



KENYA INSTITUTE OF CURRICULUM DEVELOPMENT

Facilitator's Training Manual
For
Early Years Education Curriculum

November 2017

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INTRODUCTION

Kenya Institute of Curriculum Development (KICD) has developed curriculum designs for Early Years Education (EYE) as part of the curriculum reforms materials. The Institute has also developed a Basic Education Curriculum Framework (BECF) to help education stakeholders better understand the curriculum to enhance efficient curriculum delivery. The BECF has adopted the Competency Based Curriculum (CBC). This has been informed various policy documents such as Kenya Vision 2030, Constitution of Kenya 2010, the Task Force report on the Re-alignment of the Education Sector chaired by Professor Odhiambo, the Sessional Paper No. 2 of 2015 on 'Reforming Education and Training. Other documents that informed the curriculum reforms include the 21st Century skills, the harmonized curriculum for the East African States, the sustainable development goals and KICD needs assessment report 2016 among other documents formed the basis of the curriculum reforms.

The Institute has organised an elaborate teacher training for the national roll out of the curriculum, which will be in January 2018. As part of the preparation for the roll out KICD has developed this Facilitators Training Manual to enable training of curriculum implementers for efficient curriculum implementation.

Aims of the Training

The aims of the training are as follows:

- a) Prepare teachers, education officers and other curriculum implementers and supervisors are adequately prepared for the national roll out. The training aims to
- b) Equip teachers with the necessary skills to implement the competency based curriculum using the Inquiry Based learning approach.
- c) Equip teachers to facilitate differentiated learning to ensure that all learners are wholly engaged in learning.

The training will focus on the Basic Education Curriculum Framework, Special needs education, Interpretation of the curriculum designs, Professional documents and integration of ICT in curriculum implementation.

How to Use the Manual

The Facilitators Manual guides the teacher on how to implement the curriculum designs for EYE. It provides the facilitators with a programme for training the teachers. It outlines the different

session and provides session outcomes, the key Areas to cover in each session and gives suggestion for the learning strategies that can be employed. Also provided for the facilitator is the Facilitators Notes for each session to guide on what is expected to be covered the manual. Also emphasized is the importance of preparing professional documents and how to mainstream ICT in teaching and learning. Special needs education has also been highlighted as a special component in the curriculum reforms. The lesson Key Inquiry Questions have also been provided. The facilitator should plan where to plug-in the question during the session to ensure that all learners are able to answer them appropriately by the end of the session

The manual is an important reference for facilitators. However, the facilitator will also have to use the **Basic Education Curriculum Framework** and the **curriculum designs** alongside this manual to effectively train the teachers. The facilitator is advised to read the manual before embarking into the training programme. The manual should be in session planning and implementation. The manual will help in preparation for the training and provides suggestions for activities that the facilitator can use. The facilitator is advised to choose the activities that they are able to use depending on their situation. The facilitator should use competency based approaches to facilitate the trainings.

The training will also involve training of teachers in SNE institutions. The facilitator should ensure that during group activities, teachers of respective categories of learners with SNE sit together in order for them to have a walk through in the adapted and specialist design.

A sample programme for training has been provided. The facilitator can adjust the programme depending on the amount of time available. Where a third day is available micro teaching is encouraged to give teacher opportunities to practice what is learnt.

The manual is divided into sessions. Each session has its session outcomes that the facilitator is expected to achieve.

The manual has provided information for the facilitator to help mainstream ICT in a seamless manner. Where charts, ICT gadgets and other resources are advised, the facilitator should plan ahead of the session to have them available to avoid wasting time.

During the training sessions, participants will be put in groups based on learning areas. These groups should remain until the end of the training.

Proposed Programme for the Teacher Training

TIME	ACTIVITY
	DAY 1
8.00-8.30am	Registration of participants Introduction Opening remarks Ground rules Workshop Aims
8.30-9.30am	<i>Session 1:</i> Basic Education Curriculum Framework
9.30-10.30am	<i>Session 2:</i> Competency based curriculum for learners with special needs
10.30-11.00 am	TEA BREAK
11.00 – 11.30 am	<i>Session 3:</i> Part 1 - Interpretation of the curriculum designs <ul style="list-style-type: none"> • National Goals of Education • Level learning outcomes • Learning areas for EYE <ul style="list-style-type: none"> - Essence statements
11.30 -1.00 pm	Part 2- Interpretation of the curriculum designs (Cont.) <ul style="list-style-type: none"> • Interrelationship between National Goals of Education, Level Learning Outcomes, General and Specific Learning Outcomes, Strands and sub-strands. • Learning Outcomes • Key Inquiry Questions
1.00 – 2.00pm	LUNCH BREAK
2.00 – 3.30 pm	Part 3- Interpretation of the curriculum designs (Cont.) <ul style="list-style-type: none"> • Learning Experiences (Differentiated learning (inclusive education) ,Inquiry Based learning), Core Competencies, Values, PCIs) • Learning resources
3.30 – 4.30pm	<ul style="list-style-type: none"> • Competency Based Assessment
4.30-5.30 pm	<i>Session 4:</i> Professional Documents <ul style="list-style-type: none"> • Schemes of Work
5.30 pm	TEA BREAK
	DAY 2
8.00 – 8.30 am	Preliminaries
8.30 – 9.30 am	<i>Session 4:</i> Professional Documents (cont) <ul style="list-style-type: none"> • Lesson Plans
9.30-11.00 am	Professional Documents (cont.) <ul style="list-style-type: none"> • Record of Work
11.00 – 11.30 am	TEA BREAK
11.30- 12.30 pm	Professional Documents (cont.) <ul style="list-style-type: none"> • Learner’s Progress Records • Individualized Education Programme (IEP)
12.30- 1.10 pm	<i>Session 5:</i> ICT integration in curriculum implementation
1.10-2.00 pm	LUNCH BREAK

2.00 – 4.00 pm	Infusing Competency Based Aspects in English and Kiswahili Language (We do)
4.00 – 5.30 pm	Infusing Competency Based Aspects in English and Kiswahili Language (I do)
5:30	TEA BREAK
	DAY 3
8:30 – 8:45 am	Registration, Welcome and Announcements
8:45 – 9:35 am	Infusing new curriculum in EGM
9:35 – 10:35 am	Rote counting & Counting on
10:35 – 11:05 am	TEA BREAK
11:05 – 12:05 pm	Addition by Breaking Apart
12:05 – 1:05 pm	Subtraction by Breaking Apart
1:05 – 2:00 pm	LUNCH BREAK
2:00 – 2:50 pm	Number Patterns
2:50 – 3:50 pm	Place value
3:50 – 4:50 pm	Addition by regrouping
4:50 – 5:00 pm	Homework
	DAY 4
8:30 – 8:45 am	Registration, Welcome and Announcements
8:45 – 9:45 am	Equivalence
9:45 – 10:40 am	Fractions(Introduction, I do, We do)
10:40 – 11:10 am	TEA BREAK
11:10 – 12:10 pm	Geometry
12:10 – 1:00 pm	Measurement (Length)
1:00 – 2:00 pm	LUNCH BREAK
2:00 – 2:50 pm	Addition & Subtraction of Length in Metres
2:50 – 4:00 pm	Putting it all together
4:00	Plenary

Day 1

SESSION 1: Basic Education Curriculum Framework

(1 hour)

Session Outcomes

By the end of the session, the participant should be able to:

- a) Discuss the Basic Education Curriculum Framework to professionally implement the curriculum.
- b) Appreciate the Basic Education Curriculum Framework for effective implementation of curriculum.

Key Areas to be covered

Basic Education Curriculum Framework

- Mission and Vision statements
- National Goals of Education
- Pillars of the BECF
- Core competencies
- Organisation of basic education
- Learning areas for EYE

Suggested Learning Experiences

- Buzz on the vision and mission statements
- Reflect on the national goals of education
- Brainstorm on the importance of the core competencies
- Discuss the organisation of basic education
- Question and answer

Facilitators Notes

Vision: Engaged, Empowered, and Ethical Citizen

Mission: Nurturing Every Learner's Potential

National Goals of Education

1. Foster nationalism, patriotism, and promote national unity
2. Promote social, economic, technological and industrial needs for national development
3. Promote individual development and self-fulfilment
4. Promote sound moral and religious values
5. Promote social equity and responsibility
6. Promote respect for and development of Kenya's rich and varied cultures
7. Promote international consciousness and foster positive attitudes towards other nations
8. Promote positive attitudes towards good health and environmental protection

Paradigm shifts in the reformed curriculum

FROM (less)	TO (more)
Content Focus	Focus on Competencies
Rigid and Prescriptive curriculum with limited flexibility	Flexible with Opportunities for specialisation
Primarily focused on summative assessment and competition	Balance formative and summative assessment, and excellence
Emphasis on Schooling	Emphasis on Education
Teaching	Learning

Pillars of BECF

1. Value based education

- Love
- Responsibility
- Respect
- Unity
- Peace
- Patriotism
- Social Justice
- Integrity

2. Principles of BECF

- Opportunity
- Excellence
- Diversity
- Inclusion
- Parental Empowerment and Engagement
- Community Service Learning
- Differentiated Curriculum and Learning

3. Theoretical Approaches

- The Instructional Design Theory
- Vygotsky's Sociocultural Theory.
- Gardner's Multiple Intelligences Theory
- Piaget's Theory of Cognitive Development

NOTE

The pillars for the CBC are explained in the Basic Education Curriculum Framework.

Core competencies

Competency conceptualised as '*the ability to apply appropriate knowledge and skills to successfully perform a function*'. They will mainstreamed in every strand and lesson.

The competencies identified by the BECF are:

- Communication and Collaboration
- Critical Thinking and Problem Solving
- Creativity and Imagination
- Citizenship
- Digital Literacy
- Learning to Learn
- Self-efficacy

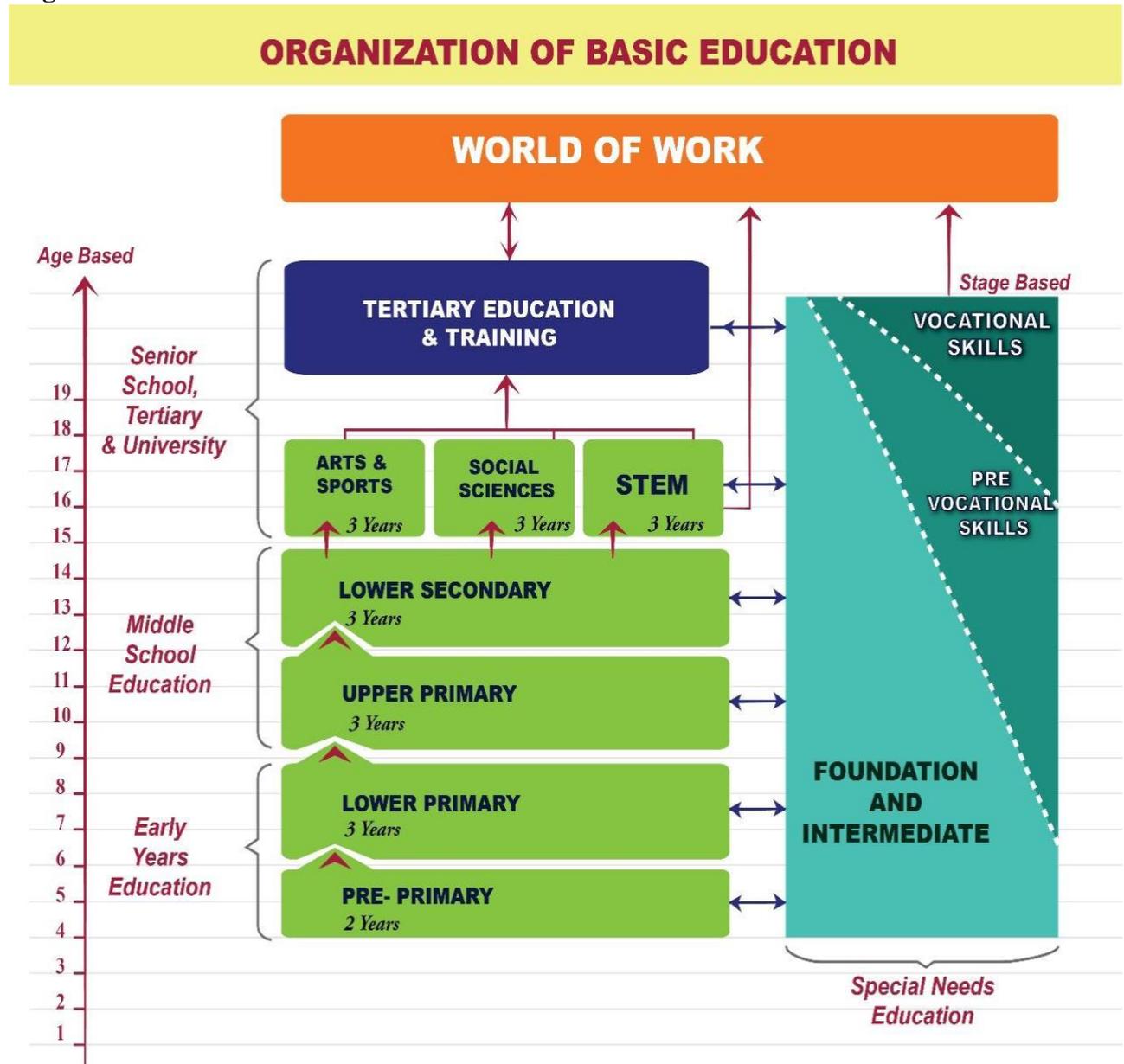
NOTE

The competencies descriptors are provided for in the Basic Education Curriculum Framework.

Essence statements

Essence statements are provided for in the BECF. These are statements that give the core of the subject and its importance. It also provides a general overview of the learning area.

Organization of Basic Education



Learning areas for Early Years Education

Pre Primary Education

	Learning Area	Lessons Per Week
1	Mathematical Activities	5
2	Language Activities/Kenya sign language/Pre Braille Activities	5
3	Environmental activities	5

4	Psychomotor and Creative activities	8 (5 outdoor activity)
5	Religious Education(CRE,IRE,HRE) and PPI	2 (1 PPI)
	Total No of lessons per week	25

Lower Primary Education

	Learning Area	Lessons Per Week
1	Literacy Activities and Indigenous Languages /Braille	5
2	Kiswahili Language Activities/Kenya Sign Language for learners who are deaf	3
3	English Language Activities	3
4	Mathematical Activities	5
5	Environmental Activities	5
6	Hygiene and Nutrition Activities	2
7	Religious Activities (CRE, IRE, HRE)	3
8	Movement and Creative Activities	8(5 for PE)
9	Pastoral Programme of Instruction	1
	Total Lesson Per Week	35

SESSION 2: Competence Based Curriculum for Learners with Special Needs (1 hour)

Session Outcomes

By the end of the session, the participant should be able to:

- a) Identify the needs of learners with special needs to include them in the learning process.
- b) Cater for learners with special needs in the implementation of the curriculum

Key Areas to be covered

Curricular for learners with special needs

- Foundation curriculum
- Adapted curriculums

Suggested Learning Experiences

- Discuss the categories of learners with special needs
- Reflect on the needs of the learners with special needs
- Brainstorm on the adapted curriculum of learners with special needs
- Question and answer

Facilitators Notes

The following learning areas have been adapted for learners who follow the regular curriculum:

Category of learners	Pre-primary	Lower primary
1. Visual impairment	Mathematic activities	Mathematic activities
	Environmental activities	Environmental activities
	Psychomotor activities	Movement and creative activities
	Pre braille activities	Braille literacy
2. Hearing impairment	Environmental activities	Environmental activities
	Psychomotor activities	Movement and creative activities
	Kenyan Sign language	Kenyan sign language
		English language activities
3. Physical impairment	Mathematic activities	Mathematic activities
	Environmental activities	Environmental activities

	Psychomotor activities	Movement and creative activities
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Learners will take the other learning areas as they are because they do not require adaptations. English and Kiswahili language activities under **TUSOME** programme have been adapted for learners with visual impairment while English language activities under the same programme has been adapted for learners with hearing impairment. Early grade mathematics under **PRIEDE** project has also been adapted for learners with visual, hearing and physical impairment and those with intellectual disabilities.

Developed curricula for learners with special needs

Learners who may not follow the regular curriculum will take specialist learning areas. These include learners with intellectual disabilities, deaf blindness, autism, cerebral palsy and multiple disabilities.

This category of learners will begin at foundation level with the following learning areas:

1. Communication, social and pre-literacy skills
2. Sensory integration and creative activities
3. Activities of daily living skills
4. Pre numeracy skills
5. Orientation and mobility skills

Note

During group activities, teachers of learners with special needs should be put in groups as per the categories of learners in order to take through the adapted and specialist curriculum designs.

SESSION 3: Interpretation of the Curriculum Designs

Part 1: 30 minutes

Session Outcomes

By the end of the session, the participant should be able to:

- a) Identify the components of the curriculum designs for proper use.
- b) Interpret the curriculum designs for effective implementation of learning areas.

Key Areas to be covered

- Components of the curriculum design
- National Goals of Education
- Level learning outcomes
- Learning areas
- Essence statements

Suggested Learning Experiences

- The National Goals of Education were mentioned in session one. Mention that they are also considered as one of the components of the curriculum designs.
- Refer participants to the curriculum designs and ask them to identify the components of the curriculum designs. Write the identified components on a flip chart. Summarize the discussion by highlighting the key components of the curriculum designs format.
- Refer participants to the Basic Education Curriculum Framework to familiarize themselves with the essence statements for each subjects and the level learning outcomes.
- Brainstorm on the learning outcomes for EYE and discuss how the can be achieved.

Facilitators Notes

Components of the curriculum design

- National Goals of Education
- Level learning outcomes
- Subjects
- Essence statements
- Strands and sub strands
- Specific learning outcomes
- Suggested learning experiences
- Key Inquiry Question(s)
- Core competences to be developed
- Pertinent and Contemporary Areas to be addressed
- Link to values
- Link to other subjects
- Community Service Learning
- Non-formal activity to support learning
- Suggested learning and teaching resources
- Suggested assessment methods
- Assessment rubrics

Session Outcomes

By the end of the session, the participant should be able to:

- a) illustrate interrelationship between national goals of education, core competencies, level learning outcomes, general learning outcomes and specific learning outcomes
- b) write learning outcomes to facilitate learning in a context
- c) develop key inquiry questions based on the learning outcomes to facilitate learning.

Key Areas to be covered

- Interrelationship between National goals of education, Level learning outcomes, General learning outcomes and specific learning outcomes.
- Learning Outcomes
- Key Inquiry Questions (KIQ)

Suggested Learning Experiences

- Pick a learning area from the designs and identify level learning outcomes, general learning outcome for the learning area, specific learning outcomes and learning experiences. List them on a flip chart.
- Divide participants into groups of about 5 individuals. Assign each group a learning area. Guide them to identify a national goal, a level learning outcome, a general learning outcome for a learning area, and a specific learning outcome
- Guide participants to link level learning outcome to appropriate national goal of education.
- Participants identify specific learning outcomes in the designs and highlight the action verb, the object and the context using Environmental Activities.
- Develop specific learning outcomes for the various sub strands.
- Identify suggested Key Inquiry Questions in the designs and develop lesson KIQs.
- Participants link Key Inquiry Questions in the designs to the specific learning outcomes

Facilitators Notes

Interrelationship between National goals of education, Level learning outcomes, General learning outcomes and specific learning outcomes

National Goal of Education	Promote positive attitudes towards good health and environmental protection
↓	↓
Level Learning Outcome	Explore the immediate environment for learning and enjoyment
↓	↓
Subject General Learning Outcome	Develop appropriate organizational, practical technological skills for problem solving in conserving the environment
↓	↓
Specific Learning Outcome	Dispose of waste responsibly to limit risks to self, others and environment

Learning outcomes

Learning outcomes indicate the expected observable behavioural changes in the learner after a learning experience. Outcomes are usually expressed through the application of knowledge, skills and attitudes. Specific learning outcome should have:

- The action verb
- The object
- The context

The Level Learning Outcomes for Early Years Education

By the end of the early year's education, the learner should be able to:

- a) Communicate appropriately using verbal and/or non-verbal modes
- b) Demonstrate basic literacy and numeracy skills
- c) Apply digital literacy skills for learning and enjoyment
- d) Apply creative and critical thinking skills in problem solving

- e) Practice hygiene, proper sanitation, safety and nutrition to promote health practice appropriate etiquette for interpersonal relationships
- f) Explore the immediate environment for learning and enjoyment
- g) Demonstrate acquisition of emotional, physical, spiritual, aesthetic and moral development
- h) Demonstrate appreciation of the country and its rich, diverse cultural heritage for harmonious living
- i) Exhibit appropriate organizational skills.

Key Inquiry Questions

Key Inquiry Questions (KIQ) is an approach where the teacher uses question to prod learners thinking to allow them to create information using their own words and understanding. They:

- help to focus the learning
- 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
- allow learners to explore ideas in an open-ended, non-judgmental, meaningful and purposeful way
- encourage collaboration amongst learners, teachers, and the community and integrates technology to support the learning process.

When writing KIQ:

- consider the focus of your learning outcome and the topic as given in the curriculum design.
- examine the theme or concept in the curriculum that must be addressed and brainstorm on questions that would enable learners to think about the concept without dictating the direction or outcome of their thinking
- utilise the six typical question words: Who? What? Where? When? Why? How?

Session Outcomes

By the end of the session, the participant should be able to:

- a) generate learning experiences to enable achievement of learning outcomes
- b) use different learning resources during curriculum implementation
- c) assess learners appropriately during curriculum implementation

Key Areas to be covered

- Learning Experiences (Differentiated learning (inclusive education), Inquiry Based Learning, Core Competencies, Values, Pertinent and Contemporary Areas PCIs, Parental Empowerment and Engagement)
- Learning resources
- Competency Based Assessment

Suggested Learning Experiences

- Participants in groups identify the suggested learning experiences in the designs and link them to the intended specific learning outcomes for the sub strand. Display the work in the plenary and lead the participants to critic the learning experiences.
- Participants mainstream values, PCIs and community service learning into learning experiences identified in bullet one.
- Pick a learning area from the curriculum designs and select a sub strand within the learning area. Model how to link a specific learning outcome in the sub strand to a value, PCI and Community Service Learning.
- Participants brainstorm on the importance of Individualized Education Programme (IEP).
- In groups identify learners who need an Individualized Education Programme (IEP).
- Participants in groups to select a learning area. Ask them to select a sub strand in the learning area and identify the learning resources they can use to teach that sub-strand.
- Ask the participant to think individually then in pairs, share and discuss the meaning of assessment and the purpose of assessing.
- In groups ask participants to discuss the following questions:
 - How do you know what a learner knows about a concept?
 - What kind of questions can you give a learner for them to learn a concept?

- How do you know if the learners have acquired a competency?

The facilitator summarizes by describing each of the question as a type of assessment that is:

- Assessment as Learning
- Assessment for learning
- Assessment of learning
- Walk the participants through others forms of assessment

Facilitators Notes

Learning experiences

Learning experiences comprise of activities that the learner is engaged in during the lesson. The activities may be carried out by an individual learner or as a group work activity. However, they should ultimately, enable the learner to achieve the intended specific learning outcomes of the lesson.

Learning experiences enable the learner to:

- Acquire knowledge, skills and develop attitudes
- Acquire the intended competences
- learn from one another
- self-regulate and evaluate
- engage deeply in the subject matter
- reflect on the learning process
- interact with others during the learning process

Note

A variety of learning experiences are shown in the curriculum designs for EYE.

Pertinent and Contemporary Issues (PCIs)

Children like adults are faced with a myriad of challenges owing to the legal, technological, social, cultural and economic dynamics in society. It is important that these challenges are addressed as the overall wellbeing of a child is critical for the survival of any society. These Areas in the Competence Based Curriculum (CBC) are referred to as Pertinent and Contemporary Areas (PCIs) formerly known as emerging/Cross-cutting Areas. Areas that have been identified as Pertinent and Contemporary have been put into six broad categories.

- Citizenship
- Health Education
- Life Skills and Values Education

- Education for Sustainable Development (ESD)
- Learner Support programmes
- Community Service learning
- Parental Empowerment and Engagement

Values Based Education (VBE)

Values are standards that guide an individual on how to respond or behave in each circumstance. Thus, values influence how we feel, act and make choices in life. Today, there is a noticeable values and behavioural crisis among the general population and young people. Many youngsters are growing up without the desired values, positive attitudes and psychosocial competencies needed to function as responsible citizens. The primary responsibility for nurturing values rests with parents and the community, but education too has a key role to play in this regard. The teaching of values will facilitate the achievement of the curriculum reforms' vision, particularly with respect to moulding ethical citizens'. The Core Values in the BECF are: love, responsibility, respect, unity, peace, patriotism, social justice and integrity

Community Service Learning (CSL)

Community Service Learning (CSL) is an experiential learning strategy that integrates classroom learning to learning from the community to enable learners to reflect, experience and learn from the community. It is a process where learners link personal and social development with academic and cognitive development.

The reformed curriculum has consequently introduced Community Service Learning as a component of learning that will be compulsory to all learners. Community Service Learning will create opportunities for learners to apply the knowledge and skills acquired through the formal dimension in their community while at the same time learning from the community. This will develop in the learner not only employability skills but also promote personal growth by strong and productive relationships with the community. Learners will utilize the acquired knowledge, skills, values and attitudes to improve the welfare of the community.

Community Service Learning covers aspects of Citizenship, Entrepreneurship, Financial Literacy, Life Skills, Communication Skills and Research.

Parental Empowerment and Engagement (PEE)

Parents, family and care-givers are a child's first and most important educator and can be a positive influence and help their child do well at school. Parents need to be empowered and provided with useful information to assist them to better engage with their child's learning. Parents also require to get involved in their child's learning throughout schooling. This engagement will enable them to participate in identifying the learner's potential and contribute to nurturing it. When parents are involved in their children's learning, it can have very positive impact on education outcomes. Teachers should create strong partnerships with parents to ensure they get engaged in learning.

Non-formal Learning

Non-formal activities are structured learning activities that are geared towards development of affective and psychomotor dimensions of learning. Some of the non-formal activities may include: singing, dancing, reciting poems, club activities, games and debates

Learning Resources

Learning resources are any materials that help to facilitate the teaching and learning process. Such materials include charts, realia, models and the immediate environment. Learning resources prompts the learners' reasoning and facilitates the development of competences such as critical thinking and problem solving, creativity and imagination, collaboration, self-efficacy among others. They make images to last longer in the mind. When a learner correctly sees, hears, smells and touches then, he or she can put the pieces together and get the picture even without you having to explain.

Links to other learning areas

Some of the competencies that are developed in one learning area can be reinforced through other learning areas for example when you teach the concept of the flag in environmental activities, it could be enhanced in the learning area of movement and creative activities where learners are expected to draw and color the national flag.

Competency Based Assessment

The main purpose of assessing learners is to:

- Inform teaching and learning decisions
- Establish the level of learner's competence

- Ascertain progress against the learning outcomes
- encourage learners to make judgments about their performance
- Enhance learner motivation
- Identify where intervention, focused support or referral is required
- Make decisions regarding choice of subject, course and careers pathways.

Formative assessment or Assessment *for* learning (AFL) is an investigative tool to monitor the progress of an individual learner in meeting the learning outcomes in a subject or learning area. It involves gathering data during the learning process, and provides feedback to both the learner and you to help improve learning. This approach helps build an accurate and detailed profile of your understanding of the curriculum and inform teaching so that you can provide appropriate assistance to the learner.

Assessment as Learning

Assessment as Learning occurs when a learner is assisted to develop a capacity to be independent, **self-directed** to set individual goals, monitor own progress/ self-assess, and reflect on his/her learning. A learner can self-assess when you provide the learner with a clear picture of steps required to reach proficiency, a set criterion that have a variety of examples or models of decent work for comparison.

Assessment of learning

This summative assessment and is carried at the end of a unit or task. It is designed to provide information on the achievement of a learner to parents, educators and learners themselves.

Other forms of assessment include:

Checklists: assist the teacher to determine areas of focus to enable the learner to develop relevant knowledge and skills

Rating Scales: Use of descriptive words, such as always, usually, sometimes and never

Questionnaires: A list of questions on various aspects of a person's situation

Project Method: a set of activities implemented within a set timeframe

Learners identify a need in their community where they can provide services based on what they have learned.

Journaling: the learner keeps a record of their personal feelings, thoughts and experiences daily.

Portfolio: a purposeful collection of work samples, self-assessments and goal statements that reflect a learner's progress.

Summative assessment

They include tests, examinations, performances, presentation, portfolios, and a variety of written, oral and visual methods. They provide feedback to educators, parents and learners, about a learner's achievement to make decisions for appropriate placements or further studies.

SESSION 4: Professional Documents

(1 hour)

Part 1 A: 1 hour

Session Outcomes

By the end of the session, the participant should be able to:

- a) develop teacher professional documents to implement CBC
- b) use professional documents in teaching and learning,
- c) appreciate teacher professional documents in the implementation of CBC

Key areas to be covered

- Schemes of Work
- Lesson Plans

Suggested Learning Experiences

- Take participants through the different components of the scheme of work. Using the curriculum designs ask participants to develop a sample scheme of work for two weeks.
- Participant to describe a lesson plan during a session discussion to bring out the components of a lesson plan.
- Develop lesson plans from the scheme of work that was previously developed.

Facilitators Notes

Professional Documents

These are the documents which are used by the teacher in the preparation, implementation and evaluation of teaching and learning. They are vital documents that a teacher must have to keep track of his or her work, that of the learners as well as to make teaching and learning more effective. They include:

- Scheme of work

- Lesson plans
- Record of work
- Progress reports
- Individualized Education Program

Schemes of Work

A scheme of work is a document that a teacher develops from the curriculum design. A scheme of work shows how the planned curriculum content shall be distributed within the time allocated for the learning area.

A scheme of work helps the teacher to do the following:

- To plan on what resources will be required.
- To decide on the methodology to be used.
- To plan for assessment.

A scheme of work has several components which include the following; week, lesson, strand/theme, sub-strand/subtheme, specific learning outcomes, suggested learning experiences, suggested learning resources, suggested assessment methods and remarks.

Sample Scheme of Work

SCHOOL	PP/Grade	Learning area	Term	YEAR
XX	YY		Xx	WW

Environmental Activities

Week	Lesson	Strand	Sub-strand	Specific learning outcome (KSA)	Key inquiry Question. (Key Inquiry questions should guide achievement of learning outcomes)	Learning experiences	Learning resources	Assessment	Reflection
1	1	Care for the environment	Caring for plants-watering flower beds	By the end of the lesson the learner should be able to: Point out when flower beds should be watered at school.	1)When do we water flowers 2)How should we water flowerbeds	-Learners to suggest reasons for watering flowers -Learners are guided to watch age appropriate media on watering flowers	Watering can Sprinkler Hose pipe Improvised watering can Bucket Video	Observing the procedure of watering flowers	
	2			Water flower beds appropriately within the school environment.		-In groups, learners to identify things used for watering flowers (watering can, sprinkler, hose	Watering can Sprinkler Hose pipe Improvised watering can	Observing the procedure of watering flowers	

						pipe, bucket, improvised watering can).	Bucket		
	3			Demonstrate willingness to take responsibility in watering flowers at school.		-Learners to practice correct procedure of watering flowers. -Learners to take turns in watering flowers.	Watering can Sprinkler Hose pipe Improvised watering can Bucket	Observing the procedure of watering flowers	

Lesson Plan

A lesson plan is an essential document for effective teaching and learning. A well-done lesson plan helps the teacher to;

- organize the content to be taught in advance focusing clearly on the content to be covered and the way it should be taught hence avoiding vagueness and irrelevance
- plan, prepare and assemble teaching/learning resources
- Present concepts and skills in a systematic manner using appropriate strategies to achieve the stated lesson outcomes
- Manage time well during the lesson
- select and design appropriate assessment methods to evaluate the teaching and learning process
- To make connections between components

Components of the lesson plan

Organization of learning - This shows where learning will be taking place. It could be in the classroom, or outside the classroom or a visit to a nearby library or farm.

Introduction - The lesson should be introduced in an interesting and stimulating manner to arouse curiosity in the learners. Integrate the learners' related past experiences as much as possible, tapping into learners' prior knowledge to prepare them for additional content you're about to introduce.

Lesson development - This is the actual teaching of the Learning area content. The subject matter is divided into steps. Each step should contain one main idea or experience. Explicitly outline how you will present the lesson's concepts to the learners and the activities to be undertaken in each step-in order to achieve the stated outcomes.

It should indicate clearly what and how is to be taught and the learners activities (learning experiences). The teacher should vary the teaching/ learning activities as the need arises.

For example, in Environmental activities:

Conclusion - This step summarizes the lesson by putting emphasis on important points/concepts covered. During this time a wrap up of the lesson is given to help learners organize the information into meaningful context in their minds.

This can be done by:

- asking questions to establish whether the lesson outcomes have been achieved.
- allowing learners to seek clarification

- summarizing the main points in the lesson
- giving follow up activity(ies) such as an assignment or project.

It is important to note that a lesson plan may not have all the details of the content, therefore the teacher should have lesson notes.

Reflection on the lesson - This is a critical analysis of the learning. The teacher is called upon to make an honest assessment of his/her performance and that of the learners during the lesson and give reasons for the success or failure of the lesson. Suggestions/remedies should be highlighted in this section.

The lesson planning will require emphasis on embedding and infusing of the aspect of the CBC such as core competences, PCIs, values, non-formal learning activities, link to other learning areas, resources and assessment. A conscious effort must be made during planning to include the types of questioning techniques that will be used in the lesson.

LESSON PLAN TEMPLATE

SCHOOL	LEARNING AREA	GRADE	DATE	TIME	ROLL
XX		YY	XX/YY/ZZ	XX.YY am/PM	XY

Strand/Theme/Topic.....

Sub-strand/Sub-Theme/Sub-topic

Specific Learning Outcomes

By the end of the lesson, the learner should be able to:

-
.....
-
.....

Key Inquiry Question

-
-

Core competences

Values

PCIs

Learning Resources

1.....

2.....

Organization of learning

.....

Introduction

.....

Lesson development

Step

1.....

2.....

3.....

Conclusion

.....

Summary.....

.....

.....

Reflection on the lesson/self-remarks

.....

Sample Lesson plan for Environmental Activities

SCHOOL	LEARNING AREA	CLASS	DATE	TIME	ROLL
Bidii Primary School	Environmental activities	Grade 1	11 /9/2017	8.10-8.40 am	30

Strand: Care for the Environment

Sub-strand: Caring for plants-watering flower beds

Specific Learning Outcomes

By the end of the sub-strand, the learner should be able to:

- a) Identify the best time of the day to water a flowerbed within the school compound.
- b) Water flower beds appropriately within the school compound.
- c) Demonstrate willingness to water a flowerbed within the school compound.

Learning Resources

- Watering can
- Sprinkler
- Hose pipe
- Improved watering can
- Bucket

Core competences, Values, PCIs

Taking turns in watering flowerbeds promotes the values of caring for plants, responsibility and respect for one another.

Organization of learning

Introduction

Learners are guided to watch age appropriate media on watering flowers to develop interest and curiosity in watering flowerbeds or study photographs/newspaper cuttings showing watering flowerbeds.

Lesson development

Step 1: Learners to suggest reasons for watering flowers

Step 2: Using the key inquiry questions, synthesize learners, responses on when and how to water flowers

Step 3: Teacher to demonstrate watering flowerbeds

Step 4: Learners practice watering flowerbeds at school.

Conclusion

- Keenly observe and guide learners on the procedure of watering flowerbeds
- Learners carry out related activities in the workbook

Summary

Some of the plants in our surroundings are flowers. Flowers need water to grow. We can take care of plants by watering the flowerbeds.

Reflection on the lesson

This is carried out after the lesson. The teacher reflects on *How successful was the lesson?*
What could I have done to make it better?

Part 1: I do: Refer to page 42 and take participants through the session on Infusing Competency Based Aspects in Teaching of English and Kiswahili Language

Part 2: We do: Refer to page 46 and take participants through the session on Infusing Competency Based Aspects in Teaching of English and Kiswahili Language

Professional Documents- Record of Work (Contd)

Part 1 A: Record of Work and Learners Progress Records (1 hour)

Session Outcomes

By the end of the session, the participant should be able to:

- a) develop teacher professional documents to implement CBC
- b) appreciate teacher professional documents in the implementation of CBC
- c) use professional documents in teaching and learning,
- d) develop tools for assessment of learning
- e) create assessment rubrics to assess learners achievement

Key Areas to be covered

Professional documents

- Record of Work
- Learner's Progress Records

Suggested Learning Experiences

- Participants brainstorm on what a record of work is and why it is important to keep the learners progress records.
- In groups as the participants to explore how they will assess the following task:
 - Grade 1 teacher asked his learners to wash hands.

Note: The Groups should come up with the steps taken when washing hands.

Example: Folding the sleeves; Apply Soap; Scrubbing hands; Running water; assisting each other to water; Rinsing; Wiping

Guide participants to create a rubric on one assessment task

Facilitators Notes

Record of Work

A Record of Work is a document kept by the teacher showing the work that has been done at the end of every lesson, strand or sub-strand. the entries are made daily by the individual teacher. It helps in:

- accountability and transparency of work covered by the teacher
- the continuity of teaching of a class
- that a new teacher has an idea of where to start teaching a class
- the evaluation of schemes of work after a period
- providing uniformity of content coverage in case of several streams

The record tracks the achievement of learning outcomes and the competencies acquired by the learner. The record can be used to show the teacher whether their teaching has been effective in addressing the learning needs of individual learners. It therefore acts as a guide for the teacher to be able to give the required attention to individual learners to ensure the desired outcomes as stated in the curriculum designs are portrayed by all the learners. The progress record can also be used to give the learner and the parents/guardians information about the learner's progress.

Components of a Record of Work

Time Frame: There should be an indication of the date and week when the work was covered.

Work done: strand and sub-strand as derived from the specific learning outcome(s)

Reflection: The remarks column should have statement(s) specifying the success and or challenges of that lesson and recommendations.

Details of The Teacher: include the name, signature or initials of the implementing teacher for accountability.

The school management should also regularly sign the record of work.

Sample Record of Work

School: _____

Learning Area: _____

Name of Teacher: _____

Grade: _____

Date	Week	Work done	Reflection	Signature

Learner's Progress Records

1. Rubrics

Rubrics is a way to assess a learner's progress with standards in a detailed manner. Rubrics provide several focal points when grading subjective work. They also provide the teacher with a tool to ensure that grading is fair and consistent for all students.

Assessment Rubrics

Learning outcomes require different assessment methods. A rubric is a teacher generated tool that maps the specific learning outcomes that specify the performance, levels of success and mastery of the outcomes. Rubrics are meant to help you in measuring the *product, process and progress* of learning. In addition, the rubric will involve the learner in creating and understanding the evaluation criteria which allows them to participate fully in the process needed to achieve the objective.

Designing an assessment criterion rubric for a lesson

Decide on the rating, for example: Excellent, Good, Developing, Needs Support.

The Curriculum designs use exceeding expectations, meeting expectations, approaching expectations and below expectations.

From the activity area, Hygiene and Nutrition learning experience where the participants were asked to create a rubric on one assessment task from an activity where learners were asked to wash their hands. The steps were folding the sleeves; apply soap; scrubbing hands; running water; assisting each other to water; rinsing; wiping

An example of the rubric is shown below:

Performance	enter ratings	enter ratings	enter ratings	enter ratings
Folding the sleeves				
Applying Soap				
Scrubbing hands				
Running water				
Assisting each other to water.				
Rinsing				
Wiping				

Reporting and notification of Learners Achievement

Reporting is the process of communicating comprehensive information about learner's achievement and learning at a point in time. Notification is the formal way of communicating the results to the learners about their achievements. For external assessment, the notification of the results is the mandate of Ministry of Education as soon as the Kenya National Examinations Council awards and processes the results. For internal assessment, notification should be communicated by the teacher.

Teachers ensure quality formative assessment when they keep detailed learners' records, not for comparing among learners but to provide individualized descriptive feedback to further a

learner's progress and development in the curriculum learning outcomes. Reporting in formative assessment should be frequent and ongoing communication between the teacher and the learner, and with the parents about the progress the learner is making towards meeting the curriculum outcomes. The reporting should focus on a series or cluster of learning.

In Assessment as learning (formative), the responsibility of reporting lies with the learner. The learner must articulate and defend own learning, understanding of the topic, personal strengths and areas they needed to develop further. A learner keeps records of own learning, which could include reflections of what he or she has accomplished, and feedback from the teacher is core to assessment as learning.

The reporting of summative assessment by teachers should be honest, fair and provide sufficient detail and contextual information. You need to keep detailed records of various components of assessment with descriptions of what each component of the assessment measured, accuracy, against the criteria and learning outcomes and supporting evidence.

Report on the learner's achievement

This is a sample rubric marking a written piece of a learner.

Language activities -Grade 1 Writing

Performance	Exceeds Expectations (4)	Meets Expectation (3)	Approaching Expectations (2)	Below expectation (1)
Legibility Daily work is printed legibly.	consistently uses proper letter size & formation	demonstrates knowledge of, and uses, proper letter size & formation	uses proper letter size & formation but not consistently proper letter size & formation	rarely uses proper letter size & formation (e.g. reversals, mixed upper & lower case)
Organization Organizes the layout of written work (e.g. left to right writing, top to bottom, using margins).	consistently & independently uses proper spatial page orientation (how to place material on the page)	consistently use proper spatial page orientation	does not consistently use proper spatial page orientation	seldom uses accepted conventions for left to right, top to bottom orientation

Spelling Correctly (spells grade appropriate words)	consistently spells Gr. 2 words phonics skills evident when spelling unfamiliar words	uses Gr. 2 appropriate words correctly, knowledge of phonics skills is evident when spelling unfamiliar words	uses Gr. 2 appropriate words, but correct spelling is inconsistent some knowledge of phonics skills is evident when spelling unfamiliar words	rarely uses and spells Gr. 2 words correctly minimal use of phonics skills evident when spelling unfamiliar words
Displays knowledge of phonics when spelling unfamiliar words	consistently displays knowledge of phonics when spelling unfamiliar words	displays knowledge of phonics when spelling unfamiliar words	Shows some application of knowledge of phonics when spelling unfamiliar words.	Seldom displays an application of the phonetic rules taught.

Reporting should appreciate learner achievements in terms of their performance that is what they are able to do and establish what they (student, teacher, parents) need to do to be able to perform as per the expected outcome.

Sample Report

Name *Bidii Mpendakazi* Class *PP2* Year *2017* Term *3* Age *5.8 years*

Learning areas	Skills	Performance Indicators
Language	Articulation of sounds	<i>The learner can recognize “/b/” “/c/” and “/g/” Sounds.</i>
	Following simple instructions	<i>Follows simple instructions</i>
	Tracing	<i>Traces patterns</i>
	Colouring	<i>Confuses colour red and green</i>
	Drawing	<i>Draws simple sketches</i>
	Pattern Writing	<i>Writes but does not maintain the line</i>
	Story telling	<i>Tells stories to the peers but cannot tell the whole class</i>
	Making simple words	<i>Combines sound learnt in the class to make words</i>
Mathematics Activities	Counting	<i>Counts 1 to 10 but omits 6</i>
	Number Recognition	<i>Confuses 6 and 9 and L and 7</i>
	Number Writing	<i>Write d instead of 9</i>
	Basic Shape Recognition	<i>Recognizes shapes learnt</i>
	Identifying colours	<i>Confuses green and red</i>
	Grouping by colours	<i>Unable to sort object by colour</i>

Environmental	Naming Self	<i>Names Self</i>
	Feeding self	<i>Unable to scoop food</i>
	Sharing	<i>Does not share items with others</i>
	Relating with others	<i>Cautious when dealing with strangers</i>

Portfolio

A Portfolio is a file or binder which holds samples of individual learner's work.

As learners master specific standards, choose a sample that represents the learner's progress and place it in the portfolio. At different points during the year, this portfolio can be used to discuss with the learner regarding their progress as well as parents, administrators or other staff members providing services for learner.

Profiling

Profiling is a record of each learner using information obtained from a variety of assessment tools

Anecdotal Records: Short reports, photos and drawings describe, in a factual way, the incident, its context, and what was said or done by the participant(s).

Summative Assessment Is a comprehensive process used to summarize and communicate what a learner knows and can do with respect to curriculum learning outcomes and expectations after a defined instructional period time. It summarizes learner achievement. Since summative assessment comes at the end of a Unit, Tier or a Term, the feedback has less impact on learner's learning compared to Formative assessment. The evidence is used to determine level of achievement.

Professional Documents (Contd) - Individualized Education Plan (IEP)

An Individualized Educational Programme (IEP) is a written plan that describes what the teacher and other professionals will do to meet the special needs of the learner. Ideally an IEP should be developed by a multidisciplinary team which may consist of the learner, the regular teacher, a special education teacher, an assessment teacher and other professionals such as psychologists, speech therapists, occupational therapists, physiotherapists, social workers and the parents. An IEP focuses on individual learners needs and allows each learner to acquire knowledge, skills, attitudes and values at his/her own pace

Components of Individualized Education Programme (IEP)

a) The learner's present level of performance.

The current level of performance of the learner is assessed to identify those skills the learner has strengths in and those that he/she has weaknesses or challenges. This can be done through observation, tests and interviews. For learning purposes, assessment should take place during the lesson. Assessment results may then be used in deciding what to teach and how to teach it.

b) Long term and short-term learning outcomes

After collecting information on the learner's strengths and weaknesses, a statement describing what is expected in each area of special learning needs is made. This statement is referred to as a long-term learning outcome. This is the overall aim of the IEP. Long term learning outcomes give direction for an IEP. It states what is expected to be achieved within a specified period for example one month. The long-term outcome is then broken into short term learning outcome. These are competencies that should be developed to achieve the long-term learning outcome.

c) Evaluation procedure and criteria

This step describes how progress will be assessed and specifies how well the student is expected to perform. Evaluation criteria must define the standards that are to be used to assess progress or success. It is always good to evaluate progress after a specific short-term learning outcome.

d) Special educational needs and related services

The IEP must be clear in listing special needs the learner may be experiencing that call for an IEP. The identified challenges may be addressed by a special needs education teacher in the resource room. If the learner requires other related services in addition to the educational intervention, this should be specified as to whom, when and where these may be provided. Related services may include physiotherapy, occupational therapy, speech therapy, guidance and counselling among others.

e) Implementation

The IEP statement must give the date when the programme will start and the length of time it should take. It can be one year, a term or a month, depending on the skill area and the learner's level of ability. The review date should also be stated.

Sample Individualized Education Programme (IEPs) report

IEP

Personal details about the learner

Name _____

Date of birth _____

Parent/guardian Name _____

Occupation _____

Address _____

Telephone/Mobile number _____

Occupation _____

Address _____

Telephone/ Mobile number _____

Date of initiation of IEP _____

Date of termination of IEP _____

Summary of strengths weaknesses and initial recommendations

Learning area/ skill assessed	Present level of performance		
	Strengths	weaknesses	Initial recommendation
Observation	---- can observe the sky ---- can grasp	- -- is not able to draw the sky (sun, moon, clouds and stars).	---should be able to observe and draw sun, moon, clouds and stars.

After establishing the present level of performance of ---- for example, the teacher should develop long term and short-term learning outcomes.

Long term learning outcome

These describe what the learner is expected to achieve and learn by the end of the term. The objectives written for each area the learner is experiencing difficulties, should be in line with the learner's present level of performance/functioning.

Short term learning outcome

These describe what the learner is expected to achieve/learn by the end of the lesson.

Long term and short learning outcome

Learning area	Learning outcomes
---------------	-------------------

	Long term	Short term	Evaluation							
Observing the Sky	By the end of the three lessons, ---should be able to: <ul style="list-style-type: none"> ● Observe ● Name parts of the sky ● Draw ● Colour 	By the end of lesson one , - - should be able to observe the sky (sun, moon, clouds and stars) By the end of lesson two , - -- should be able to draw sun, moon, clouds and stars By the end of lesson three , -- should be able to colour the sun, moon, clouds and stars	Drawing and naming parts of a flower.							
<p>This process of breaking long-term learning outcome goes on up to lesson three and the teacher to evaluate after every lesson.</p> <p>Progress record</p> <table border="1"> <thead> <tr> <th>Date evaluated</th> <th>Skills area</th> <th>comment</th> </tr> </thead> <tbody> <tr> <td>xx/xx/xx</td> <td>Observing the sky</td> <td>John could observe and identify parts of the sky</td> </tr> </tbody> </table> <p>The record shows the learner’s progress as is made after every two weeks</p> <p>Conclusion and final recommendation</p> <p>This comes at the end of three lessons which marks the end of implementation of the program for ---</p>					Date evaluated	Skills area	comment	xx/xx/xx	Observing the sky	John could observe and identify parts of the sky
Date evaluated	Skills area	comment								
xx/xx/xx	Observing the sky	John could observe and identify parts of the sky								

SESSION 5: ICT Integration in CBC Implementation (1 ½ hour)

Session Outcomes

By the end of the session, the participant should be able to:

- Appreciate ICT as an enjoyable tool for teaching and learning for EYE

- b) Integrate ICT in the lesson plan for implementing the competency based curriculum.
- c) Convert an ICT integrated lesson plan into a power point presentation

Key Issues to be covered

- Integrating ICT into lesson plans
- Components of Digital literacy Programme
- Preparing power point presentations

Suggested Learning Experiences

- Participants in groups identify the various technologies that are used in teaching and learning and how they can be used in a lesson and what one should consider before using them.
- Observe the ICT Integrated lesson plan from the strand Care for the environment presented earlier and identify where ICT has been integrated.
- Participants are guided in converting an ICT integrated lesson plan into a power point presentation

Facilitators Notes

Meaning of ICT Integration

ICT integration can be referred as “the seamless infusion of information communication technologies to support and enhance the attainment of curriculum objectives, to enhance the appropriate competencies including skills knowledge attitudes and values”. (Basic Education Act, Kenya, 2013).

Technologies used in teaching and learning

The following are various technologies used for learning:

- Phone
- Camera
- Computer
- Projector
- Power cables, data cables
- DVDs/CDs
- Flash discs
- Memory cards
- External hard discs
- Radio

- Television

The following digital resources accessible from KICD can be used for ICT integration in teaching and learning:

- **Radio** - includes audio programmes disseminated through radio or other electronic devices.
- **E-learning** - electronic learning materials disseminated through computer technologies. Interactive digital content is available on the Digital Literacy Programme (DLP) devices.
- **Television** – audio-visual content that is mainly film and/or video based and disseminated through television and other electronic devices. Radio and TV programmes can be accessed from the teacher’s laptops under the DLP or installed from external storage devices.
- **Kenya Education Cloud (www.kec.ac.ke)** – Content on the Cloud includes Course materials, Supplementary materials and open educational resources in form of interactive digital content, radio and TV programmes, e-books, Apps and Platforms. This content is quality assured and can be accessed anywhere, anytime through any device as long as there is internet connection.

Factors to consider when selecting the ICT resources

Learning outcomes of the lesson will determine what resource to use, when to use them, and how to use them. Therefore, there are a number of factors to consider when selecting relevant digital resources for teaching and learning. The following are the factors to consider when using ICT resources:

- Ease of use
- Does it fit within your curriculum designs?
- Is it relevant to the strand, learning outcomes and learning activities?
- Entry behaviour of the learners
- Is it appropriate for the learners’ age?
- Does it cater for different learning styles, different abilities?
- Does it cater for learner diversity in gender, values and culture?

- Is the language level suitable for the learners?
- Is it in a culturally and socially appropriate context for learners?
- What adaptations would need to be made to the resources to make them suitable for learners with special needs?
- Does it promote learner-centred education?
- Does it encourage problem-solving skills and/or cooperative learning?
- Is the resource easily available and accessible?
- Are there requirements for ICT equipment, other resources, space, that might limit how and where the lesson is taught?

Converting an ICT Integrated lesson plan into a power point presentation

Step 1: develop a lesson plan in a learning area of their choice

Step 2: indicate where ICT can be used within the lesson so as to enhance understanding of concepts

Step 3: converting the lesson plan to include and show how to use of multimedia elements such as videos, photos, illustrations, animations and audio as per the lesson plan and where they shall be plugged in.

Step 5: develop ICT of multimedia elements to be integrated in the lesson plan

Note

Teachers should look at the videos in advance of the lesson to ensure they are the correct ones and are loading.

Sample lesson plan with ICT integration

The following lesson plan was presented earlier in the session on professional documents. The one below shows how to integrate ICT.

SCHOOL	CLASS	DATE	TIME	ROLL
Bidii Primary School	Grade 1	11 th /9/2017	8.10-8.40 am	30

Strand: Care for the Environment

Sub-strand: Caring for plants-watering flower beds

Specific Learning Outcomes

By the end of the sub-strand, the learner should be able to:

- a) Identify when a flower bed should be watered to conserve water
- b) Water flower beds appropriately within the school compound.
- c) Demonstrate willingness to water flower beds appropriately at school

Learning Resources

- Watering can
- Sprinkler
- Hose pipe
- Improvised watering can
- Bucket
- Video clips on watering the flower bed
- Video clips on "the Garden song"

Core competences: Collaboration, communication, imagination and creativity, problem solving and digital literacy

Values: Unity, responsibility and respect for one another

PCIs:

Organization of learning

Introduction

Learners are guided to watch a video clip on watering flowers to develop interest and curiosity in watering flowerbeds.

Lesson development

Step 1: Learners to suggest reasons for watering flowerbeds

Step 2: Using the key inquiry questions, summarizes learners responses on when and how to water flowers

Step 3: Teacher to demonstrate watering flowerbeds

Step 4: Learners practice watering flowerbeds at school.

Conclusion

Keenly observe and guide learners on the procedure of watering flowerbeds

Learners carry out related activities in the workbook

The teacher guides the learners to sing along ‘‘the Garden song’’ which is in form of a video clip.

Summary statement

Some of the plants in our surroundings are flowers. Flowers need water to grow. We can take care of plants by watering the flowerbeds.

Note

Infusing Competency Based Aspects in Teaching of English and Kiswahili Language
(1 hour 30 minutes 9.30 am-11.00 am)

Learning Outcomes

1. To infuse Competency Based Curriculum Aspects in teaching of English and Kiswahili.

Task 1 I do: Identifying and infusing Competency Based Curriculum in Tusome (75 minutes)

Draw the following on the board.

Curriculum Area	Suggested Core Competencies	Suggested PCIs	Suggested Values	Suggested Non-Formal Activities	Suggested Assessments	Suggested Community Service Learning activities	Other Activity Areas
Key Area							
Guide to the teacher							

Ask participants to open their handbook to English class 1 Week 1 Day 1. Tell them to open their class 1 English Teacher's Guides to the same lesson. Give participants 10 minutes to read through the whole lesson in the Teacher's Guide including the story in the embedded Pupil's Book.

Now, ask them to look at the Teacher's handbook for English class 2 Week 4 Day 1.

Ask the following question to the participants:

What are the core competencies captured under this lesson? Communication and collaboration, learning to learn and imagination and creativity.

Write the competencies under the 'core competency' column. Guide the participants to look at the row below the core competencies. This row has the title "*Guide to the teacher*". Inform them that this row guides the teacher on how to bring out the core competencies as they teach the lesson. Ask one participant to read the first point of the "Guide to the Teacher". *At "You do" during "Pupil Story" reading, ensure learners take turns to read in pairs.*

Tell participants that during reading, the teacher needs to ensure that pupils read to their partners during "You do". This will ensure that we achieve the core competency of communication and collaboration. When they read to each other aloud, they learn how to communicate effectively through reading. Teamwork is seen when they take turns to read for each other and correct each other as they read. Ask a participant to read the second point of the 'Guide to the teacher'. *When blending words, strive to say the sounds correctly to help learners to read the words correctly.* Let the participants know that the core competency achieved when blending is 'Learning to learn'. Emphasize that during blending, learners learn how to sound out and read words. They will again encounter the same words they blended when reading a story. The fact that they were taught how to read the words prior to reading the story helps them to read the story fluently. Ask participants to look at the blending section of Class 2 English Teacher's Guide Week 22 Day 1. Ask the following question:

What words are taught during blending? *ship, boy, toy, swim*
Which of these words taught during blending can you identify in the passage below? *ship, boy, swim*

Emphasize that learning to learn involves applying what you have learned earlier, to help you learn something new.

Ask a participant to read the second point of the “Guide to the teacher”. *During predictions, ensure all learners participate by asking them to predict to partners.* Ask the following question to the participants:

What core competency do you think is achieved here? *Imagination and creativity.*

Emphasize that when learners predict, it helps them to imagine what they think might happen in the story. This is a very important skill.

Fill in the table above. Now ask participants to look at the next column. This column shows the PCIs that should be captured within this lesson. These are safety, life skills (effective communication) and critical thinking. Now ask the participants to look at the row below the PCIs. The title of this row is “*Guide to the Teacher*”. Emphasize that this row helps the teachers to know how the PCIs will be brought out as they teach the lesson.

Ask a participant to read the first point on the ‘Guide to the teacher’. *When discussing the story title and pictures during "Get Ready to Read," emphasize that children should not play on the road.* Ask the following question to the participants:

What PCI is captured by this statement? *Health and Hygiene*

Ask participants to read the title of the story in the snippet pupil page within the teacher’s guide. *Bad smell at the lake.* Now ask them to read the “*Get ready to Read*” section.

Emphasize that before the teacher asks learners to predict as they discuss the title and the pictures, teachers need to ensure that they talk about safety by emphasizing the risks involved when children play on the road.

Ask a participant to read the next guide. *During prediction, ensure each child strives to communicate in full sentences.* Emphasize that helping learners to communicate in full sentences helps them to become effective communicators. The PCI on ‘Effective communication’ is brought out here.

Ask a participant to read the next guide. *When asking inferential questions at the "You do," encourage learners to think beyond the story to get the answers.* Ask the following question to the participants:

What are inferential questions?

Tell participants that these are questions whose answers are not found within the story. To answer such questions, the learner must think beyond the information given in the story. They

must relate their own experiences to the story to derive the answers the questions. Ask the following question to the participants:

What Core Competency do you think is brought out when we ask inferential questions? *Critical thinking.*

Fill in the table above with all the PCIs and the activities.

Now ask participants to look at ‘values’ column. Ask the following question to the participants:

What values are brought out in this lesson? *Responsibility*

Ask the participants to look at the “Guide to the teacher”. Ask one participant to read it. *During the lesson, encourage learners to be working together and be ready to assist each other i.e. with an extra pencil or share desk space.* Ask participants to identify other ‘values’ that need to be imparted in learners. Inform them that these values are captured mostly in the stories in the Tusome materials. Teachers therefore need to always be keen to identify the values from each of the stories they read and impart them in learners.

Ask participants to look at the column of ‘Suggested non-formal Activities’. Within this lesson of Week 22 Day 1, Teacher must ask learners to retell other relevant stories to their friends. Ask a participant to read the ‘guide to the teacher’. *Before giving learners classwork, ask them to tell their friends any story about any toy during break time, lunch time or while at home.* Tell participants that this activity is given to learners after reading the story and answering comprehension questions.

Within the Tusome lessons, this activity is not explicitly stated in the teacher’s guides.

However, teachers need to refer to the handbook to identify activity recommended and the time of the lesson when it is to be passed to learners. Teacher ought to be careful since the activities and when to ask learners to perform them vary from lesson to lesson. They should never be uniformly applying the same strategy.

Fill in the table above under the non-formal activities column.

Take participants through all the remaining columns in the hand book; Link to Other Activity Areas, Suggested Assessment and Suggested Community Service Learning Activities; and ensure you fill the table above.

Now ask participants to look at the class 2 Week 22 Day 1 Kiswahili Teacher handbook. Ask them the following question:

What core competencies are taught in this lesson? Communication and collaboration, imagination and creativity

Now ask them to open the Teacher's Guide to Week 22 Day 1. Briefly discuss how the core competencies are achieved in the lesson.

Now ask them to look at the PCIs. Ask the following question to the participants:

What PCIs are brought out in this lesson?

Ask participants to look at the handbook, then the lesson and discuss how they should ensure the PCIs should come out within the lesson.

Part 2: We do: Infusing Competency Based Aspects in Teaching of English and Kiswahili Language (60 minutes 11.30 am-12.30 pm)

Refer participants to their Teacher Handbook. Ask them to select a partner. One person in the pair will work on Kiswahili class 1 or 2, while the other person will work on English class 1 or 2. Ask participants to identify the 7 concept areas of the new curriculum from the handbook and then tell how these areas are brought out in a Tusome lesson from any week starting from week 1 to 10. Stop the activity after 30 minutes and ask the partners to present their findings to partners.

Reflection Changing Role

 Ask the following question to the participants:

How will your role change as you infuse the concepts of Competence Based Curriculum?

Day 3

Welcome and Announcements

(15 minutes 8:30 am-8:45 am)

Welcome participants to day 4 of training. Post and review the agenda. Make any announcements. Remind the participants to sign the participants list in the morning and afternoon.

Day 3

Welcome and Announcements**(15 minutes 8:30 am-8:45 am)**

Welcome participants to day 4 of training. Post and review the agenda. Make any announcements. Remind the participants to sign the participants list in the morning and afternoon.

SESSION 8: Infusing Competence Aspects in Early Grade Mathematics

Learning Outcomes

1. Teach Early Grade Mathematics using various strategies.
 2. Infuse Competency Based Curriculum Aspects in teaching of Early Grade Mathematics.
-

INTRODUCTION OF THE TOOLS**(30 Minutes 8.45 am-9.15 am)****Introduction (20 Minutes: 8:45-9:05am)**

A teacher will be required to prepare adequately before delivering an EGM lesson. Documents a teacher will require in the preparation are: EGM books, Competence Based Curriculum Mathematics design and Handbooks.

Handbooks are documents that have been developed to guide teachers on how to align the existing EGM books to the Competence Based Curriculum.

HOW TO USE THE HANDBOOK

The handbooks contains: -

- Strands,
- Sub strands,
- Specific learning outcomes,
- Suggested learning experiences,
- Issues in the reformed curriculum and
- Assessment

Participants Activity (20 Minutes: 9:05-9:25am)

Refer the participants to the Curriculum designs, EGM books and the Handbooks. Ask them to flag out the differences in content in the three documents and let them give feedback

Some of the issues that have been identified are:

For grade 1:

- (i) under the reformed curriculum learners are required to read numbers 1-50 in symbols but in the EGM books learners are required to read numbers 1-100 in symbols
- (ii) under the CBC learners are to read and write numbers 1-20 in words while under the EGM books learners are to read and write numbers 1-9 in words

For grade 2:

- (i) Learners are to Read numbers 1-100 in symbols under CBC while the EGM books learners are to read numbers up to 1000 in symbols
- (ii) Under CBC learners are to read and write numbers 1-20 in words while learners are to Read and write numbers 1-99 in words under the EGM books
- (iii) Learners are to add a 2 digit number to up to a 2 digit number with and without regrouping while under the EGM books learners are required to add up to sums not exceeding 999
- (iv) In subtraction learners are to subtract up to 2- digit numbers without regrouping under the CBC while they are to subtract up to 3- digit numbers from up to 3 digit without borrowing
- (v) Learners are to learn the skill of $\frac{1}{2}$ and $\frac{1}{4}$ as part of a whole on fractions under CBC but there are no fractions in EGM books.
- (vi) Under the CBC learners are to identify Kenyan currency coins and notes up to 100 but under the EGM books they are to identify Kenyan currency coins and notes up to 500

The trainers to advise teachers to tone down where the skill under CBC is of lower order than what is contained in the E

GM books. On the same breath the teachers are to teach the skills in the CBC that are not contained in the EGM books.

Checklist (10 min: 9.25-9.35)

In delivery of a lesson the teacher is required to bring out aspects of the new curriculum in his/her teaching.

During the training; as participants' model activities, they should use the checklist below to give feedback on how well infusion of new curriculum aspects was done;

Incorporation of:

- Core competencies
- Pertinent and contemporary issues
- Values
- Links to other subjects

- Suggested non-formal activities to support learning
- Suggested community service learning
- Suggested assessment

Whole number: Rote Counting and Counting on**(60 Minutes 9.35 am-10.35 am)****Introduction (10 Minutes:9.35-9.45am)**

Ask the following question to the participants?

- What is rote counting?
- Why is rote counting important?
- What is counting on?
- Why do we teach counting on?

Rote counting is the simplest number concept that children develop, and it merely consists of counting numbers sequentially. Counting by rote is a skill that come quite naturally to most children, as it doesn't require direct instruction to learn the skills needed to rote counting is counting numbers from one onwards from memory, while counting on involves counting forward starting from any number.

Task 1 Model/ I do: Whole numbers: Rote Counting (10 Minutes: 9.45-9.55am)

Trainer's Activity Book 1 Teacher's Guide, Page 1 Week 1 Day 1 Activity 2(Demonstrate and guide), *Rote Counting*
During the lesson, infuse a few key concepts from the CBC. Ask participants to give feedback using the checklist.

Task 2 Practice/ We do: Counting on (20 minutes:9.55-10.15am)

Ask participants to model the following activity to their partner.

Participant's Activity
Book 2 Teacher's Guide, Page 1 Week 1 Day 1 Activity 1, *Counting on*
Book 2 Teacher's Guide, Page 1 Week 1 Day 1 Activity 3, *Counting using tens frame*
Ask participants to infuse a few key concepts from CBC into the activity.

Task 3 Presentation/You do: Counting (20 Minutes:10.15-10.35am)

Ask two participants to model the counting on while the rest give feedback referring to the checklist. Ensure that when giving feedback, participants start with what went on well in the presentation before they discuss areas of improvement.

Break (30 Minutes 10.35am-11.05 am)

Operations: Addition by Breaking apart (60 Minutes 11.05 am-12.05 pm)

Introduction 10 minutes:11.05-11.15am

Learning outcome

By the end of the session the participant should be able to

- Teach addition by breaking apart
- Incorporate Competencies, PCI and Values

Key Inquiry Question How do you teach addition by breaking to class 2 learners?

Ask the following questions to the participants:

What is addition by breaking apart? What is the importance of teaching this strategy?
--

Addition by breaking apart involves breaking one of the numbers to make the other a ten. It involves making the first number a ten by breaking the second number. Working with a ten is much easier than working with other numbers.

TASK 2 Model/ I do: Addition by breaking apart 10 minutes:11.15-11.25am

Trainer's Activity Book 2 Teacher's Guide, Page 50 Week 7 Day 3 Activity 1, Operations: <i>Addition</i> <i>During the lesson, infuse a few key concepts from the CBC.</i>

TASK 3 Practice/ We do: Addition by breaking apart 20 minutes:11.25-11.45am

Ask participants to model the following activity to their partner.

Participant's Activity Book 2 Teacher's Guide, Page 23 Week 3 Day 2 Activity 2, Operations: <i>Addition</i> Book 2 Teacher's Guide, Page 49 Week 7 Day 2 Activity 1, Operations: <i>Addition</i> <i>Ask participants to infuse a few concepts from the CBC into the activity.</i>
--

TASK 4 Presentation/You do: Breaking apart strategy 20 minutes:11.45-12.05pm

Ask two participants to model the breaking apart strategy in addition while the rest give feedback. Ensure that when giving feedback, participants start with what went well in the presentation before the discuss areas of improvement.

When they are presenting it an opportunity to enhance their self-efficacy and communication skills

Subtraction by breaking apart strategy

(60 Minutes 12.05 am-1.05 pm)

Introduction 10 minutes :12.05-12-15pm

Ask the following question to the participants:

How did you learn to subtract numbers with regrouping?

What is subtraction by breaking apart?

How does this strategy help learners to subtract?

Tell participants that this strategy ensures that the second number is broken down to create a tens in the first number. We break the second number to create two numbers. One number is added to the ones in the first number to create a tens. The remaining number is subtracted from the tens that has been created. Working with tens is much easier for learners.. *Breaking apart in this strategy helps to avoid “borrowing” which confuses learners.*

Emphasize that it is always very easy to work with a ten when we subtract.

TASK 1 Model/I do: Subtraction by breaking apart 10 minutes:12.15-12.25pm

Trainer’s Activity

Book 2 Teacher’s Guide, Page 13 Week 2 Day 2 Activity 2, Operations: *Subtraction*

During the lesson, infuse a few key concepts from the CBC

TASK 2 Practice/We do: Breaking apart strategy 20 minutes:12.25-12.45pm

Ask participants to practice breaking apart strategy with their partner.

Participant’s Activity

Book 2 Teacher’s Guide, Page 13 Week 2 Day 1 Activity 2, Operations: *Subtraction*

Book 2 Teacher’s Guide, Page 61 Week 9 Day 3 Activity 1, Operations: *Subtraction*

Ask participants to infuse a few key concepts from the CBC during the activity.

TASK 3 Presentation/You do: Breaking apart strategy (20 minutes: 12.45-1.05pm)

Ask two participants to model the breaking apart strategy in subtraction while the rest give feedback using the checklist. Ensure that when giving feedback, participants start with what went well in the presentation before the discuss areas of improvement.



LUNCH BREAK 55 Min: 1.05-2.00pm

Number Patterns

(50 Minutes 2.00pm-2.50 pm)

Introduction (10 minutes:2.00-2.10pm)

Tell participants that the next concept they are going to learn is the concept of number patterns. A number pattern is a list of numbers that follows a certain rule.

Ask the following question:

- *Why is learning number patterns important?* (It helps pupils to learn how to predict and solve a task).
- *What strategies can we use to teach number patterns?*

Emphasize that number patterns help us to count a sequence of numbers. It involves predicting the missing numbers in a sequence based on certain rules. The learners are expected to look at the numbers and come up with rules that will help them know the missing numbers in a pattern. There are various strategies we can use to learn the concept of number patterns. These include counting forward and counting backwards and using the number line.

TASK 1 Model/ I do: Counting Backwards (10 minutes:2.10-2.20pm)

Briefly model teaching the concept of the number patterns using the “counting forward strategy.

Trainer’s Activity

Book 2 Teacher’s Guide Page 39 Week 5 Day 2 Activity 1 Operations; *Number patterns*

During the lesson, infuse a few key concepts from the CBC

Ask participants to give you feedback after the lesson.

TASK 2 Practice/We do: Counting Backwards 15 minutes:2.20-2.35pm

Ask participants to practice teaching the following lesson activities to their partner.

Participant's Activity

Book 1 Teacher's Guide Page 55 Week 8 Day 4 Activity 3, Whole Numbers: *Number patterns*

Book 2 Teacher's Guide Page 34, Week 4 Day 3 Activity 1, Operations: *Number patterns*
Ask participants to infuse a few key concepts of the CBC in the activity.

Each person should have a turn being the teacher while the other is the learner.

Ask learners to make errors so the teacher can practice giving formative feedback.

Task 3: You do (15 Min:2.35-2.50pm)

Ask two volunteers to model counting backwards as they get feedback from the other participants.

Whole number: Place Value

(60 Minutes 2.50 pm-3.50 pm)

Introduction 10 minutes:2.50-3.00pm

Learning Outcomes

By the end of the session the trainer should be able to

- a) Teach Place value
- b) Integrate concepts of Competence Based Curriculum

Key Inquiry question

How do I teach whole numbers to class two learners and concepts of Competence Based Curriculum?

Introduction

Place value is the value of the position of a digit in a number. When teaching the concept of place value, you could integrate the core competence of communication and collaboration as you put participants to work in groups. The competence of self-efficacy could also be brought out as participant is called upon to fill in the place value chart. Imagination and creativity is developed as they identify place value of various digits. When learning place value learners may collect concrete objects count and group in tens. The teacher should guide on the safety of the

materials. As learners work in groups it is expected that they will be responsible and respect each other in order to achieve their goal.

TASK 1 Model/ I do: Whole number: place value (10 minutes:3.00-3.10pm)

The facilitator to fill in the missing numbers in the addition statements on page 7 of the teacher's guide.

Trainer's Activity

Book 2 Teacher's Guide, Page 7 Week 1 Day 4 Activity 1, Whole number: Place value

During the lesson, infuse a few key concepts from the CBC

TASK 2 Practice/ We do: Whole number: Place Value 20 minutes:3.10-3.30pm

Ask participants to model the following activity to their partner. This will encourage communication and collaboration as a competence.

Participant's Activity

Book 1 Teacher's Guide, Page 65 Week 10 Day 3 Activity 1, Whole number: Place value

Book 2 Teacher's Guide, Page 49 Week 7 Day 2 Activity 3, Whole number: Place value

Ask participants to infuse a few key concepts of the CBC in the activity.

TASK 3 Presentations/You Do (20 Minutes:3.30-3.50pm)

Ask participants to model the activity in small groups or at plenary.

Operations: Addition by Regrouping

(60 Minutes 3.50 pm-4.50 pm)

Session's learning outcomes

By the end of the session, participants should be able to:

- a. Teach addition by regrouping.
- b. Infuse concepts of competency based curriculum

Key Inquiry Questions

Ask the following questions to the participants:

- a. How do you teach addition by regrouping?
- b. How would you infuse concepts of competency based curriculum while teaching addition by regrouping?

Introduction (10 Minutes:3.50-4.00pm)

Addition by regrouping involves aligning the digits in numbers correctly according to their place values to make addition tasks easier. During addition of numbers, digits in a certain place value are added and the sums obtained are regrouped by placing them in their correct places according to place value.

While teaching addition by regrouping, a teacher could ask the learners to carry out simple additions. This helps to develop the competency of critical thinking and problem solving.

TASK 1 Model/ I do: Operations: Addition by Regrouping (10 Minutes:4.00-4.10pm)

Trainer's Activity

Book 2 Teacher's Guide, Page 55 Week 8 Day 3 Activity 1, Addition by Regrouping

During the lesson, infuse a few key concepts from the CBC

TASK 2 Practice/ We do: Addition by Regrouping (20 minutes:4.10-4.30pm)

Ask participants to model the following activity to their partner.

This regrouping encourages critical thinking and problem solving as well as learning to learn among the learners.

Participant's Activity

Book 2 Teacher's Guide, Page 43 Week 6 Day 1 Activity 1, Addition by Regrouping

Book 2 Teacher's Guide, Page 42 Week 5 Day 5 Activity 3, Addition by Regrouping

Ask participants to infuse a few concepts of the CBC in the activity.

TASK 3 Presentation/You Do (20 Minutes:4.30-4.50pm)

Ask participants to model the activity they just practice in small groups or at plenary.

This activity is likely to promote self-efficacy.

Homework: 10min:4.50-5.00pm

Ask participants to prepare a full lesson using the following activities:

Book 1 – Week 10 Day 3, Page 65

Book 2 – Week 2 Day 2, Page 13

The lesson to be taught during the putting it together session

Day 4

Welcome and Announcements

(15 minutes 8:30 am-8:45 am)

Welcome participants to day 5 of training. Post and review the agenda. Make any announcements. Remind the participants to sign the participants list in the morning and afternoon.

Equivalence

(60 Min:8.45-9.45am)

Introduction 10 (Minutes:8.45-8.55am)



This concept helps us to determine which quantities have the same value even when they look different. It helps learners to build mental computation to balance both sides of the equation.

A strategy that is used in EGM to teach this concept is known as ‘balancing equations’.

It is important for the learners to know how to use an equal sign. Teachers need to explain to the learners that both sides of the equal sign need to be balanced.

Tell participants that the tips below will help them to teach balancing of equations:

- Work out the side with the complete statement first.
- Ask the learners how many more you need to add to or subtract from the side that has the incomplete statement to make both sides of the statement balance. You can do this by counting on or counting backwards or using the number family strategy.

TASK 1 | Do/model: EQUIVALENCE (10 Minutes:9.05-9.05am)

Model an activity on balancing equations to the participants.

Trainers Activity: Book 2 Teacher’s Guide, Page 23 Week 132 Day 1, Activity 3,
Operations: *Equivalence*
During the lesson, infuse a few key concepts from the CBC

TASK 2 Practice/ we do: Equivalence (20 minutes:9.05-9.25am)

 Ask the participants to practice in pairs the balancing equations strategy.

Participant’s Activity
Book 1 – Week 11 Day 4, Page 71 Activity 2, Whole Numbers: *Equivalence*
Book 2 – Week 9 Day 2, Page 60 Activity 3, Operations: *Equivalence*
Ask participants to infuse a few concepts of the CBC in the activity.

TASK 3 YOU DO (15 Minutes:9.25-9.40pm)

Ask participants to model in small groups or at plenary the activity they just practiced as they get feedback from the rest of the group.

Fractions: Part of a whole and Part of a group

(60 minutes 9.45 am-10.40am)

Introduction (10 Minutes:9.40-9.50am)

A fraction is either a part of a whole object or part of a group of objects.

Activity

Ask participants to make a circular cut out. Let them fold it into two and shade one part.

It is important for the trainer to show participants how fractions are written in symbols and words.

TASK 1 Model/ I do: Part of a whole (10 Minutes:9.50-10.00am)

Trainer's Activity

Demonstrate to participants $\frac{1}{2}$ and $\frac{1}{4}$ as part of a whole using a circular and rectangular paper cut outs. Show them how fractions are written in symbols and words. Clearly identify the numerator and the denominator.

During the lesson, infuse a few key concepts from the CBC

TASK 2 Practice/ We do: Part of a whole and Part of a group (20 Minutes:10.00-10.20am)

Ask participants to model the following activity to their partner.

Participants' Activity

Demonstrate $\frac{1}{2}$ and $\frac{1}{4}$ as part of a group using 8 objects. Show how fractions are written in symbols and words. Clearly identify the numerator and the denominator.

During the lesson, infuse a few key concepts from the CBC

Task 3 You do: Fraction: Part of a whole and Part of a group (20 Minutes:10.20-10.40am)

Ask 2 participants to model the activity on fraction above. Allow feedback from the plenary using the checklist. When giving feedback, ensure that participants start with what went well in the presentations before they can talk about areas of improvement.

Break

(30 Minutes 10.40am-11.10 am)

Geometry

(60 Minutes 11.10 am-12.10 pm)

Session's Learning outcomes

By the end of the session, participants should be able to:

- a. Teach Geometry.
- b. Infuse concepts of competency based curriculum in teaching Geometry.

Key Inquiry Questions

Ask the following questions to the participants:

- a. How do you teach Geometry?
- b. How would you infuse concepts of competency based curriculum while teaching Geometry?

Introduction (10 Minutes:11.10-11.20am)

Ask participants the following question:

- Which strategies can we use to teach geometry?
- What geometry activities are taught to class 1 and 2 learners?
- Which CBC concepts can we infuse while teaching Geometry?

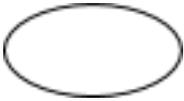
Tell participants that many strategies can be used in teaching time. Observation and matching, sorting, drawing and tracing can effectively be used enhance the understanding of the concept of geometry.

TASK 1 Model/ I Do: Matching on a worksheet and making patterns (10 Minutes:11.20-11.30am)

Activity 1 Model the following activity: The trainer should infuse aspects of the CBC while modelling the activity.

Complete the table

DRAWING OF A SHAPE	NAME OF THE SHAPE	EXAMPLES FROM THE ENVIRONMENT WITH SIMILAR SHAPES
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	Rectangle	Chalkboard, table top, Door
	Circle	
		
	Triangle	

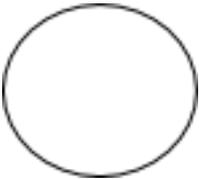
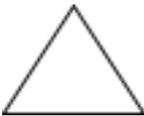
Activity 2: Making patterns using the shapes above

Model the making of patterns using squares, rectangles, circles, ovals and triangles as you infuse a few concepts from the CBC.

TASK 2 Participant's activity (20 Minutes:11.30-11.50am)

Ask the participants in groups to model how to teach matching using the word card below and making patterns using combinations of the shapes with their learners. Ask them to infuse concepts from the CBC as they use the direct instruction model.

Shape		Name
		Rectangle
		Circle

		Oval
		Square
		Triangle

TASK 3 You do: Geometry (20 Minutes:11.50-12.10pm)

Ask 2 participants to model the activity on geometry above. Allow feedback from the plenary on how well the participants infused aspects of the Competency Based Curriculum and used the Direct Instruction approach to help learners understand geometry.

Measurement: Length

(50 Minutes 12.10 pm-1.00 pm)

Introduction (10 Minutes:12.10-12.20pm)

By the end of the session the participant should be able

- to teach length

-Incorporate PDC, Values and Competencies in teaching length.

Key inquiry Question -How can I teach length to class 2 pupils while incorporating PCI, Values and competencies.

Ask participants the following question:

- Which strategies can we use to teach length?

Tell participants that it is important to develop the skills of estimation, measuring and recording length in pupils. Estimation, observation, measuring and recording can effectively be

used to enhance the understanding of the concept of length. This an opportunity for critical thinking and problem solving as the learning

Task 1 Model/ I Do: Estimating and measuring length (10 Minutes:12.20-12.30pm)

The facilitators estimate the height of the door and ask the participant to estimate the following measurements and record in the table.

Draw

OBJECT	Estimate in meters	Actual measurement in meters
Length of classroom		
Width of classroom		
Length of teacher’s table		
Length of the mathematics textbook		
Length of chalkboard		

Guide: Fill the table by estimating and measuring with the pupils.

Estimation and measurement is an opportunity to enhance critical thinking and problem solving when coming up with the estimate and collaboration and communication when measuring and recording.

Task 2: We Do: Estimating and measuring length (15Minutes:12.30-12.45pm)

Participants practice teaching estimation of length to their partners.

Task 3: You do: Estimating and measuring length (15 Minutes:12.45-1.00pm)

Ask 2 to 3 participants to model the activity as they get feedback from the rest of the group.

Lunch **(60 minutes 1.00 pm-2.00 pm)**

Addition and subtraction of length involving meters (50 Minutes 2.00 pm-2.50 pm)

Model/I do Addition and subtraction involving meters (15 Minutes:2.00-2.15pm)

- Draw: Write the following on the board. 1. Tom had 576 metres of wire. He bought 49 metres more. How many metres does he have altogether?

$$576m+49 m=.....m$$

2. Jane school is 465 m from her home. One day as she was walking to school she took a rest after walking for 237 m. How far was she from school?

$$\begin{array}{r} 465 \text{ m} \\ - 237 \text{ m} \\ \hline \end{array}$$

• Guide: Work out the addition questions involving metres with the participants.

Addition and subtraction require critical thinking and problem solving and same cases collaboration and communication. You can explore of different addition and subtraction activities and their consequences such as surveying a farm, cutting of piece of cloth or grooming or sculpting. This can bring aspects of values such as honesty, responsibility and competency of citizenship and PCI such as people fighting over issue in safety and security

Task 2 Practice/ We do (20 Minutes:2.15-2.35pm)

Participant's activity

Ask the participants to practice activity 1 (estimating and measuring length) above with their partners

Allow the participants to discuss:

1. The aspects of competence based curriculum that can be infused in the activity.
2. What strategies can be used in teaching the activity to allow realisation of the aspects of new curriculum.

Task 3: You do/Presentations (15 Minutes:2.35-2.50pm)

Ask a volunteer to model what they presented as they get feedback from plenary.

Putting it all together

(20 minutes 2.50 pm-4.00 pm)

Ask to participants full to teach full lesson using the following activities:

Book 1 – Week 10 Day 3, Page 65

Book 2 – Week 2 Day 2, Page 13

Plenary Session 60min: 4:00-5.00pm

SESSION 9 Role of Key stakeholders in Implementation of CBC (30 Minutes 5.00 pm-5.30 pm)

Session's Learning Outcomes

By the end of the session, participants should be able to:

- Identify the stakeholders in the implementation of CBC.
- Describe the role of key stakeholders in the implementation of CBC.
- Appreciate the role of key stakeholders in the implementation of CBC.

Key Inquiry Questions

 Ask the following questions to the participants and let them respond by way of question and answer.

- Who are the stakeholders in the implementation of CBC?
- What is your role as a key stakeholder in the implementation of the CBC?

Introduction (5 Minutes)

List the key stakeholder on a flip chart as shown below.

Head teacher
Teacher
Learners
Parents
Board of Management
School community

Exploring the stakeholder's role (15 Minutes)

Assign each stakeholder to a group of participants and ask them to write down their role in the implementation of CBC. Stop the discussion after about 10 minutes and ask each group to post what they wrote on the wall.

Ask all participants to walk round and identify the role of different stakeholders as written on the wall.

Plenary

 Ask participants to mention any additional role that was not mentioned during the group discussions as written on the flipcharts.

ROLES OF STAKEHOLDERS



a) Head Teachers

Head teachers are charged with the responsibility of:

- Creating a positive climate within the school setup,
- Providing supervision especially in the areas of classroom teaching
- Coordinating curriculum change in the school.
- Planning and organization of financial support as well human support towards effective implementation of CBC.

b) Teachers

One of the most important person in the curriculum implementation process is the teacher. With their knowledge, experience and competencies, teachers are central to any curriculum improvement effort. They are responsible for introducing the curriculum in the classroom. Since implementation of CBC will take place through the interaction of the learner and the planned learning opportunities, the role and influence of the teacher in the process is indisputable. The roles of the teacher include:

- Implementing CBC in the Classroom.
- Ensuring Lists of core textbooks for each part of the CBC and other resources including reference texts are identified by teachers and purchased for use by learners.
- Ensuring Provision of Instructional facilities e.g. teaching rooms
- Ensuring access of all available textbooks to students, maintain and update related records and timely retrieval.
- Preparation and efficient utilization of schemes of work, records of work, and Learners records.

- follow-up of the learner's class works and performance progress
- Stimulate interest, work morale and enthusiasm of learners in the learning process.
- Provide opportunities for learners to make connections between what they know and newly acquired knowledge and skills to real or simulated situations
- empower parents to contribute to the learning outcomes for their children and to be engaged at all tiers and levels of basic education

c) Learners

Learners are also a critical element in curriculum implementation. While teachers control classroom practice, the learners hold the key to what is transmitted and adopted from the official curriculum. The official curriculum can be quite different from the curriculum that is implemented. The learner factor influences teachers in their selection of learning experiences. In the CBC, learners are no longer seen as passive receptors of knowledge. Learners are expected to:

- Be engaged in and contribute to teaching, learning and assessment processes
- Understand the purpose of classroom activities and participate actively in them;
- Know what they will learn and why, their expectations and how they will know that they have learnt well;
- Be open to innovative ideas;
- Be curious and willing to ask questions;
- Raise what they take for granted to the level of conscious critical scrutiny;
- Engage in assessing their own and other students' learning; as well as learning the content and associated skills,
- Support and respect other students' efforts to learn
- Be present in the school and to attend all programmes.
- Develop independent learning and revision programmes.
- Maintain the highest levels of discipline and commitment to learning.
- Make connections between what they know and newly acquired knowledge and skills to real or simulated situations

d) Parents

Parental empowerment and engagement is a critical component of the CBC. Parents play a very important role in determining the success of a child's education. The roles of parents include: To

- provide an enabling environment that is conducive to learning and which motivates the child to achieve their full potential.
- Make a sustained follow-up of the students' academic performance.
- Provide appropriate funding and support for schools programmes.
- Provide adequate support to the learners emotionally, physically and spiritually/nurture the learners
- Support guidance and counseling programmes in the school
- Ensure the learners maintains the highest levels of discipline and commitment
- Make a sustained follow-up of the student's class work, academic performance and maintenance of high grades.
- Stimulate interest, work morale and enthusiasm of learners in the learning process.
- Help the learners to make connections between what they know and newly acquired knowledge and skills to real or simulated situations

e) School community

Community plays an important part in the **education** system.

The community has the following roles:

- Provide additional resources and facilities to implement CBC
- Help in improving existing school facilities to facilitate implementation of CBC
- Provide opportunities for implementation of CSL
- Provide resource persons for CBC
- support mentorship programmes in school
- Institutions in the community may offer learning opportunities for learners

Reflection (5 Minutes)

 Ask the following questions to the participants:

- What are two things I can do to ensure that all stakeholders play their role effectively in the implementation of CBC?
- Ask participants to reflect on what skills they should develop to work together in the implementation of CBC

Reflection

(10 Minutes 5.30 pm-5.40 pm)

Ask participants the following question:

- How do I ensure I incorporate CBC in all subject areas?

Give participants 5 minutes to share, then ask them to present at plenary.
