ACTION/COMPETENCE you're looking for - evidence of learners' action (choose from the list of verbs in the tips and aim for higher levels of comprehension).
- Include the CONTENT you want the learner to learn
- Have a STANDARD OF PERFORMANCE - criteria for acceptable performance.

Components of an Instructional Objective

Activity 2:

Example:

Given a sheet of paper, a pencil, a pair of compasses and a protractor (**condition/situation**), the learner should be able to (**learne**r) construct (**action**) a right- angle triangle (**content**/subject matter) accurately (**criterion**)using problem solving skills.

NB: The condition/situation may alternatively be of a more general nature (as opposed to subject specific) like, "by the end of the lesson..."

Given a ruler and pencil, learners will be able to draw a thin straight line correctly
Using long division technique, learners will be able to divide a 3-digit number by a 2-digit number accurately.

Given a world map, learners will locate at least ten different countries in less than five minutes

Through discussions, learners will describe two of their favorite leisure activities with confidence (communication and collaboration)

Using sentence starters and given vocabulary, learners will write rules for family behavior correctly (problem solving)

Aim statements / General Objectives are purposefully written for a wide use (for a unit or a set of lessons). Thus, instructional objectives are derived from aims. Teachers should therefore make an effort to ensure that aims (in the unit planning/scheme of work) are stated in a very simple language since they provide information for planning lessons.

Learning objectives in a lesson plan

In a lesson plan, only instructional objectives are acceptable.

They should be stated in a way that each lesson has a clear statement, with terminal behavior which can be classified as either, (1) knowledge and understanding, (2) skills and competences or (3) attitudes and values.

5.5. Stages in lesson planning

Lesson planning is an important and time-consuming responsibility for a teacher and very critical for enhancing learner learning and the teacher's confidence. Classroom management matters are also greatly assisted by careful lesson planning.

Points to consider in advance when planning a lesson

1. What are learners going to learn? i.e., what are the *objectives* of the lesson?
2. What *competencies* learners will acquire? Teachers write down one sentence for each of the following categories, describing the intended outcomes: (1) Knowledge & understanding, (2) Skills and (3) Attitudes & Values;
3. Who are *learners with Special Education Needs* in the targeted classroom? Here the teacher needs to think on the objectives achievable by all learners (including SEN);
4. What *organizational issues need* to be considered? E.g. is the class inside/outside/in a laboratory? What equipment is available or necessary? Is the size/means for grouping learners appropriate, e.g. male/female, ability, friendship groups, etc.?
5. What *teaching methods and activities* could be included in order to achieve these objectives, maximize learner participation/motivation, and meet the needs of both a mixed ability class and the different learning styles of learners?
6. What *previous relevant knowledge* will the lesson build upon to make clear the learning linkages? This may be formal (taught previously) or informal (life experience);

7. What *teaching materials /resources* will motivate the learners and facilitate their understanding of the topic?
8. How long is the lesson and how can this *time* be used most efficiently?
9. How will the teachers *assess* whether learning has taken place and the lesson objectives have been achieved?

Identifying learners with Special Educational Needs

In the Lesson Plan template, teachers are requested to consider and write down in the Lesson Plan, the type of Special Educational Needs learners identified in the classroom and the number of those learners.

Types of SEN (Special Educational Needs)

The Policy targets learners with Special Educational Needs (SEN), qualified (through standardized SEN assessment) for adjusted educational provisions, or/and who meet barriers within the ordinary Rwandan education system.

The groups shall include:

1. ***Learners with functional difficulties (disabilities)***

a. Physical and Motor Challenges
b. Intellectual Challenges
c. Visual Difficulties
d. Hearing Difficulties
e. Developmental Challenges
f. Multiple Difficulties
g. Speech and Communication Difficulties

2. ***Learners with Exceptional Learning Abilities***

a. Specific and General Learning Difficulties
b. Gifted and Talented

3. ***Learners with Social, Emotional and Behavioral Difficulties***

a. Emotional Difficulties,
b. Behavioral Difficulties
c. Social Challenges/Vulnerabilities

4. Learners with Curricula-related Challenges

a. Difficulties in handling/ manipulating educational resources (Including Left-handed)
b. Difficulties to comprehend/use the teaching languages (Including Linguistic Minorities)

5. Learners with Health Challenges

Planning for teaching methods and activities

When selecting teaching methods and activities, you should consider the following:

i. Encouraging the motivation, interest and enthusiasm of learners
ii. Resources available and the safety of the learners
iii. Whether activities are to be individual, group or class based
iv. Choose activities because they fit the purpose and not out of habit or fear of trying a new approach
v. Continuity and flow of topic development.

Learner activities are generally believed to produce an increase in concentration. Therefore, in choosing an appropriate method or activity, consideration should be given to:

- Whether the teacher is trying to change /challenge attitudes/values, develop skills, or assist/evaluate learners' acquisition of knowledge.
- Methods and activities which are more learner-centered include: Case studies, games, simulations, group/individual exercises/assignments, brainstorming, role play, group discussion, discovery, question and answer (if handled appropriately), etc.
- More teacher centered alternatives include: demonstration, lecture, storytelling, class discussion, etc.

Organizational issues

Teaching resources should be prepared well in advance taking into account their:

- Adequacy for the size of the class group and the location of the classroom
- Availability and working order

- Suitability for lesson objectives and learner ability, age, etc.

Grouping of learners, if applicable, should be planned in advance taking into account:

- Whether groups will be of mixed ability, same ability, same sex, etc.
- Whether groups will be made up of friends, learner or teacher determined.
- The selection here will be influenced by the lesson objectives, learner differentiation, etc.
- The teaching space should be checked for size, suitability, furniture arrangement, availability, inside/outside.

Preparing a Lesson Plan

- A lesson plan should have a distinct introduction, main body, and conclusion.
- The transition between these sections should not be noticeable and the development of the lesson content should be logical.

Lesson introduction

- Should be brief, imaginative, motivating, link to earlier work or knowledge of learners, explain the topic of the lesson, outline objectives and programme for the lesson.
- Alternative ways of introducing a lesson may include: dramatic story, visual stimulation (pictures, videos, charts, etc.), posing a problem, dramatic demonstration, a brief field trip, physical exercise, etc.
- Introductions may be designed to start the lesson with a "bang" or to settle learners into learning.

Lesson development/Main body

- Very important and allocated most of lesson time
- Always start with the already known towards unknown principles/structures
- Skills are developed and practiced, learner activities included and new learning covered
- Content should be clear and arranged in a logical sequence
- Teaching methods should be learner-centered, varied and suited to both subject content and learners

- Activities should also be varied, keep learners involved, and allow for differentiation (either through task or outcome differentiation)
- Teacher-learner interaction: use learners' names, give reinforcement, create a positive learning environment
- Teaching/learning aids should be used in the development to stimulate learning and motivate / engage learners
- Questions should be clear, planned in advance, cover Bloom's hierarchy and be inclusive of ***all learners***;
- Evaluation or assessment activities should be included in this section so that the teacher can gauge whether the lesson objectives have been achieved.

Conclusion:

- Should be brief and consolidate new learning
- What has been learned should be made clear, summarized, and noted down if this has not already been done in partial synthesis
- An indication should be given of the linkage between this lesson and the next, if appropriate. A homework may be one of the techniques to be used.
- Assignment or follow-up work should be given which reinforces learning and/or provides opportunities for further practice
- Assignment may be written or require learners to investigate/observe/read If given, assignment should be followed up in a subsequent lesson.

Flexibility in the classroom

Deviations from the lesson plan should not be considered as a failure; they might actually be appropriate or necessary responses to classroom circumstances and situations.

Lesson notes

The style of lesson notes can be varied to meet the needs of the learner. Lesson notes are complementary to the lesson plan and may include:

- A summary of information from several sources
- Points to be noted by learners
- Outline of a story, copy of a worksheet, case study or other activity to be included in the lesson
- Special notes (summary, partial synthesis, key words, key sentences, …) will assist the teacher in the lesson delivery ▪ Worked out examples

Preparing/making learning and teaching aids for the lesson

The use of teaching/learning aids in class results in the following:

- Promote a mood of mutual understanding and empathy in class;
- Bring about significant changes in the behavior of learners;
- Show the relationship of subject matter to the needs and interests of the learners, which results in the heightening of motivation for learning;
- Bring freshness and variety to the learning experience;
- Make learning meaningful for a wide range of learners' abilities;
- Encourage meaningful use of subject matter by allowing for imaginative involvement and active participation;
- Provide needed feedback that will help the learners to discover how well they have learned;
- Furnish the rich experiences from which meaningful concepts and competences will be developed;
- Widen the range of learner experiences in a process that will foster non-verbal learning and the making of accurate generalizations;
- Assume the order and clarity of thought that learners will need if they are to form conceptual structures, establish meaningful systems of ideas and develop competences.

Classification of teaching aids

Teaching aids can be classified into the following categories:

1. **Realia** -these are real things such as coins, tools, artefacts, plants, animals, etc.
2. **Boards**-i.e. chalkboard, magnetic board, whiteboard, display board, flannel board/cloth board, etc.

3. **Projected materials**-i.e. overhead projectors (slide projector, filmstrip projectors, etc.
4. **Audio aids**-i.e. cassette recorders, CD players, musical equipment such as amplifier, etc.
5. **Audio visual aids**-i.e. video, TV and camcorder.
6. **Compute**r – i.e. CD ROM and computer simulation programmes.
7. **Paper based aids** – i.e. textbooks, hand-outs, flipcharts, wall charts, posters, work cards, assignment cards, and flash cards.

All the above if properly used will help the teacher to describe abstract concepts.

A model to help assure learning: The ASSURE model

Analyze learner characteristics
This is the first step in planning. You need to identify the learners and know who they are. They can be identified in terms of two types of traits:

1. General characteristics and
2. Specific entry competencies such as knowledge, skills and attitude about the topic.

State objectives

The next step is to state the objectives as specifically as possible. These could be derived from the course syllabus, text book or from the curriculum guide or developed by you as the teacher. These should be stated in terms of what the learners will be able to do after the instruction.

Select, modify or design materials

Once you know the characteristics and specific entry competencies of your learners, the next task is to build a "bridge" between these two points and the three options to do this are by (1) selecting available materials (2) modifying existing materials (3) designing new materials.

Utilize materials

Once you have selected, modified or designed your materials you must then plan how materials will be used and how much time will be spent using them. After this step you will have to present the materials to the learners by using the correct techniques which you have also planned. The final step is to have class discussions, small group activities, individual projects and reports.

Require learner response

There should be activities within the lesson that given the learners a chance to respond and receive feedback on their performance and response. They need to practice what they are expected to learn and be reinforced for the correct response.

Evaluate

After the instruction, it is necessary to evaluate its effectiveness. This can be done by way of evaluating the whole instructional process.

Find out if:

- The learners have met the objectives;
- The media has assisted the learners in reaching the objectives;
- All the learners can use the materials properly and
- You as the teacher have facilitated learning by providing the necessary assistance for individual learners.

Time management

Planning the use of the time available is important for maximizing learning. This subsection includes brief guidelines for time management when lesson planning.

When planning a lesson, a teacher should take into account the length of the lesson: is it a single (40 minutes), double (80 minutes) or even triple (120 minutes) period?

Note: *Never plan*

- A double period (80 min) in lower primary level
- A triple period (120) in both primary or secondary levels

The teacher should plan her/his time management in order to allow:

- Learners sufficient time to complete tasks, practice new learning and receive feedback from the teacher;
    - Enough time for getting and putting away materials and equipment, group formation, etc; This may take longer than anticipated;
- Sufficient time for learners to apply learning through the use of suitable activities;
- For deviation if tasks take shorter/longer times than planned;

- Time for the teacher to conclude the lesson in a smooth and calm manner.

After the lesson:

- The teacher should evaluate whether the lesson time was used effectively
- Analyze the time allocated to teacher and pupil activities and
- Assess whether the time used was sufficient for the activities included.

Guidelines for allocating time in 40-minute lesson

These are generalizations only and need to be varied to take into account learner characteristics and entry behaviors, content, lesson environment, etc.

*Introduction***: 5 minutes** *Development / main body***: 30 minutes**

Conclusion: 5 minutes

Generally, lesson time should be divided into small "chunks" so that mismanagement is less likely to happen. A maximum time of 15-20 minutes is suggested. This might vary when necessary to allow time for other activities such as field trips.

Evaluating the total lesson

Evaluating the lesson in order to identify strengths and weaknesses is an important aspect of teacher training. Thorough evaluation can improve future performance.

Common themes

All subject areas:

a. Focus on the teacher reflecting on her/his performance during the lesson through asking a number of pertinent questions, such as:

- How relevant and motivating was the lesson introduction?
- Were the groups small enough to maximize learning?
- Were the experiments/demonstrations visible to the whole class?
- What went well in the lesson?

- Where the activities motivating and suitable?

b. Emphasize the importance of constructive self-evaluation as a means to future improvement. Questions such as these are encouraged:

- What did not go well in the lesson - with possible reasons, so that the teacher can think out alternative approaches for the future?
- What improvements could be incorporated if the lesson is to be taught again?
- Emphasize identification of strengths and weaknesses in teacher performance **Template of a Competence – based Lesson Plan**

School Name: …… **Teacher's name**: ……

Term	**Date**	**Subject**	**Class**	**Unit Nº**	**Lesson Nº**	**Duration**	**Class size**
	… /……/ 20	…..	….	….	… .	…	….

Type of Special Educational Needs and number of learners	
Topic area:	
Sub-topic area:	
Unit title	
Key Unit Competence:	
Title of the lesson	
Learning Objective	
Knowledge & understanding	
Skills	
Attitudes & Values	
Plan for this Class (location: in / outside)	

Learning Materials (for all learners)	
References	

Timing for each step	**Description of teaching and learning activity**		**Competences and cross cutting issues to be addressed**
	Teacher activities	**Learner activities**	
Introduction … min			
Development of the lesson … min			
Conclusion … min			
Teacher self-evaluation			

Self-assessment questions

1. What is a scheme of work, and why is it essential for effective teaching? Discuss the key elements that should be included in a scheme of work and how it helps in planning and delivering lessons.
2. How does creating a scheme of work benefit both the teacher and the students? Explore the reasons for making a scheme of work and how it impacts lesson continuity, teacher confidence, and student learning.

3. What are the main steps involved in unit planning, and why is each step important?
4. How can teachers ensure their lesson plans are flexible and adaptable to different classroom situations? Discuss strategies for modifying lesson plans based on student needs, unexpected events, or classroom dynamics.
5. What are the key components of an effective lesson plan, and how should they be structured?
6. How can a teacher identify and accommodate students with Special Educational Needs (SEN) in their lesson plans? Discuss methods for including SEN students in lesson planning and how to adapt teaching methods to meet their needs.
7. Why is it important for lesson plans to include specific instructional objectives, and how should these be formulated? Explore the role of instructional objectives in guiding lesson content and assessing student learning.
8. What types of teaching aids can enhance the effectiveness of a lesson plan, and how should they be selected and used? Discuss various teaching aids and how they can be integrated into lesson plans to support learning.

Indicative resources

Geoff, P. (2004). *Teaching Today: A practical guide*. 3rd Edition. Nelson Thornes.

Alcina, A. (Ed.). (2009). *Teaching and Learning Terminology. New strategies and methods.* Amsterdam: John Benjamins Publishing Company.

Angelo, T.A., & Cross, K.P. (1993). *Classroom Assessment Techniques. A Handbook for College Teachers* (2nded.). San Francisco: Jossey-Bass.

Marzano, R.J., & Kendal, J.S. (2007).*The new taxonomy of educational objectives*. New York: Corwin Press.

Sharma, V. (2011).*Principles and Methods of Teaching*. New Delhi: Lakshay Publications.

Westwood, P.S. (2008).*What Teachers Need to Know about Teaching Methods*.Victoria: ACER Press.