Micro-teaching-notes compress

MICRO-TEACHING FOR DPTE AND DECTE BY PHILO.

ESSENCE STATEMENT

GENERAL LEARNING OUTCOMES.

1.0BASIC EDUCATION CURRICULUM FRAMEWORK.

1.1.   OVERVIEW OF THE BASIC EDUCATION CURRICULUM FRAMEWORK.

CURRICULUM FRAMEWORK.

- . Is an organized plan/set of standards/learning outcomes that define the content to be learned in terms of clear, definable standards of what the learner should be able to do.
- . Is part of an outcome based education reform design.
- . Is a supportive structure to help schools to plan and develop their own curriculum.

PURPOSE OF A CURRICULUM FRAMEWORK.

- . Outlines the vision for the curriculum reforms including the over approaching mission , the pillars of reforms.
- . Provides a comprehensive conceptualization of reforms in basic education.
- . Enhances the school plan and develop their own.
- . Helps develop quality that makes a child socially effective and happy in various social settings.
- . Helps develop pre-vocational skills, willingness to work hard, dignity of manual work and love for social justice.
- . Helps develop knowledge of scientific methods of inquiry and its use in solving problems.
- . It sets out what students should know, value and be able to do at various stages of schooling.
- . Gives schools and teachers flexibility and ownership to plan and develop alternative curriculum modesto meet.

- Promotes uniformity of education system across the country.
- Facilitate the work of curriculum support officers.

Reasons for changing a curriculum.

- Developing learners individual potential in a holistic integrated manner while producing intellectually, emotionally and physically balanced citizens.
- Focused on teaching and learning concrete skills rather that taking an abstract approach.
- Establishing a national assessment system that caters for continuous evaluation of learners.
- Putting in place structures to identify and nature child's talents from anearly age.
- Emphasis on science, technology and innovation.

Basic Education Curriculum Framework Pillars

The basic education curriculum framework vision and mission are supported by three important pillars; values, theoretical approaches and guiding principles.

Values

Values are defined as standards that guide an individual on how to respond or behave in a given circumstance. Our values influence how we feel, act and make choices in life. Internationally, there has been arise in the challenges and issues

related with cultural integration, as well as ethnic and religious diversity. In Sub-Saharan Africa, scholars have argued that the way ethnic groups interact has been responsible for Africa's low economic growth, political instability and conflict, high inequality, and low provision of public goods and services.

The teaching of **values** will facilitate the achievement of the curriculum reforms'vision, particularly with respect to developing **ethical citizens.** The thrust of this will be to nurture learners who do the right thing because it is the right thing to do. Students will be guided to learn about and appreciate the effort and sacrifice that built the country and to

see

beyond their self-interests to the needs of the community. As a result, they will be provided with opportunities to **contribute** fully to the world around them – economically, culturally, socially and politically. Basic education will build capacities in learners that will enable them to be **stewards of the earth,** and to minimize negative environmental impacts. It will also nurture them to **build relationships** through humility, fairness and open-mindedness, and with **teamwork** and communication. The teaching and learning of values will also enable them to **value diversity** in all people, and to demonstrate respect, **empathy** and compassion for all people.

In Kenya, there is a noticeable values and behavioral crisis among the general population and young people in particular (Pernell, 1990). Many youngsters are growing up without the desired values, positive attitudes and psychosocial competencies needed to function as responsible citizens. The primary responsibility for inculcating values rests with parents and the community, but education too has an important role to play in this regard. The Framework recognizes that values are important to the socio-economic development and stability of the country, in the same way that competencies in academics are important.

The Framework will take advantage of the fact that learners spend most of their formative years in school, which presents opportunities for the curriculum to mold and reinforce values upon which the learner's character is formed. The Framework will adopt a value based approach to education that will create learning opportunities within the formal, non- formal and informal curriculum dimensions to inculcate the desired values in all learners.

The values in BCEF include **responsibility, respect, love, integrity, peace, unity and patriotism.**

LOVE

. Quality of deep admiration/strong feeling of affection to others. When learners have a loving environment at home and school, they too are able to love themselves and others. This helps them to become team players.

PEACE

. Friendly/freedom from disturbance. A state of tranquility and harmony with one's self and with others. Peaceful people have high levels of self-awareness and self-esteem which enable them to remain calm despite the surrounding circumstances, even when not favorable. One is able to uphold healthy relationships and collaborations with others.

UNITY

. Joined as one/oneness.
. Ability to work together with others towards a common goal regardless of their different backgrounds and abilities.
. Unity enables people to live together with others in harmony without focusing on social, religion, racial, cultural, economic and political differences.
. As learners share in teamwork, they purpose to support each other.

RESPONSIBILITY

. Ability to act independently and take decisions without authorization.
. It is the obligation of the school community to mold and nurture responsible learners.
. This will enable them to fruitfully engage in the assigned roles and duties in the school, home and community.

PATRIOTISM.

. Is loyalty, love and devotion to one'scountry.
. Patriotic citizens are always ready to defend their country, obey its laws and respect their fellow citizens.

RESPECT

. Obeying and submission.
. Is the ability to have positive regards towards self and others without prejudice.
. It can be fairly nurtured through the values of human dignity, humility, patience and etiquette.
. In the class room situation, respect will help the learner to understand that each member counts and they are worth their presence in that class irrespective of their diverse needs and varied personalities.

INTEGRITY

. Being honest, fair in making judgements, truthful having control over something/someone.
. Ability to know, defend and do what is right always.
. This value is exhibited through commitment, courage, honesty, and ethical conduct.
. Integrity can be well nurtured in school by example when the school leaders uphold integrity in their duties and obligations. Discipline, fairness, transparency, consistency and reliability help to entrench integrity in the community.

PERTINENT AND CONTEMPORARY ISSUES(PCIs)

. These are challenges the society faces and experiences as a result of dynamism in various aspects ranging from social, technological, economic and cultural changes. The PCIs have been mainstreamed in different learning areas to enable learners respond appropriately when faced with particular challenges in their learning environments and beyond.

BROAD AREA	PERTINENT AND CONPEMPORARY ISSUE
GLOBAL ZITIZENSHIP	Peace education, integrity, ethnic and

	racial relations, social cohesion, patriotism and good governance, human rights and responsibilities, child rights, childcare and protection, gender issues in education
HEALTH EDUCATION	HIV and AIDS education, alcohol and drug abuse prevention, lifestyle diseases, personal hygiene and preventive health, common communicable and chronic diseases.
LIFE SKILLS AND VALUES EDUCATION	Life skills, values, moral education and human sexuality, etiquette
EDUCATION FOR SUSTAINABLE DEVELOPMENT	Environmental education, disaster risk reduction, safety and security education(small arms, human

	trafficking), financial literacy, poverty eradication, countering terrorism, extreme violence and radicalization, gender issues and animal welfare.
LERNER SUPPORT PROGRAMS	Guidance services, career guidance, counseling services, peer education, mentorship, learning to live together, clubs and societies, sports and games
COMMUNITY SERVICE LEARNING	Service learning and community involvement, parental empowerment and engagement

Importance of pertinent contemporary issues.

- . Enables citizens understand the current critical issues that affect the society.
- . Equips citizens with skills, knowledge and understanding of social issues emerging in the society.
- . Enables citizens solve problems affecting them in the society.

GUIDING PRINCIPLES

The Framework is based on the following guiding principles:

1. *Opportunity*

In order to achieve the reforms'vision and mission, the curriculum provides learners with a variety of opportunities to enable them to identify their needs, talents and potential. This will enable them to participate in the world of work and the development of the nation. The emphasis will be on equal access to education for all. This will enable learners to enjoy learning and reduce wastage in terms of learners leaving school because the curriculum is not relevant to their needs.

2. *Excellence*

Every learner will be nurtured to excel in their areas of greatest interest and ability. The Framework values excellence and competitiveness rather than raw competition for examination grades. This will play a role in helping to reduce the challenge of malpractice in examinations because each learner will be guided to excel in their area of interest and ability.

3. *Diversity and Inclusion*

There are two dimensions in the guiding principle of diversity and inclusion. First, the Framework will guide learners to appreciate Kenya's diversity in terms of race, ethnicity, gender, language, culture, and religion. The second dimension relates to the fact that learners are different in terms of their learning needs and abilities and these differences need to be respected and valued within an inclusive learning environment. Inclusion will entail ensuring that all learning institutions accommodate all learners regardless of their physical, emotional, intellectual, or any other need. It involves provision of reasonable accommodation characterized by flexibility, responsiveness and support. The Framework recognizes that not all learners are academically gifted but considers every learner's social and cognitive capabilities, their needs and desires, and respects the differences in the way children learn. The ultimate aim is to guarantee basic education for every learner according to their abilities and needs.

The curriculum reforms should address the needs of children and youth who are out of school, and adults, to

increase their access to and participation in education, and hence, raise their literacy levels for personal and national social

economic development.

4. *Differentiated Curriculum and Learning*

Differentiated curriculum and learning builds on the principle of diversity and inclusion. It ensures that the curriculum content and instructional approaches are appropriate for each learner. It provides space for teachers to adapt the

curriculum to suit the learner. It does not demand that every learner learn the same content in the same way, in the same number of hours and at the sametime.

5. *Parental Empowerment and Engagement*

Parents play a very important role in determining the success of a child‟s education. They have a shared responsibility with schools to provide an enabling environment that is conducive to learning and which motivates the child to achieve their full

potential. The Framework will provide opportunities for schools to empower parents to contribute to the learning outcomes for their children and to be engaged at all tiers and levels of basic education.

- . Ensure learners goto school
- . Pay fee
- . Ensure learners do homework
- . Provide basic needs
- . Provide conducive environment
- . Provide learning materials/improvise
- . Ensure learners are in good health.

6. *Community Service Learning*

Involving students in community service is a form of experiential education that enables students to apply their knowledge and skills in a different setting. Teachers then support students to analyse what they have learned by taking part in this

activity and how it might be applied to their academic and personal development.

Community service learning entails a balanced emphasis on both students" learning and addressing real needs in the community. Learning outcomes are linked to meaningful human, safety, educational, and environmental needs that are co-determined with

community partners and service recipients. The service experience is brought back to the classroom to enhance learning. Learners work

on real problems that make academic learning relevant while simultaneously enhancing their social skills, analytical ability, civic and ethical responsibility, self-efficacy, and career development.

Importance of guiding principles.

- Learners are given opportunity to their needs, talents and potentials.
- Learners are nurtured to excel in the areas of greatest interest and abilities.
- Learners appreciate Kenyans diversity in terms of race, ethnicity, gender, language, culture and religion.
- Every learner is guaranteed basic education according to their abilities and needs.
- It ensures the curriculum content and instructional approaches are appropriate for each learner.
- Parents are able to provide an enabling and conducive environment for learning.
- It enables learners to apply their knowledge and skills in different setting.

1.2. THEORETICAL FRAMEWORK.

Theoretical Approaches

A theory is an abstract general explanation of observations or a subject understudy that can be relied upon to provide guidance for practice. It attempts to predict behaviour or reach a reasonable and general set of explanations for an
underlying issue. The Basic Education Curriculum Framework is underpinned by several theories.

Instructional Design Theory

This theory offers explicit guidance towards a new curriculum that explainshow to help students learn and develop in the wake of emerging globalization. Perkins, (1992) describes the instructional design theory which offers guidance for fostering cognitive learning as "Clear information, in terms of goals, knowledge needed and performance expected; Thoughtful practice, in terms of opportunities for learners to engage in learning actively and reflectively; Informative feedback, in terms of clear and thorough counsel to learners, and; Strong intrinsic or extrinsic motivation."

Instructional design theory is design-oriented because it focuses on the means to attain given goals for learning and offers guidelines on methods to use in different situations in curriculum implementation. Values play an important role in instructional design theory. They underlie both the goals the curriculum pursues and the methods it offers to attain the goals. All these will be articulated in this BECF which takes cognizance of the place of values as an anchor for the pillars of the curriculum. The BECF also provides a vision for the reforms and engages critical stakeholders and policymakers to identify with it. This will provide a strong momentum for change in achieving the reforms' vision.

Visible Learning Theory
John Hattie (2012) observes that globally, fundamental changes in education systems have important implications for curriculum reform. Learners need to be able to think about and solve problems, work in teams, communicate through discussions, take initiatives and bring diverse perspectives to their learning. In addition, students need to learn more, yet they have little time available to learn it (Lee and Zemke, 1995). Learners also need to demonstrate the impact of the
achievement of national goals of education.

Visible learning means an enhanced role for teachers as they become evaluators of their own teaching. Hattie asserts that visible learning and teaching occurs when teachers see learning through the eyes of students and help them become their own teachers. It entails making student *learning* visible to teachers so that they can know whether they are having an
impact on this learning, this is an important component of becoming a lifelong learner. This resonates with the Sustainable Development Goals. The „learning" part of visible learning is the need to think of teaching with *learning* in the forefront
and with the idea that we should consider teaching primarily in terms of its *impact on student learning.*

When the *teaching is visible* the student knows what to do and how to do it. When the *learning is visible* the teacher knows if learning is occurring or not. Teaching and learning are *visible* when the learning goal is not only challenging but is

explicit. Furthermore, both the teacher and the student work *together* to attain the goal, provide feedback, and ascertain whether   the student has attained the goal. Evidence shows that the greatest effects on student learning come when not only the

students become their own teachers (through self-monitoring, and self-assessment), but when the teachers become

learners of their own teaching. In successful classrooms, both the teaching and learning are visible. This theory is important in designing a competency based curriculum. It provides directions on the nature of engagement in the learning process

between the teacher, the learner and the environment. It also provides a basis for designing a formative and criterion referenced assessment, which is the bedrock of a competency-based curriculum.

Constructivism Theories

Different proponents of the constructivist theory have opined that human beings construct all knowledge while

participating in different mental and physical experiences. In constructivism, the learner builds a personal interpretation of the world based on experiences and interactions and learning is a process of constructing knowledge rather than acquiring or communicating it. Among its proponents are Dewey, Vygotsky, Piaget, Brunner, and more recently Gardner and Hattie.

i. Dewey's Social Constructivism

Dewey felt that the curriculum should ultimately produce students who would be able to deal effectively with the modern world. Therefore, curricula should not be presented as finished abstractions, but should include the child's preconceptions and should incorporate how the child views his or her own world. Dewey uses four instincts, or impulses, to describe how to characterize children's behavior. The four instincts according to Dewey are social, constructive, expressive, and artistic. Curricula should build an orderly sense of the world where the child lives. He hoped to use occupations to connect miniature versions of fundamental activities of life with classroom activities. The way Dewey hoped to accomplish this goal was to combine subject areas and materials. By doing this, he made connections between subjects and the child's life. According to Dewey, education is growth and not an end in itself, and thus the curriculum should arise from students'interests and should be hands-on and experience based rather than abstract. This theory underscores the emphasis of continuous, participatory and experiential learning. This is an emphasis of the practical aspect of the basic education curriculum in the curriculum reforms.

ii. Vygotsky's Social-Cultural Development Theory

Vygotsky's social-cultural theory emphasized that teaching and learning are highly social activities and that interactions with teachers, peers and instructional materials influence the cognitive and affective developments of learners (Kim and Baylor, 2006). The theory argues that learning takes place when learners interact with each other, or have other social contact. Learners negotiate meanings with people in the environment, and they achieve goals through interacting, both explicitly and implicitly, with the teacher, peers, materials, and atmosphere embedded in the context. This theory underpins the basic education curriculum framework in terms of conceptualizing and

designing the necessary paradigm shifts that will facilitate creating rich learning environments which will stimulate all learners and help them to fulfill their potential.

Vygotsky's theory emphasizes that while adults may learn independently, children require mediation from others before they can learn on their own. He called this process of moving from being mediated by others to learning

independently *scaffolding*. Within *scaffolding*, he identified an optimal point where learning takes place and called this the Zone of Proximal Development (ZPD). The concepts of scaffolding and ZPD will be useful in designing the pedagogical shifts that teachers will be trained into facilitate adoption of a competency based curriculum in basic education. Activities in the classroom will include journaling, experiential activities, and collaborative and cooperative learning.

iii. Gardner's Multiple Intelligence Theory

Gardner's theory grew out of constructivism. It states that learners possess different kinds of minds and therefore learn, remember, perform, and understand in different ways. He argues that we are all able to know the world

through language, logical-mathematical analysis, spatial representation, musical thinking, use of the body to solve problems or to make things, an understanding of other individuals, and an understanding of ourselves. Recognizing this enables learners to leverage their strengths and purposively target and develop their weaknesses.

Pedagogical approaches under this theory emphasize the importance of a learner centred classroom, self-directed learning and delivery of instruction via multiple mediums.

Where individuals differ is in the strength of these intelligences – the so-called profile of intelligences – and in the ways in which such intelligences are invoked and combined to carryout different tasks, solve diverse problems, and progress in various domains. Gardner says that these differences challenge an educational system which assumes that everyone can learn the same materials in the same way and that a uniform, universal measure suffices to test student

learning. Indeed, as currently constituted, our educational system is heavily biased toward linguistic modes of instruction and assessment and, to a somewhat lesser degree, toward logical-quantitative modes as well. Given the need to identify, develop and nurture the talents of learners in the reformed curriculum, Gardner's argument that

learners can leverage their strengths is more likely to be educationally effective since learners learn in ways that are identifiably distinctive. The broad spectrum of learners – and perhaps society as a whole – would be better served if disciplines could be presented in a number of ways and learning could be assessed through a variety of means.

Criterion referenced assessment that is aligned to a learner's competencies can be situated within Gardner's multiple intelligencestheory. This type of assessment is emphasized in the BECF.

iv. Piaget's Cognitive Development Theory

Piaget's theory deals with how humans gradually come to acquire, construct, and use knowledge. He looked at the impact a person's childhood had on their development, and the ways in which maturation affect a child's increasing capacity to understand their world. Piaget asserted that children cannot undertake certain tasks until they are

psychologically mature enough to do so. According to this theory, there is progressive reorganization of mental processes resulting from biological maturation and environmental experience. It is important to note that children's thinking does not develop entirely smoothly, instead, there are certain points at which it "takes off" and moves into completely new areas and capabilities. These points are in four stages of cognitive development: sensory motor (0-2 years), language development and conceptual thought (2-7 years), concrete operations (7-11 years) and formal

operations (11 years and above). This has been taken to mean that before these ages children are not capable (no matter how bright) of understanding things in certain ways, and has been used as the basis for scheduling the school curriculum. Parents are encouraged to provide a rich, supportive environment for their child's natural propensity to grow and learn. Parent involvement in learning is an active element in reforming the basic education curriculum.

v. Bruner's Cognitive Development Theory

Bruner's constructionist theoretical framework is based on the theme that learners construct new ideas or concepts based upon existing knowledge. According to Brunner (1976) the facets of the learning process includeselection and transformation of information, decision making, generating hypotheses, and making meaning from information and experiences. The theory emphasizes the significance of categorization in learning as "to perceive, to conceptualize, to learn, to make decisions." Interpreting information and experiences by similarities and differences is a key concept.   The theory identifies four key themes:

a) The role of structure in learning and how it may be made central in teaching. Structure refers to relationships among factual elements and techniques.

b) Readiness for learning and spiral curriculum. Bruner believed that any subject could be taught at any stage of development in a way that fit the child's cognitive abilities. Spiral curriculum refers to the idea of revisiting basic ideas over and over,building upon them and elaborating to the level of full understanding and mastery.

c) Intuitive and analytical thinking should both be encouraged and rewarded. He believed the intuitive skills were under-emphasized and he reflected on the ability of experts in every field to make intuitive leaps.

d) Motivation for learning. He felt that ideally, interest in the subject matter is the best stimulus for learning. Bruner was against external competitive goals such as grades or class ranking.

Just like the other constructivists, Bruner placed emphasis on learning instruction that allows learners to discover principles for themselves and knowledge being structured in away that is readily grasped by learners.

vi. Erik Erikson's Theory of Psychosocial Development

This theory attempts to describe personality development throughout the entire lifespan of an individual in eight distinct stages. Erikson proposed a lifespan model of development that entails five stages in childhood (from birth to the age of 18 years) and three stages in adulthood. According to Erikson, there is plenty of room for continued growth and development throughout one's life. The theory is underpinned by the epigenic principle which presupposes that   personality develops in a predetermined order, and builds upon each previous stage. Reference

to this theory will be

made to minimize frustration and ensure that education tasks given to the child are in alignment with their stage of development.

Erikson assumes that a crisis occurs at each stage of development. These crises are of a psychosocial nature because they involve the psychological needs of the individual (i.e. psycho) conflicting with the needs of society (i.e. social). Successful negotiation of each stage results in a healthy personality and the acquisition of basic virtues. Failure to
successfully complete a stage can result in a reduced ability to complete further stages and therefore a more unhealthy personality and sense of self. To help each learner achieve the expected learning outcomes,a competence based curriculum will ensure that outcomes are commensurate with the learner's stage of development.

The following table gives a summary of the tasks or crises a human being is expected to negotiate in order to move to the next stage of development.

1	Trust vs. mistrust	Hope	Infancy (o to1 ½)
2	Autonomy vs. shame	Will	Early Childhood (1 ½ to3)
3	Initiative vs. guilt	Purpose	Play Age (3 to 5)
4	Industry vs. inferiority	Competency	School Age (5 to 12)
5	Ego identity vs. Role Confusion	Fidelity	Adolescence (12 to 18)
6	Intimacy vs. isolation	Love	Young Adult (18 to 40)
7	Generativity vs. stagnation	Care	Adult hood(40 to 65)
8	Ego integrity vs. despair	Wisdom	Maturity (65+)

(McLeod 2016)

According to Erikson the curriculum aims at fostering both lower and high level skills concurrently where the teacher remains a guide or facilitator while the learner constructs their own knowledge through exploration and experiential learning. Learners as they grow are active participants in the learning process through collaborating with others in group

projects, hands-on exploration, and aiming at authentic tasks and product development. Learning goals are stated in terms of growth and increased ability to work independently and collaboratively. Pedagogy and assessment therefore as

discussed in these theories are inclined towards the 21st century skills and competencies which the basic education curriculum aspires to achieve in the curriculum reforms.

IMPORTANCE OF STUDYING THEORIES ON BASIC EDUCATION FRAMEWORK.

Piagetes cognitive development theory.

- Piaget's theory deals with how humans gradually come to acquire construct and use knowledge.
- He looked at the impact a person's childhood had on their development and the way in which maturation affect child's increasing capacity to understand their world.
- Piaget assorted that children cannot undertake certain tasks until they are psychologically mature enough to do so.
- According to this, there is a progressive re-organization of mental process resulting from biological maturation and environmental experiences.
- It is important to note that children's thinking does not develop completely new areas and capabilities.
- These points are in four stages of cognitive development sensory motor(0-2 years) language development and conceptual thought 2-7 years.
- Concrete operations (7-11 years).
- Formal operations (11 years).
- He argued that before these ages children are not capable of understanding things in certain ways/no matter how bright the child is.
- This has been used as a basis for scheduling the school curriculum.
- Parents are encouraged to provide a rich supportive environment for their child's natural prosperity to grow and learn.
- Parents involvement in learning is an active element in reforming the basis education curriculum.

Importance of this theory.

- Maturation plays an important role of understanding ideas of the child as the child moves from one stage of life to another/level of understanding increases with age.
- Environmental experiences also aid the child in acquiring, constructing and use of knowledge.

- The theory has been of great help for basis of scheduling the school curriculum/at which age the child is supposed to be enrolled in pre-primary school and which content to be taught.
- The theory involves the parent for their child's natural prosperity to grow and learn by providing rich and supportive environment.
- This helps in reforming the basic education curriculum. PIAGETS
- Environmental experiments aids the child in acquiring knowledge.
- Maturation plays a vital role of understanding ideas.

How learning theories help nature every learner'spotential.

- Provides a basis to understanding how people learn and ways to explain, describe, analyze and predict learners' progress. It helps us to make more informed decisions around the design, development and delivery of learning.
- Teachers use educational learning theories in solving same psychological problems for their learners.
- Offers framework on how knowledge is created and how learning takes place.
- Provide the context of learning, motivation and methods of teaching.
- Learners learn from known to unknown, weteach them from one instructional design theory.
- Learners learn when they interact with peers to peers, parents and friends(Vygotsky).
- Learners should be motivated by clapping for them and giving presents.
- We should create environment that learners learn from/ learner centered approach(Vygotsky).
- Learners differ inability and intelligence.
- Provide basis to understand how people learn and ways to explain, describe, analyze and predict learning in that sense.
- Learners should be given variety of activities as propagated by theory.

THEORIES THAT PROPAGATE DIFFERENTIATED LEARNING.

- Differentiated learning does not demand that every learner learn same content in the same number of hours and at the sametime. **Vygotskys.**
- Encourages collaborative learning since learners learn from the society.
- Encourages learners to care and preserve cultural tools.

- His social-cultural theory emphasizes that teaching and learning are highly social activities and that interactions with teachers, peers and instructional materials influence the cognitive and effective development of learners.
- Teachers should use different learning resources.

  Piagets.
- Teachers should take an active role in mentoring learners instead of spoon feeding them.
- Learners should share learning experiences and participate actively in learning.
- Learners should learn from each other.
- Equips learners with skills used in problem solving.
- Learners individual abilities are respected since learners reach development stages differently.

  Instructional.
- Teachers strategy is formed in away that they can easily identify specific learning outcomes.
- Helps in indicating approaches to evaluation for teachers.
- Allows for collaboration learning since learners learn from the society-Vygotsky.
- Encourages learners to care for and keep cultural tools for future generation-Vygotsky.

  Gardener.
- Provides theoretical foundation for recognizing the different abilities and talents of learners.
- It allows learners to participate in different activities.
- Teachers can use different modes of assessment to tackle all the intelligences.
- Teachers should use different learning resources.

DIFFERENCIATED LEARNING.

- Differentiated curriculum and learning builds on the principle of diversity and inclusion.
- It ensures that the curriculum content and instructional approaches are appropriate for each learner.
- It provides space for teachers to adapt the curriculum to suit the learner.
- It does not demand that every learner learn the same content in the same number of hours and at the sametime.
- Teachers using this instructional model cultivate and facilitate diverse educational experiences designed to advance each learner's learning, regardless of their learning style and background.

HOW DIFFERENTIATED LEARNING CAN BE APPLIED IN A MICRO-TEACHING LEARNING

Differentiated learning; teaching approach that tailors instructions to all learners needs. How differentiated learning can be applied in micro-teaching;

- Design lessons based on learners learning styles
- Group learners by shared interests/ability for assignments
- Assess the learners using formative assessment.
- Manage the class room to create a safe and supportive environment.
- Continually assess and adjust lesson content to meet every learner's need.

2.0 BASIC EDUCATION CURRICULUM FRAMEWORK.
2.1 CORE COMPETENCIES.

21ST CENTURY SKILLS REQUIRED BY ALL LEARNERS.

Learning skills. Teaches students about mental processes required to adapt and improve upon modern work environment.

Literacy skills. Focuses on how students can discern facts, publishing outlets, and the technology behind them. There is a strong focus on determining trustworthy sources and factual information to separate it from the misinformation that floods the internet.

Life skills. Take a look at intangible elements of a student's everyday life. They focus on personal and professional qualities. Contribute to a student's future career. They are; skills for knowing and living with self, skills for knowing and living with others and skills for
decision making. The general 21st century life skills areas follows;

- Critical thinking
- Creativity
- Collaboration

.   Communication

- Information literacy
- Technology
- Media literacy
- Flexibility
- Leadership
- Initiative
- Productivity
- Social skills.

CORE COMPETENCIES.

Core Competencies for Basic Education

A competency based approach enables meaningful connections within and between subject areas through a focus on competencies.
Subjects will continue to be taught and will be the vehicles through which the core competencies are developed over time.
Competency based curriculum, and specifically for basic education, the Framework provides clarity on the concept itself and also how the curriculum will be designed, implemented and assessed.

In the context of the Kenyan Competency Based Curriculum (KCBC), competency is the ability to apply appropriate knowledge and skills to successfully perform a function.

There are seven core competencies to be achieved by every learner in basic education are:

1. Communication and Collaboration
2. Self-efficacy

3. Critical Thinking and Problem Solving
4. Creativity and Imagination
5. Citizenship
6. Digital Literacy
7. Learning to Learn

The Framework seeks to develop these competencies so that all Kenyans can thrive in the 21st century.

Communication and Collaboration

Communication is the act of transferring information from one place to another/exchange of information, whether vocally, visually, or non-verbally. The discipline of communication focuses on how people use messages to generate meanings

within and across various contexts, cultures, channels, and media. The discipline promotes the effective and ethical practice of human communication.

Collaboration is the process of two or more people or organizations working together to realize shared goals. Collaboration may require leadership, although this can be social within decentralized or egalitarian groups or teams that work collaboratively in relation to gaining greater resources, recognition and motivation. Strategies for effective communication enhance the attainment of greater collaboration among groups that ultimately increase the success of teams as they engage in collaborative problem solving. Collaboration is also present in

opposing goals exhibiting the notion of adversarial collaboration, though this is not a common case for using the word. Collaborative learning is a system in which two or more people co-operate in a learning experience to share and contribute to each member's

understanding of a topic and to complete a given task. Collaborative learning is designed to help learners learn from each other.

. Communication and collaboration is incorporated in CBC so that we can nurture learners who are expressive, clear and team players.

. It also brings about good and confident learners. This can be achieved through group discussions, doing experiments and projects.

Self-efficacy

Self-efficacy is a person's belief about his or her capabilities to perform tasks or assignments that can change and transform his or her life. It determines how the person feels, thinks, behaves and motivates themselves. Self-efficacy has the potential to determine four major processes namely cognitive, motivational, affective and selection processes.

A strong sense of self-efficacy enhances a learner's accomplishment and personal well-being in many ways. Learners with high assurance in their capabilities approach difficult tasks as challenges to be mastered, rather than as threats to be avoided. Self-efficacy fosters intrinsic interest and deep engrossment in activities. Learners set themselves challenging goals and maintain a strong commitment to them.

Self-efficacy as a competence will enable learners to develop and nurture intra-personal skills and values such as self-awareness, self-esteem, confidence and personal integrity. These competencies will enhance the learner'sability to heighten and sustain efforts in the face of failure and effectively manage stressful situations. A learner with a strong sense of self-efficacy will be courageous and bold enough to set and pursue personal educational, family, community, entrepreneurial,professional, and career goals in all forms of employment that will lead to personal accomplishment (British Council, 2016). An efficacious learner will be aware of the resources at their disposal and will take personal
responsibility for the use, care, management, protection and preservation of these resources.

A learner with strong self-efficacy will be internally motivated to establish and maintain healthy interpersonal relationships.
They will demonstrate interpersonal relationship skills such as assertiveness, empathy, effective communication, negotiationskills,non-violent conflict resolution skills and peer pressure resistance skills. Creative and critical thinking that leads to effective decision making and problem solving is based on a strong sense of self-efficacy (British Council, 2016).
Capacity building of teachers and parental engagement are two crucial factors that would determine acquisition of self-efficacy. The school will be expected to provide opportunities for parents to be empowered and engaged in the affairs and welfare of their children'seducation.

.   Use the learning environment to instill learners the belief about their capabilities to perform assigned tasks, prospects and accomplishment and personal well-being.

. Develop assignments that give learners chance to;

1. Present ideas with confidence
2. Demonstrate a sense of assurance and trust

3. Present self-interest, group interest and/or defend opinions
4. Volunteer to undertake challenging tasks
5. Courageously volunteer to take group leadership
6. Demonstrate self-awareness, responsibility, resources care and age-related care management
7. Confidently protect and conserve personal and group resources.

Critical Thinking and Problem Solving

An important outcome of quality education is teaching learners how to think critically. The British Council (2015) identifies three types of thinking: reasoning, making judgments, and problem solving. It is possible for learners to reason in an uncritical way. When learners are empowered with critical thinking, they avoid being subjective, and use logic and evidence to arrive at conclusions. Critical thinking also facilitates exploring new ways of doing things and learner autonomy. Learners learn that for every issue there are multiple perspectives that they can explore, rather than a rigid recall and regurgitation   of information.

Critical thinking is important for lifelong learning. It helps learners to have an open mind and be ready to listen and appreciate information and opinions that may sometimes conflict with their earlier held beliefs and positions. Critical thinking and problem solving are useful for learners of all ages and in all the subjects and disciplines offered in the basic education curriculum. For example, in the sciences learners need to think critically about observations and patterns to
develop ideas on how to solve problems. These competencies are also important for solving problems in their lives and communities, and will ultimately help them to fulfill their potential, which is the vision for the basic education curriculum. This will contribute to addressing the unemployment challenge in Kenya.

Critical thinking and problem solving will be developed through age appropriate activities and programs in the school curriculum. For example, at pre-primary school level learners can be asked to come up with the best ways of using and keeping their books, stationery and other personal items safe. At the other end of the basic education spectrum, learners can be asked to come up with the best ways of addressing the challenge of scarce resources such as water in the school and community.

. Structure learning around situations that will require learners to use logic and evidence to arrive at conclusions/solve problems.
. Create scenarios for learners to;
1. Demonstrate objective ideas, opinions and views.
2. Use evidence to draw conclusions.
3. Innovate to solve problems inline with their age.
4. Explore options/new ways of doing common chores.
5. Generate and implement ideas individually and or collectively to seek solutions to a contextual issue.
6. Demonstrate open mindedness to new ideas and opinions.
7. Make critical observations and deduce objective conclusions.
8. Make critical hypothesis and attempt resolutions to a problem.
9. Seek lassistance in critical needs.

Creativity and Imagination

Creativity and imagination refers to the ability to form new images and sensations in the mind, and to turn them into reality (British Council, 2016). It is the ability to imagine things that are not real, to form pictures in the mind of things that one has not seen or experienced, and turn those pictures into real things. It also refers to the actor power of forming mental
images of things that are not present to the senses, or that are never wholly perceived in reality, and creating physical representations of those images. Imagination only exists or happens in the mind, and it remains in the mind. Creativity and imagination on the other hand, is characterized by the ability to perceive the world in new ways, to find hidden patterns, to

make connections between seemingly unrelated phenomena, and to generate solutions. It is a phenomenon whereby something new and valuable is formed.

In educational terms,creativity and imagination refers to the ability of learners and their teachers to form images and ideas in their minds, and turn them into real, visible creations. Learners who are imaginative and creative are able to make life

interesting for themselves and others around them. They are able to use the knowledge, skills and values acquired in the learning process to create new ideas that result in products that add value to their lives and to the lives of others around them. The competence based curriculum recognizes this hidden ability in learners. It will therefore, inspire learners" imagination by presenting knowledge in ways that encourage learners to think as individuals. It will create scenarios that help learners to engage in imagination and encourage them to develop creations steered by the imagination. Their ability to imagine will be stretched through exposure to challenging situations that help to expand their thinking and creativity

skills. The curriculum will also create room for innovative ways of teaching as well as creating an environment conducive to learning that offers all learners opportunities to explore their full potential in and through creativity and imagination.

- Exploit learning activities as avenues for learners to create new ideas that result in products that add value to their lives and lives around them.
- Diversify the activities to take onboard various learners inclination to;
    1. Form and communicate/present ideas/writing, sketching, gesture.
    2. Present multiple dimensions as a single idea.
    3. Translate ideas to real items/drawing, sculpturing, model and design.
    4. Compile other people'sideas to a concrete image.
    5. Compile ideas to develop a concept.
    6. Patch-up ideas to concrete course/solution/concept.
    7. Analyze abroad idea into a component idea.
    8. Innovate a model/item from own or others ideas.

Citizenship

Human beings have always formed communities based on a shared identity. Such identities are forged in response to a variety of human needs, which might be economic, political, religious or social. As group identities grow stronger, those who hold them in commonality with others organize themselves into communities, articulate their shared values, and build governance structures to support their beliefs. The individuals in these communities identify themselves as citizens.

Citizenship is the state of being vested with the rights, privileges, and duties of a citizen.It creates a sense of belonging and attachment to one's nation. A sense of citizenship helps to equip young people to deal with situations of conflict and controversy knowledgeably and tolerantly. They are able to understand the consequences of their actions, and those of the adults around them.

Global citizenship is away of living which recognizes that our world is an increasingly complex web of connections and interdependencies. One in which our choices and actions may have repercussions for people and communities locally, nationally or internationally. It nurtures personal respect and respect for others, wherever they live. It encourages
individuals to think deeply and critically about what is equitable and just, and what will minimize harm to our planet.

- Create learning environment that will require learners to demonstrate their rights, privileges and duties as citizens.
- Engage them in activities requiring them to;
  1. Value asense of identity with others.
  2. Uphold identity with peers.
  3. Respect and uphold rights of others.
  4. Operate within their own rights.
  5. Responsibility claim their own rights and privileges
  6. Undertake duties and obligations.
  7. Seek peace while resolving conflict with others.
  8. Express own belonging among others.

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9. Demonstrate tolerance in resolving controversies.

10.Demonstrate some level of understanding when own rights/privileges are infringed.

Digital Literacy

Digital literacy can be described as having the knowledge, skills and behaviors which are necessary to effectively and safely use a wide range of digital content and devices. Such devices include mobile phones, smartphones, tablets, laptops and

desktops among others. All these fall within the category of network enabled devices. Digital literacy focuses mainly on network enabled devices and should not be confused with computer literacy skills. However, traditional forms of literacy and computer literacy are enhancers in the acquisition of digital literacy skills.

Individuals are presumed to be digitally literate if they possess abroad range of digital skills and knowledge, and have a basic understanding of the potential uses of computing devices. Digital literacy skills also include being able to use computer communication networks, being able to engage in online communication and social networks, being aware of and adhering to ethical behavior protocols, being aware of societal issues raised through digital media, and being able to search, evaluate and use information channeled through digital platforms. Furthermore, the digital literate individual should also have the ability to safely and securely use technology while being able to assess the nature of the information acquired in order to support and enhance the environment (British Council, 2015). Digital literacy as a competence

therefore encompasses knowledge and skills concerning the appropriate application of a variety of hardware platforms such as computers, tablets and mobile devices, and their software including but not limited to web search or internet   application software. Digital literacy is a dynamic competence due to the fast-changing world of information

communication technology and the ongoing development of technological devices as well as their related software. This is

an area in which there is constant innovation and development as the industry attempts to keep up with a globally

increasing demand for efficient and effective communication technologies.. Currently, digital literacy is considered as

one of the main core competencies for learning and life in the 21st century. It challenges existing thinking and practice while   leading to a more innovative, creative and often transformationallearning.

- Expose learners to a wide range of content and devices to equip them with knowledge, skills, and behaviors which are effective for digital literacy.
- Explore opportunities in and out of school for learners to progressively;
    1. Use digital communication network
    2. Engage in online communication and social work
    3. Become aware of adhering to ethical behavior protocols
    4. Get informed about societal issues through digital media
    5. Search, evaluate and use information channeled through digital platforms.

Learning to Learn

Learning is acontinuous process that begins at birth and continues until death; it is the process through which we use our experience to deal with new situations and to develop relationships. As a concept, it involves far more than thinking as it incorporates the whole personality – senses, feelings, intuition, beliefs, values and will. If we do not have the will to learn, we will not learn and if we have learned, we are actually changed in some way. If the learning makes no difference it can have very little significance beyond being random ideas that float through our consciousness.

Learning to learn is the ability to pursue and persist in learning, to organise one's own learning by the effective management of time and information, both individually and in groups. This competence includes awareness of one's learning process and needs, identifying available opportunities, and the ability to overcome obstacles in order to learn successfully. This competence means gaining, processing and assimilating new knowledge and skills as well as seeking and making use of guidance. Learning to learn helps learners to build on prior learning and life experiences in order to use and apply knowledge and skills in a variety of contexts. There are four pillars of learning: Learning to know, learning to do,
learning to be and learning to live to live together.

- Regularly remind learners that learning is a continuous process that requires personal organization, effective management of time and information, both individually and in groups.

.   Provide tasks that will challenge learners to'

1. Show openness to new ideas
2. Critique own ideas
3. Use one idea as a learning experience to new ideas
4. Continuously demonstrate personality progress
5. Use new opportunities as learning experiences to expound knowledge and skills
6. Progressively adopt new value, belief and opinion structures
7. Persistently pursue new targets and more challenging goals
8. Work progressively to overcome existing obstacles
9. Seek assistance and guidance to overcome persistent obstacles
10. Adopt and assimilate new knowledge and skills to overcome contextual challenges.

Strengths of competency based curriculum.

1. Learner-focused

The focus should be lesson the school and the system and more on the education and the learner. The curriculum should be responsive and relevant to learners and enable flexibility for teachers – who are designers of learning opportunities – to enable them to meet the diverse needs of the students.

2. Focus on Competencies

More focus should be directed to competencies and lesson content. The goal should be the appropriate application of knowledge, and not necessarily just its acquisition. This kind of curriculum enables the creation of meaningful connections within and among subject areas by focusing on competencies. Subjects/subjects/disciplines will continue to be taught and will be the vehicle through which literacy, numeracy and other competencies are developed overtime.

3. *Opportunities for Local Decision Making and Greater Depth of Study*

Prescriptive curricula with limited flexibility should be avoided, as should programs that have fewer learning outcomes. The goal is to enable greater flexibility at the local level. Teachers will have autonomy in implementing the curriculum while

teaching.

4. *Balance Between Formative and Summative Assessment*

Too much focus on summative assessment should be avoided. A range of assessment that focuses on the development of student learning outcomes, cross-curricular competencies, and literacy and numeracy should be adopted.

5. *Digitally Based*

The design of the curriculum within a collaborative digital application enables it to be improved continuously and supports learning with flexible timing and pacing through a range of learning environments.

6. *Collaborative and Co-development Models*

Collaboration by all stakeholders in the curriculum design should be the norm. Co-creation of the curriculum with partners and stakeholders taps into local expertise to enhance its design and development. Content delivery will be flexible and

exploratory.

7. *Synchronous Development*

Sequential development needs to be replaced with synchronous development. An integrated approach to develop programs of study, assessments, and learning and teaching resources supports a common approach that encourages interdisciplinary learning.

Importance of competences.

. They develop informed citizens and life-long news readers.

. Studying events helps students understand the important people, events and issues in the news.

. Stimulates students to explore and learn more about the news and to pay attention to the news they see in and outside school.

ENGAGED EMPOWERED AND ETHICAL CITIZEN.

The vision of the basic education curriculum reforms is to enable every Kenyan to become an **engaged**, **empowered** and **ethical** citizen. This will be achieved by providing every Kenyan learner with **world class standards** in the skills and knowledge that they deserve, and which they need in order to thrive in the 21st century. This shall be accomplished through the provision of excellent **teaching, school environments and resources** and a **sustainable visionary curriculum** that

provides every learner with seamless, competency based high quality learning that values every learner.

In order to do this, highly knowledgeable, reflective, professional teachers that have additional enhanced skills and confidence in a range of modern pedagogical tools such as **coaching, facilitating, and mentoring** shall be developed and supported.

This will enable teachers to act as role models for learners, caring for and inspiring every child to achieve his or her potential. It will also enable teachers to be flexible in adapting this new curriculum to meet the needs, talents and interests of every child, constantly diagnosing the learner's needs and collaborating with other stakeholders that influence the child such as **parents, other professionals and the local and wider community**.

To provide bespoke, differentiated, innovative learning experiences that ensure each and every child can take their place in the world with confidence and pride as 21st century Kenyans. This new curriculum shall ensure that all learning can be made contextually relevant for every learner's holistic growth and development so that they can all become **independent, confident, co-operative, and inspired learners** who love learning and are keen, focused and able to apply

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their learning in

order to make constructive contributions as productive responsible citizens who co-operate with peers around the world in their learning, through enhanced digital literacy and mastery.

In so doing, the reformed curriculum seeks to ensure that the next and future generations of Kenyan citizens shall be both patriotic and global, equipped with the skills, knowledge, attitudes and values to thrive in the modern world, confident
about their proud and rich cultural heritage and contributing this heritage to make the world a better place for everyone.

CBC MISSION-NURTURING EVERY LEARNER'S POTENTIAL

The mission of the basic education curriculum reforms is „ **nurturing every learner's potential'** . The curriculum will be designed to ensure that it provides opportunities to identify the potential that every learner brings to school and nurture this potential through the learning pathways and tracks that will be provided at Senior School. The mission will ensure that no child is labeled a failure at the end of basic education.

3.0CURRICULUM DESIGN INTERPRETATION.
3.1 ESSENCE STATEMENT
- A general overview of a learning area.
- Summarizes the fundamental ideas of each learning area.
- Explains the **rationale and justification** of inclusion of the learning area in the curriculum.

3.2 LEARNING OUTCOMES

Clear statements of what the learner is expected to achieve and how he or she is expected to demonstrate that achievement. Thus, learning outcomes are:

-
-

More

precise,

easier to

compose

and far

clearer

than

objective

s

reflect
essential
knowled
ge, skills
or
attitudes

- focus on results of the learning experiences

- reflect the desired end of the learning experience, not the means or the process.

- represent the minimum performances that must be achieved to successfully complete a course.

TYPES OF LEARNING OUTCOMES.

. Level learning outcomes-level of education
. General learning outcomes-learning area
. Specific learning outcomes-sub strand/lesson FORMULATING LEARNING OUTCOMES.
. Beginning each learning outcome with an action verb followed by the object of the verb then by a phrase that gives the context.
. NOTE-they should be smart.
. VERB- says what should be done by the learner like identify, name, describe, collect, appreciate, design, choose, formulate, build, justify etc. Verbs are of knowledge, skills and value based.
. OBJECT- it answers the question what.
. CONTEXT- answers the question 'why', 'where', ' how' and 'when.'
. Example ; choose(verb) foods rich in vitamin C(object) in the locality(context)
. Name (verb)the parts of the body used in swimming(object) for body awareness(context)
. Play (verb)aconditioned game (object) for enjoyment(context)

TAXONOMIES OF EDUCATION.

✓ Classification of educational objectives into an ascending order of complexity.

✓ There are two types of taxonomies. i.e

1)BLOOM'S TAXONOMY (BENJAMIN BLOOM

✓ He gives six categories of measurable cognitive abilities namely; knowledge, comprehension, application, analysis, synthesis and evaluation.

✓ He describes the affective, psychomotor and cognitive domains.

The revised Bloom's taxonomy is as follows;

- Remember-involves being able to recall, defining or labeling. The verbs used are; arrange, choose, cite, define, relate, repeat, reproduce, review, select, study, tabulate, indicate, list, label, name, memorize, locate, listen, quote, provide, outline, read, recognize, record, match, meet.

- Understand-to summarize/classify. Verbs used are; acquire, outline, paraphrase, approximate, articulate, associate, discuss, describe, calculate, characterize, clarity, classify, compare, convert, defend, demonstrate, compare, compute, contrast, detail, differentiate,

  distinguish, elaborate, estimate, example, expand upon, explain, express, extend, factor, generalize, give, identify, illustrate, infer, interact, interpret, locate,, observe, reference, report, research,

- Apply-requires some level of implementation or to follow a procedure- verbs used include; acquire,adapt, allocate, apply, ascertain, assign, attain, backup, calculate, capture, change, choose, classify, collect, complete, compute, conclude, conduct, construct, create, customize, demonstrate, derive, determine, develop, diminish, discover, dramatize, employ, examine, execute, exhibit, experiment,

  expose, express, graph, illustrate, implement, interpret, interview, investigate, list, make, manage, manipulate, modify, operate, paint, perform, plot, practice, predict, prepare, price, process, produce, provide, react, record, relate, respond, role-play, roundoff, schedule, select, sequence, show, stimulate, sketch, solve, subscribe, tabulate, teach, transcribe, transfer, translate, use

- Analyze-breaks down parts of a concept for deeper analysis. Verbs in use; analyze, arrange, appraise, audit, blueprint, breakdown, calculate, compare, confirm, correlate, contrast, criticize, debate, deduce, detect, diagnose, diagram, discuss, dissect, distinguish, document, examine, experiment, graph, infer, inquire, inspect, interpret, investigate, layout, manage, maximize, measure, optimize, order, organize, outline, plot, point out, probe, program, quantify, query, question, relate, research, review, scrutinize, select, separate, sequence, sift, size up, solve, specify, study, subdivide, survey, test, train, transform, value.

- Evaluate-critiquing/making ajudgement based on research. Words used; appraise, argue, assess, choose, compare, conclude, contrast, counsel, criticize, critique, debate, defend, determine, diagnose, discuss, enhance, estimate, evaluate, grade, infer, interpret, investigate, judge, justify, predict, prescribe, prove, recommend, referee, reframe, reject, relate, release, report on, research, review, revise, score, select,summarize, support, tell why, test, validate, value, verify, weigh

- Create-developing something new based on all the learning. Words used; abstract, act, adapt, animate, anticipate, assemble, blend, build, change, code collaborate, combine, communicate, compare, compile, compose, concoct, construct, correspond, create,

  cultivate, depict, derive, design, develop, devise, enhance, express, establish, facilitate, format, formulate, hypothesize, imagine,

import, improve, incorporate, initiate, integrate, interface, intervene, invent, join, lecture, make, makeup, manage, model, modify, modifier, negotiate, network, organize, originate, overhaul, perform, plan, predict, portray, prepare, prescribe, pretend, process,

produce, program, progress, propose, rearrange, reconstruct, relate, reinforce, reorganize, revise, rewrite, role-play, sequence, setup, show, specify, structure, substitute, suggest, summarize, suppose, synthesis, tell, validate, visualize, write.

DOMAINS IN BLOOMS TAXONOMY.

✓ Affective-describes learning outcomes that emphasize on self-awareness and expression of feelings, interests, attitudes, appreciations, values and emotions.

✓ Psychomotor/kinesthetics- concerned with physical performances with movement/ with activities where the gross and fine muscles are used for expression /interpretation of information/concepts.

✓ Cognitive-involves development of intellectual skills and abilities/mental development.

2) Depth of knowledge (Norman Webb)

✓ These are broken down into four levels.

✓ All the levels define stratified categories of cognitive processes/how learners think.

✓ DOK 1-learners memorize/ Recall and production.

✓ DOK 2 -learners compare and contrast information which summarizes as concept /skill. Compare and basic reasoning.

✓ DOK3-learners make decisions about ways to solve problems. This involves planning and complex reasoning. This is strategic thinking. ✓ DOK 4-learners analyze the results of experiments, draw upon multiple sources to formulate creative solutions and investigate unique

and challenging problems that require complex understanding. Synthesis of information and interpretation of data to solve problems. This is extended thinking.

3.3 LEARNING EXPERIENCES.

. Are activities/tasks that learners should carryout in order to develop desired knowledge, skills, values and attitudes.
. They focus on developing the learners' cognitive, physical and emotional domains.
. They are interactions in which learning takes place.
. They are interactions between the learner and external conditions in the environment o which they can react. TYPES OF LEARNING EXPERIENCES.
. Formal-are organized/structured, guided and intentional
. Non-formal- take place outside formal learning environments but within some kind of organization framework. Need not follow a formal design.
. Informal-takes place outside schools and arise from learners' involvement in activities that are not undertaken with a learning purpose in mind. Are involuntary and inescapable part of daily life incidental.
PURPOSE OF LEARNING EXPERIENCES.

. Assist learners acquire and apply knowledge, skills, values and attitudes.
. Helps learners acquire and apply intended competencies.
. Enhances modeling of core values.
. Self- regulate and evaluate their learning.
. Engage deeply in the learnt concepts.
. Reflect on learning process.
. Interact with others during the learning process. CHARACTERISTICS OF LEARNING EXPERIENCES.
. Involves activities.
. Requires interaction.
. Constitutes learning.
. Learning occurs randomly.
. Learning involves problem solving.
. Learning is a process of acquiring information. FACTORS CONSIDERED FOR CHOICE OF LEARNING EXPERIENCES.
. Relevance to intended learning outcomes/learning outcome.
. Learning environment.
. Time required for the experience.
. Developmental age level/age appropriateness.
. Safety.
. Learning resources. WHAT INFORMS LEARNING EXPERIENCES.
. Differentiated learning.
. Multiple intelligence.
. Prior knowledge
. Learning styles.

3.4 KEY INQUIRY QUESTIONS.
. Are questions that help focus on learning.
. They probe for deeper meaning and set the stage for further questioning.
. Foster the development of critical thinking skills and higher order capabilities such as problem solving. CHARACTERISTICS OF GOOD KEY INQUIRY QUESTIONS.

.   Integrates technology to support learning.
.   Encourages collaboration amongst learners, teachers and the community.
.   Is thought provoking and intellectually engaging, often sparking discussion and debate.
.   Is open-minded, non-judgemental, meaningful and purposeful.
.   Requires support and justification not just an answer.
.   Raises additional questions and sparks further inquiry.
.   Can't be effectively answered by recall alone.

3.5 LINK TO OTHER SUBJECTS.

.   Refers to transfer of knowledge, skills and attitudes learnt in one area to another.
.   The teacher is expected to make conscious effort to use concepts in one learning area to relate knowledge, skills and attitudes to another learning area.
.   The linkage gives learners a holistic perception of learning by allowing them to see inter-relationship in different learning areas.
.   All the learning subjects are interrelated and noone can be taught in isolation.
.   The interrelationship will enable learners achieve learning outcomes in all learning areas.
.   Example in English-vocabulary in weather sub strand, words like calm, cloudy, rainy and windy will be taught like in environmental activities. In home science and Agriculture- kitchen garden. In Science and Social Studies, sources of water.

Importance of interrelationship between learning areas.

.   Promotes transfer of knowledge and skills from one learning area to the other.

4.0 MICRO TEACHING.
4.1. MICRO TEACHING.

Micro-teaching and its role in learning.

.   An action of conducting a mean lesson to class mates before the actual teaching practice commences/real teaching.

Role of micro-teaching in learning/advantages.

.   Cultivates courage/confidence. Allows the trainee learn new skills and art of teaching. It gives an opportunity to develop confidence. Facing fellow colleagues enables elimination of fear hence cultivate confidence.
.   Exposure-provides exposure to trainees. They are exposed to real teaching which includes preparations.
.   Time management/planning. Trainees are timed to complete their activities within stipulated time. This trains them the aspect of time management as they have to cover a particular content within a specified period.
.   Feedback/share experiences. It enables interaction between and classmates. After the lesson time is given for them to give feedback. A platform is created where experiences are shared.
.   Class control/organization. The trainee has the opportunity to practice management skills. They are expected to maintain discipline and give guidance on the activities taking place.

- Creativity/innovation. They are expected to interestingly present their teaching in varying styles. It calls for creativity and innovation to decide the best methods to use for various stages.
- Promotes good manipulation of content. Trainees have the opportunity to work on the specific content hence manipulation skills on content.
- Promotes familiarization with professional documents. Gives trainees chance to familiarize themselves with the necessary documents on preparation and use.

Disadvantages.
- Is involving in terms of preparation.
- Takes a lot of time.

Procedure of conducting micro-teaching lesson.
- Preparation of scheme of work and lesson plan.
- Lesson preparation(marking operational area/resources).
- Lesson implementation.
- Reflection.

Challenges likely to be faced.
- Poor time management.
- Poor demonstrations.
- Poor content delivery.
- Inadequate resources.
- Over planning.
- Lack of confidence.
- Poor class organizations.
- Inappropriate attire.

CHARACTERISTICS OF GOOD LESSONS.
- ✓ Time management. Should start in time, end in time. Equitable and effectively managed.
- ✓ Teacher preparation for the lesson.
- ✓ Presentation. Should have good mastery and variety of aids.
- ✓ Dress-the teacher should be well dressed.
- ✓ Nature of lesson. Lively, interesting, motivating, captivating and enjoyable.

- ✓ Participation. Both the learner and teacher should be actively involved.
- ✓ Class control. Teacher to be in charge and have few disciplinary problems.
- ✓ Learning activities should be varied to cater for varied needs

Differences between micro-teaching and teaching practice.

Micro-teaching	Teaching practice
-performed in college environment -teaching same level learners -takes less time/given by trainer -involves feedback by all others	-performed in the TP school. -teaching school learners(pre-primary/primary) learners -takes whole lesson -feedback by the assessor only

Skills required by a teacher in micro-teaching.
Skills of introducing a lesson.
- ✓ Establishes a rapport with learners.
- ✓ Creates interest.
- ✓ Sustains learners attention.
- ✓ Links the previous knowledge to the current.
- ✓ Promotes curiosity.
- ✓ Uses devices/resources that motivates the learners.
  Skills of probing and prompting.
- ✓ Questions must be;
  - ✓ Stimulating/inspiring/interesting
  - ✓ Helping to seek further clarification.
  - ✓ Promotes creativity.
  - ✓ Creates awareness of what of what to be learnt.

Skills of explanation
. Explanations should be;
  - ✓ Clear.

✓ Well sequenced.

- ✓ Relevant to the content taught.
- ✓ Simple.
- ✓ Interesting and captivating.
- ✓ Give appropriate and relevant.

Skills of stimulus variation.
. Arouses learners interest.
. Brings variety of learning approaches. Skills of audio-visual aids.
. Clarifies concepts.
. Reinforces ideas.
. Draws attention of the learner to what is being taught.
. Expresses holistic picture of the content.
. Adds variety to the content.
. Creates learners interest.

Skills of classroom management.
. Addressing learners by name.
. Keeping learners in eye span.
. Checking inappropriate behavior.
. Giving clear instructions.
. Establishing norms of classroom behavior. Skills of concluding a lesson.
. This is away of wrapping up the lesson in ways that benefit learners.
. It emphasizes the purpose of the session with review and closure.
. Should be interesting.

Ways of concluding lessons.
. Making oral review of what was learnt.
. Can give extended activity.
. Getting feedback from the learners on what was learnt. Skills of using the chalk /whiteboard.
. These are reusable writing surfaces on which text/drawings are made.
. They are the most commonly used tools in learning.

. They are the simplest visual learning tools.

- They allow learners interact with the learning material.
- They are helpful to both teacher and learner.
- Provide content to learners from a central location.
- Communicate with learners

easily. .

4.2.PROFESSIONAL DOCUMENTS.

- These are official documents developed to make learning efficient and effective as the teacher implements the curriculum.
- Development is guided by the curriculum designs thereby enhancing the teacher's understanding of the designs.
- The types of professional documents include; scheme of work,lesson plan, record of work, progress record and individualized education Programme.

Schemes of work. Is the breakdown of the curriculum design into teachable units that are handled from the lesson.

Components of a scheme of work.

- Administrative information
- Week
- lesson
- Strand
- Sub strand
- Specific learning outcomes
- Learning experiences
- Key inquiry questions
- Learning resources
- Assessment
- Reflection.

SCHEME OF WORK TEMPLATE.

- Institution--
- Subject/learning area----------------------------
- Term--
- Tear---

WK	LSN	STRAND	SUB STRAND	SPECIFIC LEARNING OUTCOMES	LEARNING EXP	KIQ	LEARNING RESOURCES	ASSESSMENT	REFLECTION

LESSON PLAN.
- Lesson plan. Is a documented procedure of the delivery of content within a specified duration.
- Is a plan of what the learners will learn within a specified period of time. A work plan showing all activities that will take place in the lesson.
- Breakdown of the scheme of work into teachable units.
- Shows what needs to be accomplished within time allocated for the lesson.
- Enables teachers contextualize the lesson activities at a glance.
- Adopts inquiry based learning techniques when planning, since they are learner centred and key to successfully implementation of Competency Based Learning.
- Establishes the learning outcomes to be achieved during the lesson.
- Considers the teachers 'ability, background and learning approach to use among others.
- Ensure the availability of relevant and appropriate materials for the lesson.
- Determine appropriate assessment methods to use.

Factors to consider when lesson planning.
- Age of learner.
- Nature of learner.
- Grade/level/year of learner.
- Learner'sentry behavior.
- Learning resources.
- What will be learnt.

Factors to consider when developing a lesson plan.
- Specific learning outcomes.
- Learning experiences.
- Key inquiry questions.
- ICT integration.

. Learning resources.
. Core competences to be achieved.
. Values.
. Assessment.
. Homework etc

Components of a lesson plan.
. Administrative information in tabular form.
. Strand--
. Sub strand--
. Specific learning outcomes----------------------
. Key inquiry--
. Learning resources-------------------------------------
. Organization of learning- where learning will take place/how learners will be organized e.g group work, pair work.
. (core competences, PCIs and values that have been incorporated in each step e.g the core competency of learning to learn will be developed as the learner conducts research online parts of the body, digital literacy as learners watch videoclip on parts of the body)
. Introduction---
. Lesson development
    ✓ Step 1
    ✓
    Step2 ✓
    Step3 ✓
    Step4 ✓
    Step5
. Extended activity- activities that will be given in the form of assignment, take away etc
. Conclusion--
. Reflection---
. Community service learning activity---------------------------------------

RECORD OF WORK.
. Record of work. A written document which a teacher writes and keeps as he teaches to show what has been covered and the reflection over a period of time.
. Provides evidence of work covered by the teacher.

Components.

. Administrative details.
  - ✓ School
  - ✓ Learning area
  - ✓ Name of teacher ✓ grade

. Timeframe-indicates date when lesson was covered.
. Lesson-order of the lesson in the week.
. Work done-accounts for the sub strands in accordance to learning outcomes.
. Reflection-statement expressing the teacher's experiences in relation to components of the entire lesson, successes and failures of the lesson as well as suggestions for improvement.
. Signature-teacher's identity. Helps in accountability and transparency.

Sample of a record of work.

Administrative details.
School--------------------
Grade---------
Learning area----------------
Strand-----------------------
Sub-strand-------------------
Name of teacher---------------------------

Date	Lesson	Record of work done	reflection	Signature

Importance of a record of work.

. Provides evidence of work covered by the teacher which shows accountability and transparency.
. Involves storing and managing records appropriately so that the information will be available when needed.
. Provides continuity of teaching of a particular grade since new teachers are able to trace where to start teaching from.
. Allows both teacher and learner to reassess the teaching learning relationship.
. Helps identify learners who need more help, guidance and support and helps them understand what they need to do next to improve.
. Effectively monitors the progress of the teacher and the learner for planning and decision making.

PROGRESS RECORD.

. Learners progress record. Document showing the learners progress- throughout the learning period.
. Is made up of learner's academic achievements, skills and abilities and school reports.

Importance of progress records.
- ✓ Helps teachers plan appropriate learning experiences that will meet the learners needs.
- ✓ Helps in identifying learners who are slow for appropriate action.
- ✓ Provides school leadership team with information about the progress learners are making.
- ✓ Provides information if learners are meeting age-appropriate expectations and are on track to meet expected outcomes. ✓ Area source of information for parental engagement with the school on how their children perform.
- ✓ Enables teachers track the continuous learning process of learners.
- ✓ Provides information on accurate production of enriched certificates.

Qualities of effective progress record.
- ✓ Be simple and easily understood by internal and external users.
- ✓ Relate to key indicators about attainment and progress.
- ✓ Use language that is sensitive to those whose attainment is currently below age-related expectations.

Sample progress record.
Name--
School--
Grade--
Learning area----------------------------------
Ratings: exceeds expectation (4), meets expectation (3), approaches expectation (2), below expectation(1)

Performance indicators/ratings	Exceeds expectation	Meets expectation	Approaches expectation	Below expectation	Remarks.
	✓				Consistently/excellently… …
		✓			Is able to … ..
			✓		Trys to…./
				✓	Struggles…/notable to…/rarely… …

ASSESSMENT TOOL
- . Assessment tool. The techniques used to measure learners' academic abilities and skills/to measure ones' progress towards academic proficiency in a learning area. They are used to make informed decisions regarding strategies to enhance learners' learning.

INDIVIDUALIZED EDUCATION PROGRAMME.(IEP)
- . Is a written plan that describes what the teacher and other professionals will do to meet special needs of a learner.
- . It focuses on individual learner's needs, thereby allowing him/her to acquire knowledge, skills, attitudes and values athis/her own pace.
- . Is developed by multidisciplinary team composed of the learner, special education teacher, assessment officer, psychologist, speech therapist,occupational therapist, physiotherapist, social worker and parents.
- . IEP therefore is a plan whereby teachers, support personnel and parents work together as a team to meet the needs of individual learners who require individualized support.
- . It provides a description and action plan for the services and supports necessary to meet unique learning needs of the learner.
  Components of IEP.
- . Background information. Includes historical background, birth history etc.
- . Learner's present level of performance. The current level is assessed to identify the academic skills in which the learner has strengths and those that he/she has challenges. Assess also communication, behavior and social skills. This can be done through observation,   oral, written or interviews.
  Implementation strategy.
- . Initial and termination dates-the program should start after the entry behavior assessment has been done. Implementation duration will depend on the achievement of the stated outcomes. Review should be carried out continuously and adjustment of the termination date should be made accordingly. If the learner achieved all the outcomes specified, the IEP ends. If the learner achieves some of the   outcomes, then the IEP period is extended/reviewed to acquire the remaining outcomes..
- . Adaptation-these are changes to the curriculum, learning resources and physical environment that may be required to accommodate learners with special needs in the learning environment.
  Assessment procedure
- . This describes how progress will be measured and specifies how well the learner is expected to perform.
- . Checklists, observation schedules, oral and written questions maybe used for assessment.
- . Continuous assessment will be instrumental in determining the decision to be made about learner'sprogress.
  Related specialized services.
- . Physiotherapy.
- . Occupational therapy.

- Speech and language therapy.
- Guidance and counseling.
- Sign language interpretation.
- Braille subscription.

Present level of performance.
- Tools used for assessing the present performance.
- Criteria.

IEP TEMPLATE.

Background information.

Personal details.

Learner's name------------------------------------

Date ofbirth---

Parent's/guardian's name------------------------

Occupation---

Address--

Mobile number--------------------------------------

Date of initiation of IEP------------------------

Date of termination of IEP----------------------

Historical background.
- Medical history.
- Disability history.
- Home environment.
- Learning environment.

Summary of strengths/challenges and initial recommendations.

Learning area/skill	strengths	Challenges.	Initial recommend action

Long term outcome--

Short term outcomes------------------------------------

Assessment

.   The following tools will be used to assess achievement of the learning outcomes--
----

.   Performance will be expressed in descriptive terms. Performance levels like exceeding/meeting/ approaching/below expectation
    will be used.

Related services needed

.   --

.   ---

IEP implementation

.   IEP will commence on------------------------------

.   IEP will be reviewed on--------------------------------------

.   IEP will be terminated on ----------------------------------

Conclusion and recommendations.

.   IEP ends if learner achieves outcomes.

.   It is reviewed/extended if some outcomes are not achieved.

4.3 MOTIVATION/STIMULUS VARIATION.

Importance of setting induction during a micro-teaching lesson

.   It is atechnique of learning.

.   Refers to facilitator's actions which develops and maintains a high level /maximum attention by learners during the learning process.

.   It makes learning lively/ avoids boredom.

.   Arouses learners' interest.

.   Brings variety of learning approaches.

.   Enhances learner's thinking capacity.

.   Learners are actively involved.

Importance of reinforcement.

.   A consequent applied to strengthen behavior/response.

.   It can be in form of praise/commendation after a child has executed askill correctly to encourage and lay emphasis.

.   It can be tangible/rewards/material for positive encouragement.

.   It can be immediate reinforcement after an attempt to perform something.

Ways of creating stimulus variation

.   Varying the voice.

- Use of videos.
- Use of photos.
- Use of pictures.
- Use of interesting/relevant materials.
- Varying methods of teaching.

5.0 MICRO TEACHING SKILLS.
5.1 LEARNING RESOURCES.
- Are materials used for facilitating learning.
- Are materials that teachers can access to help them to enhance lesson facilitation to be better/enhance learning.
  Categories of learning resources.
   Learning resources are categorized in terms of; use, source, cost, availability, safety and durability.
- Use-refers to relevancy and utilization/functionality. Relevancy to the person in terms of age/gender.
- Source. Refers to ways of procuring the items to be used. This determines the quality of the item.
- Cost-refers to the amount of money to be spent on it preferably affordable.
- Availability- Consider the items that are locally available.
- Safety- all items to be used must be safe in use to prevent injurious situations. They should not have sharp corners, rough edges, projecting parts and peeling off parts. They should be clean also since children are fond of putting items in the mouths.
- Durability- the items used should be long lasting for learners to use for a loner period. This will reduce the cost of buying new ones so soon.
- They should also be; attractive, varied, multi-purpose etc.

Care of the materials.
- Cleaning.
- Polishing.
- Dusting.
- Spaying.
- Painting repairing.
- Keeping in a lockable store(portable)

Ways of sourcing for the materials.
- Realia
- Purchasing.
- Donations.

- Hiring.
- Borrowing.
- Sharing.
- Improvisation and/use of locally available.

Justification on use of locally available materials.
- Opportunity to appreciate materials from own environment.
- Cheap.
- Use of familiar material.
- Saves time.
- Active involvement in collection.
- Easily accessible.

Types of resources for use.
- Charts.
- Flash cards.
- Picture cards.
- Boards.
- Realia/soil/balls/water/tools.
- Puppets.
- Models. Etc.

Importance of using resources.
- Arousing learners interests/motivational.
- Ensuring achievement of learning outcomes.
- Creates/sustains/maintains attention.
- Raises competitive spirit hence improving learning.
- Enhances retention of knowledge, skills and attitudes.
- Promotes sharing/cooperation.

6.0 LESSON DEMONSTRATION.
6.1 LESSON DEMONSTRATION AND REFLECTION.

Importance of lesson demonstration in learning.
- Provide learners with experiences of real events.

- Raises learners' interests and motivation.
- Improves learners' perceptions of their learning efficiency.
- Enhances learners; achievements and understanding of concepts.
- Promote thinking skills hence enable learners to think creatively.
- They engage learners intrinsically.
- It involves many senses making learning permanent.

Components of a micro lesson.
- Preparation of micro lesson plan
- Creating micro teaching settings.
- Practice of teachingskill.

Reflective teaching.
- This is thinking about/reflecting on what teachers do in class.
- This is what teachers do when they look back at the teaching and learning that has occurred, and reconstructs, re-enacts, and/or recaptures the events, emotions, and the accomplishments in class.
- It is closely linked to the concept of learning from experience, in that teachers think about what they did, what happened, and decide on what they would do differently next time.
- It leads to questions such as why the approach/strategy used worked or didn't work, what the teacher should try next time etc.
- A focus on reflection in and on action during instruction brings about understanding of what works and what doesn'twork.
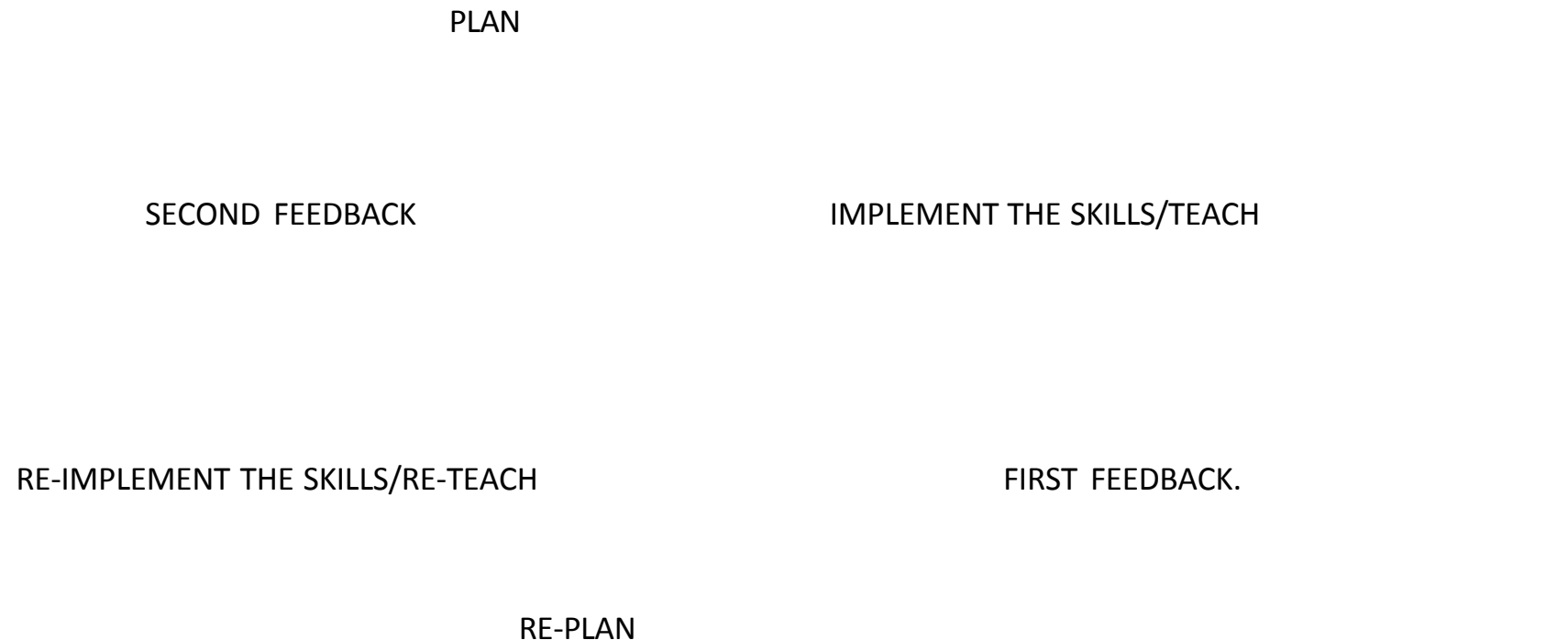
Role of teacher in reflective teaching.
- Understanding learners.
- Managerial and organizational terms/planning
lessons/monitoring .
- **Importance of reflective teaching in assessment as learning.(formative)**
- Teachers make choices and take alternative actions and allows to think to improve teaching and learning decisions in a classroom.
- Can be used to observe and evaluate the way teachers behave in class.
- Used to examine curricular choices.
- Is an accurate way of evaluation.

7.0 MICRO TEACHING PROCESS.
7.1 MICRO TEACHING CYCLE AND METHODOLOGIES.

PLAN

SECOND FEEDBACK   IMPLEMENT THE SKILLS/TEACH

RE-IMPLEMENT THE SKILLS/RE-TEACH   FIRST FEEDBACK.

RE-PLAN

Plan- a detailed proposal for doing /achieving something./an intention /decision about what one is going to do.

Implement the skills-put the plan into use/put into practice
First feedback-giving information about reactions to a product/person's performance of a task.
Re-plan- re-doing what was done earlier/redrawing a new proposal
Re-implement the skills- redoing what was done earlier using there-plan.
Second feedback-giving information a second time inline with there-plan.
APPROPRIATE METHODOLOGIES IN MICRO-TEACHING.

. Skill definition.
. Demonstration.
. Lesson planning.
. Conducting lesson.
. Discussion and conclusion.
. Re-planning.
. Re-teaching.
. Re-discussion.
. Re-conclusion.

7.2 CLASS MANAGEMENT.

. The process by which teachers and schools create and maintain appropriate behaviors of students in classroom settings.
. Establish and sustain an orderly environment in the classroom.
. Process of ensuring that classroom lessons run smoothly without disruptive behavior from learners compromising the delivery of instruction.
. It increases meaningful academic learning and facilities social and emotional growth. PRINCIPLES OF CLASSROOM MANAGEMENT.
. Take care of yourself to take care of your learners.
. Focus on building trusting relationships.
. Set rules, boundaries and expectations/let learners help establish guidelines and document rules.
. Take a strength based approach.
. Involve parents and guardians.
  WAYS OF CLASSROOM MANAGEMENT.
. Use polite language.
. Have good mastery of content.
. Use clear instructions.

- Be well prepared for lessons.
- Avoid biasness.
- Choose appropriate and interesting activities.
- Maintain punctuality.
- Maintain eye contact.
- Offer praise appropriately.
- Keep phones in pockets.
- Avoid punishing the class/address isolated discipline cases individually instead of punishing the entire class.
- Let one another speak uninterrupted.
- Raise concerns about one another's statements in a respectful way.

7.3 ASSESSMENT AND EVALUATION OF A MICRO TEACHING LESSON.

-

8.0 TEACHING PRACTICE
8.1. CONCEPTUALIZATION OF TEACHING PRACTICE
- Is when a teacher trainee designs lessons that focus on concepts. Concepts contain facts/ideas.
- Teaching practice is the preparatory stage for exposing pre/in-service teachers to teaching techniques, strategies, methods, teaching and learning activities within the institution of learning.
- Through this exposure, student teachers encounter authentic teaching and learning experiences upon which they are expected to critically reflect.

-

8.2 MENTORSHIP AND TEAM TEACHING
- Mentoring is the process of experienced teachers/experts assist other teachers to grow in all spheres of their life as a professional.

- Team teaching is a group of two/more teachers working together to plan, conduct and evaluate the learning activities for the same group of students.

-

8.3 ASSESSMENT OF LEARNING IN A MICRO TEACHING LESSON.
- Is the observation of the micro lesson using specific attributes for purpose of correcting the teacher trainee for improvement in the future lessons.
- The main attributes normally checked include; documents, presentation and resources. KNEC ASSESSMENT
- The checklist has the following expectations/attributes to be observed;

1. Professional documents- S.O.W and L.P, availability, relevant and updated . One,ark each so 6 marks. Lesson notes; availability and relevant, one mark each-2marks.
2. Lesson introduction 5 marks- induction setting, captivating, link with previous lesson, progression, maximizing transition time. Each one mark.
3. Lesson delivery 6 marks-content mastery, models/demonstrations/illustrations and provides examples, logical flow of content, uses language to the level of learners, varied methods of content delivery(group work, inquiry based, demonstration,
   experiments), deliberate effort to infuse PCIs, and Values.
4. Classroom management 2 marks- tidiness and appropriate seating arrangement and demonstration of fairness and consistency in involving learners in activities/tasks.
5. Conclusion 1mark- appropriate conclusion(question and answer, writing key points, use of songs, skits etc)
6. Reflection 1 mark- provides feedback and reteaches when necessary.
7. Extended activity 3marks- relevant, cost effective and achievable.
8. Learning resources- 7 marks-available, adequate, cost-effective, creativity and innovativeness, improvised using locally available materials, effective use of learning resources and deliberate effort to integrate ICT.
9. Teacher professional attributes 5 marks- well groomed, audible, confident, effective use of learning time and shows concern for learners.
10. Micro-lesson review 2 marks- objective critique of the micro-lesson by peers and self and embrace peeer/tutor critique. 11.Trainers' remarks- on strengths, what to improve on, and notable improvements.

8.4 ACTION RESEARCH PROJECT

School-based action research is a process of seeking functional solutions to education challenges at the school level. It seeks solutions to:

- Learning resources

- Classroom experiences

- Other challenges in the teaching and learning process

BENEFITS OF ACTION RESEARCH.

- Provides basis for trying out approaches andideas to solving a problem.

- Helps develop reflective practice.

- Enables accurate and informed decision making process.

  How to carry action research.
  Stages involved in reseach;

- Preliminary action, plan, action, observation and reflection.

  PRELIMINARY ACTION.

Consider the current practice. What aspects need to be improved?

- Teaching learning resources?
- Teaching methodologies?
- Make a list of the challenges in the current practice.What are the benefits?

- Write a research question.

- Consult colleagues and other sources of information. PLANNING STAGE.

State your research question (hypothesis). State how you will carry out information search. State the tool required and timeframe.

Example:

- I will carry out daily observations and make records afterthe lesson
- interview learners on challenges and make online search for solutions.

- I will benchmark with others. ACTION STAGE.

State how you will execute the solutions (methods).

Example:

- I will make peer observations
- keep teacher diary to record the observations

OBSERVATION STAGE.

- Observe the action after implementation.
- Engage peers in the observation.
- Make notes of observed changes.
- Make notes of evidence relating to thechanges.

- Make notes on possible improvements, improvisations, weaknesses and deviations resulting from the change.

REFLECTION STAGE.

- Analyze the evidences (observations) andfeedback on the action.

- What insights have you gained?

- What conclusion have you made?

- What changes/modifications can you make?

- What other areas could be contributory tothe intended change.
AFTER REFLECTION/WHAT NEXT?

- Based on the conclusions and lessons learnt, implement an improved version toenhance the previous

- solution.

- Conduct improvisations and consultationswhere necessary.

Reinforce the strengths where prevailing.

SAMPLE RESEARCH QUESTIONS.

- ●

-

How can I involve learners in improvising learning resources in English?

How can I make learners in my learning area more engaged in learning activities?

How can I encourage leaners to speak

- How can I measure learner's achievementwithout use of written tests?
RESEARCH IN CONTEXT

Your School has challenges in:

1.Lack of teaching/learning resources, specifically application or integration of ICT in the learning process 2.Lack of day today teaching learning resources to use in regular lessons.

Identify a resource challenge in your school,
Formulate an action research detailing how to resolve thechallenge (use the 4 steps discussed).

Present the action research plan to plenary.

Post plenary activity

- Assume the plenary discussions are suggestions received from your peers after planning stage.

- Now, actionize/implement the chosen research to resolve the identified challenge in teaching learningresources.

9.0 PEDAGOGICAL PRACTICES
9.1 METHODS OF TEACHING.
Problem -Based learning(PBL)
. Is a learner centred approach where learners learn about a subject by working in groups to solve open -ended problems.
. The problem is what drives the motivation and the learning.
. Is an instructional method that initiates learning by creating a need to solve authentic tasks.
Advantages
. Promotes learning by doing/problem solving.
. Develop scientific attitude.
. Learners become dependent and self-reliant.
. Retain acquired knowledge longer.
Disadvantages.
. Time consuming.
. Not practical with large classrooms and average teachers.
. Extra work needed for teachers.
. Costly in terms of resources.
Inquiry-based learning.
. Involves providing learners with experiences that enable them to develop understanding about aspects of the world around.
. It is based on constructive theories where learners construct knowledge and meaning from their experiences through the development and use of investigative skills.
. Specific Learning Experiences planned for enable the learner to use investigative skills, ask questions, make discoveries and conduct research.

. It incorporates a process of exploring the world which leads to;
- ✓ Asking questions
- ✓ Making discoveries
- ✓ Conducting research/experiments.

Benefits of inquiry based learning.
- ✓ Learners develop problem-solving skills that can be applied in novel situations.
- ✓ It leads to realization of learning outcomes with ease.
- ✓ Assessment is focused on determining the progress of skills development in addition to understanding content.
    - ✓ Uses technology to connect learners with local and the world communities, thus providing them with the tools for continuous learning.

Experiential learning.
. Is learning through reflection, requires no teacher.
. For instance, taking learners for a field trip, where they experience real hands on learning on the farm, instead of reading about it in a text book/listening to explanations is a form of experiential learning.

. Teacher to consider Specific Learning Experiences that enable thelearner to use their senses fully-feeling, seeing, hearing, tasting, touching to have an experience for learning to take place instead of reading about it.

. To gain knowledge from experience, the learner must;
1. Be willing to be actively involved in the experience
2. Be able to reflect on the experience
3. Possess decision making and problem solving skills in order to use the new ideas gained from the experience.

Benefits of experiential learning.
. Access to realtime coaching and feedback.
. Development of reflective practice.

. Promotion of teamwork and communication skills.
. Ability to apply core competences acquired to solve real world problems.

Project-Based learning.
. A learning method where learners gain knowledge and skills by working for an extended period of time to investigate and respond to authentic, engaging and complex tasks, questions, problems/challenges.
. Is an innovation approach where learners drive their own learning through inquiry, as they work collaboratively to research and

create projects that reflect their innate potential and talents.

. Can lead to increased creativity and learner engagement for long term learning.

Blended learning.

. Is integrating traditional face-to-face instruction with technology.
. The blended learning environments extend the reach of the instruction beyond the classroom using digital devices.
. Some portion occurs where the learners may learn online at their pace.
. Blended learning is more effective than pure face to face /pure online.

Collaborative and cooperative learning.

. Collaborative learning is based upon consensus building through cooperation by learners.
. It is more learner centred in that working together results in greater understanding than if one had worked independently.
. Cooperative learning is defined by a set of processes which help learners interact together in order to accomplish a specific task.
. Teacher to plan for Specific Learning Experiences that enable learners to work in pairs or groups for opportunity to interactand cooperate to construct knowledge.

Benefits of collaborative and cooperative learning.

✓ More caring and supportive relationships.
✓ Greater psychological health, positive social and self-esteem.
✓ Higher acquisition of competencies and values.

Differentiated learning.

. Means tailoring instructions to meet individual needs of learners.
. The learning environment, use of continuous assessment and flexible grouping makes differentiated learning a successful approach to instruction.
. Teachers can differentiate the following four classroom elements based on learners readiness, interests or learning needs; ✓ **Content-**what the learner needs/how the learner will get access to information,
✓ **Process-**activities in which the learner engages in order to make sense of/master the content,
✓ **Products-**culminating projects that ask learners to rehearse, apply and extend what he/she has learned in a unit, ✓ **Learning environment-**the way the classroom works and feels.

9.2LEARNING RESOURCES

Learning resources are items/tools/individuals that are used byteachers to facilitate learning.

Importance of learning resources.

. They help to explain and simplify lesson concepts to the learners.

. **Learning resources assist the learner to achieve the learning   outcome**

. Learning resources provide the learning experiences for the learner.

. They make learning real, practical and pleasurable for the learners.
. They are also used to illustrate or reinforce askill, viewpoint, perspective or an idea

. They activate, influence motivation and arouse interest in learners

. They help clarify, interpret and compare important concepts, phenomena andevents
. They make learning more focused, effective, interesting, vivid, meaningful andimaginative

. They promote better understanding and development of different skills, valuesand attitudes
. They promote teacher-learner and learner-learner communication and interaction(communication and collaboration)
. Enhances acquisition of competencies such as self-efficacy, imagination and creativity, critical and problem solving among others.

Factors to consider when selecting learning resources.

. Learning outcome.

. Learning experiences.

.   Learners' previous experience.

.   Age of learner.

.   Time available.

.   Season/time of the year.

.   Type of material.

.   Availability.

.   Viability.

   TYPES OF RESOURCES.

   . Text books.

   . Realia.

. Charts.

. Journals.

. Lesson plans.

. Newspaper articles.

. Visual aids.

. Audial aids.

. Audial visual aids.

9.3DEVELOPMENT OF PROFESSIONAL DOCUMENTS .

9.4 ASSESSMENT.

9.5 CONDUCTING A MICRO-LESSON.

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