INSET COORDINATOR INSTRUCTIONS

- BEFORE MEETING WITH TEACHERS FOR THIS MODULE, LOOK AT THE ‘MATERIALS FOR THE SESSION’ AND MAKE SURE THAT YOU AND THE TEACHERS BRING THEM.
- BEFORE MEETING WITH TEACHERS FOR THIS MODULE, ENSURE THAT YOU AND THE TEACHERS HAVE READ THE MODULE IN ADVANCE.
- PLEASE HAVE THE TEACHERS SIGN THEIR SIGNATURE BELOW.

SAY TO TEACHERS:
‘Now we will read the introduction to this module. After the first teacher reads a paragraph aloud, they can call on another teacher to read the next paragraph.’

Module 2: Teaching Aids to Develop Number Concept

CONTENT OF MODULE:
Children learn maths concepts progressively through three stages. In the first stage they learn maths concepts in the context of a story or real life experience. In the second stage they learn by relating representative objects such as counters or number cards to the story. In the final stage, they learn to translate the story to mathematical symbols and equations. The role of teaching aids and its appropriate use in lessons is critical to this learning progression of children. In this module, teachers will collect objects to use as counters and design number cards to use in teaching the number concept. They will also learn to incorporate these teaching aids into their lesson to facilitate children’s progressive learning.

CORE CONCEPTS:
Children understand numbers, counting and calculating progressively in three stages:
1. In Context: Learning maths concepts within a story that children can imagine using their real life experiences
2. Concrete Objects: Learning maths concepts by relating quantities within the story to representative objects such as counters or number cards or number line.
3. Symbols: Learning maths concepts by relating the story to the objects such as counters and to translate it to their representative mathematical symbols and equations.

MATHS VOCABULARY:
1. Teaching Aids – any concrete object or tool that allow pupils to explore a concept and learn maths in an active, hands-on way; they can be almost anything such as stones, seeds, bottle caps, shapes, paper that is cut or folded, measurement tools, number cards, number tables, number lines etc.
2. Counters – a teaching aid using locally found seeds or stones or bottle caps useful in developing number concept and counting skills through different games and activities.
3. Number-Picture Cards – a teaching aid useful in developing number concept by associating numerals with its value represented by pictures of real life things such as animals; it is like playing cards.
4. Number-Dot Cards – a teaching aid useful in developing number concept by associating numerals with its value represented by an abstract image such as a dot.
5. Number Cards – a teaching aid with numerals written on cards useful in developing number concept and recognizing numerals for counting.
6. Picture Cards – a teaching aid with different quantity of drawings on cards useful in developing number concept and recognizing numerals for counting.

MODULE LENGTH: 3 hours 45 minutes for Core Concepts and Activities plus 2 hours of Lesson Planning

MODULE OBJECTIVES:
By the end of this module, teachers will be able to:
1. Understand that children learn progressively.
2. Collect, design, make and improvise teaching aids to use in pupil activities using materials found in the environment.
3. Practice pupil activities that incorporate teaching aids that develop number concept.

MATERIALS FOR THE SESSION:
1. INSET Module.
2. Copy of 2015 Standards 1 syllabus and copy of Module 1.
3. Notebook, pen, flip chart and markers, or chalk and board.
4. Cardboard, markers, scissors, ruler, cardboard box, stones or seeds or bottle caps, large empty bottles, rubber bands.

LEARNING ENVIRONMENT FOR THE SESSION:
1. Review the ground rules established by participants during the first meeting.
2. Make revisions to the ground rules if required.
3. Arrange the desks so that all participants can see and speak to each other.
4. Feel free to ask questions.
5. Always be supportive of your colleagues.
REFLECTION

SAY TO TEACHERS:
“Welcome to Module 2 of the INSET Maths training. In this module we will learn to design, collect, improvise and make teaching aids that support developing the number concept. We will also explore some pupil activities that incorporate these teaching aids in a manner that reflects how children learn maths concepts progressively. Before we begin, let us reflect on the previous session. In your own words, write down the difference between competency and learning object. Also note down examples of pupil activities that you use in your own classroom.”

6. Try to be creative and think about how ideas apply to your classroom.

7. Put phones or pagers on silent mode.

REFLECTION

WRITE INDIVIDUALLY (10 MINUTES)

In the previous module we learnt:

1. The importance of learning maths at an early age.
2. The revised 2015 maths syllabus focuses on developing number concept, performing number operations, recognising shapes, recognising measurement and collecting things.
3. The definitions of the terms ‘competency’, ‘learning objective’, ‘pupil activity’ and ‘scheme of work’.

• Write down the difference between competency and learning objective in your words

• Write down examples of pupil activities that you use in your classroom

GROUP DISCUSSION (15 MINUTES)
TEACHERS MAY HAVE DIFFICULTY WRITING RESPONSES IN THEIR OWN WORDS FOR THIS ACTIVITY. THE DIFFERENCE BETWEEN ‘COMPETENCY’ AND ‘LEARNING OBJECTIVE’ IS NOT ALWAYS CLEAR OR EASY TO UNDERSTAND. THERE ARE MANY VARYING DEFINITIONS AND INTERPRETATIONS FOR THESE TERMS. FOR THE MATHS INSET MODULES, THE DEFINITIONS ARE AS FOLLOWS WHICH YOU CAN READ ALOUD TO TEACHERS FOR CLARIFICATION:

- Competency – is knowledge, skill and attitude developed progressively over a long period of time from primary school into high school and further to university and outside of formal schooling.

- Learning Objective – is a grade-specific skill that builds a competency; it is measurable at the end of a time period such as at the end of a lesson, a term or one school year.

- Pupil Activity – is an activity that pupils engage in during a lesson that can be used to introduce a learning objective or develop understanding of it or reinforce mastery. Examples include using song or working in small groups.

READ ALOUD (5 MINUTES)

The primary difference between a competency and a learning objective is that a competency is a combination of knowledge, skill and attitude that is deepened over a long period of time. The deepening is achieved in small increments in the form of skill development defined by a learning objective. For example, the learning objective of drawing 2 dimensional shapes in Standard 1 includes the triangle, rectangle, square and circle. This is extended to include the rhombus and parallelogram in Standard 3. Both learning objectives contribute to the competency of recognising shapes.

INTRODUCTION

SAY TO TEACHERS:
“Instead, we will learn how to design, improvise, make and collect maths teaching aids and how to incorporate them into daily lessons in order to help pupils develop number concept.”

ENSURE THAT ALL THE MATERIALS ARE AVAILABLE BEFORE BEGINNING THIS MODULE.
- A lot of cardboard paper
- A container to store the materials
- A pair of scissors
- Markers

READ ALOUD (5 MINUTES)

In this module we will:
1. Understand that children learn maths concepts progressively through three stages.
2. Collect, design, make and improvise teaching aids to use in pupil activities using materials found in the local environment.
3. Practice pupil activities that take into consideration how children learn progressively and incorporate teaching aids appropriately to support the learning.
- Seeds or stones or bottle caps
- 2 or 3 large empty water bottles

FOLLOWING THE DISCUSSION, SHARE THE FOLLOWING RESPONSES TO THE QUESTIONS IF THEY WERE NOT ALREADY ADDRESSED.

What are teaching aids? Teaching aids are any concrete objects or tool that allow pupils to explore a concept and learn in an active, hands-on way. They can be almost anything – stones, seeds, bottle caps, shapes, number cards, number line or paper that is cut or folded.

Why are teaching aids important in your maths lesson? Teaching aids are important because it gives pupils an opportunity to manipulate objects using their own hands and develop an understanding of the connections between abstract mathematical symbols and its concrete representation.

In order to complete this module, we will require the following materials:
- Cardboard paper
- A container or box to store the materials
- A pair of scissors
- Markers
- Seeds or stones or bottle caps as counters
- Large empty water bottles or box for storage of counters

GROUP DISCUSSION (10 MINUTES)
- Discuss the following question and make a list of responses in your notebook or on a flipchart:
  - What are teaching aids?
  - Why are teaching aids such as counters and number cards important in your maths lesson?
- Note down any interesting points for your future reference.

What are teaching aids? Why are they important in maths lessons?
Children understand numbers, counting and calculating progressively in three stages:

1. **In Context:** Learning maths concepts within a story that children can imagine using their real life experiences
2. **Concrete Objects:** Learning maths concepts by relating quantities within the story to representative objects such as counters or number cards or number line.
3. **Symbols:** Learning maths concepts by relating the story to the objects such as counters and to translate it to their representative mathematical symbols and equations.

When children begin primary school, they have already been exposed to numbers, counting and calculating in their daily lives such as going to the market to buy goods for their family, working in the fields, herding cattle. Teachers must use this knowledge from their daily lives to introduce formal mathematics.

For example, to teach the learning objective “Add numbers with total not exceeding 10”, over a period of different lessons, you can introduce and develop the concept as follows:

1. First pose a question to your children in the form of a story. Narrate the story about Nuru and her goats:
   
   "Monday morning Nuru woke up and checked on her goats. She counted...one two three four. There were 4 goats in Nuru’s yard. Tuesday morning Nuru woke up and checked on her goats and there were 2 more goats! Where did they come from and how many goats in total does Nuru now have?"

2. Allow children to be creative and make up reasons why there were two additional goats in Nuru’s yard. This allows children to engage in the story and enjoy it. Perhaps one of the goats was pregnant and gave birth over night. Perhaps her father bought new goats at the market and brought them home late in the evening. Any answer is a good answer and children should be able to create their own reasoning.

3. Now children can explore the question of how many goats in total are in Nuru’s yard. Children will be able to count correctly because the story makes sense. They may draw 4 goats then draw 2 more and count “1, 2, 3, 4, 5, 6”. They may use their fingers. They may use stones or seeds to represent the
As the teacher, you can guide your pupils to associate each goat with the counter. By touching and manipulating the counter, the story comes to life in their imagination. They will be able to represent the goats by the counter.

4. After practicing this approach a few times, you can introduce the terminology of *adding*, the symbols + and = and eventually the mathematical sentence of $4 + 2 = 6$.

As the above example illustrates, children understand numbers, counting and calculating progressively. First they understand it within a story that they can imagine such as Nuru’s goats. Then they relate the story to concrete objects such as the counters. And eventually they relate the story and the objects to mathematical symbols such as $4 + 2 = 6$.
If you consider how children learn progressively as illustrated by the graphic above, it is important that lessons are structured carefully to maximise pupils’ learning. For instance, the first few activities over a period of two or three lessons can be focused on exploring concepts through stories and songs. Then you can incorporate the teaching aids such as counters and number cards. Then finally you can introduce the representative symbols and formal mathematical sentences and equations continually referencing the story or context so that pupils’ imagination is engaged on the purpose of the addition or subtraction or counting concept. Once pupils have a strong understanding of the concept of addition or subtraction or counting, you can give practice exercises that only use mathematical symbols without any context or story to support it.

**GROUP DISCUSSION (20 MINUTES)**

- Discuss the following question and make a list of responses in your notebook or on a flipchart:
  - How do we usually introduce the learning objective “Subtract numbers within 100”?
  - How is the approach described above different?
  - What aspects could make the above approach more effective?

**READ ALOUD (10 MINUTES)**

1. One teacher should start reading out loud. After he/she finishes the first paragraph, he/she can call out another teacher’s name so that they read the next paragraph.
2. While reading:
   - Put an exclamation point (!) next to anything that you find important
   - Put a question mark (?) next to anything you don’t understand or don’t agree with
   - Circle (o) any words that are new to you.

In this session, we will design, improvise and make teaching aids to support your pupils’ learning progression. The teaching aids focused on here are counters and number cards.

**Counters**

Counters are objects that pupils can manipulate which help teach maths concepts while building children’s motor skills such as hand-eye coordination. Children can touch and feel, play with and count with the counters. They then can begin to associate the number of counters with the numeral representation of the quantity. Number cards are useful to make that association. Objects are frequently used only for counting in the lower grades; however, this is a very limited use. They are important to all pupils, primary through high school. Younger children need more time and activities with these objects, but pupils of every age benefit from them. Counters are an example of objects to manipulate.

- Counters are useful to teach one-on-one correspondence where pupils can lay out the objects in a neat
• Counters are useful for basic addition and subtraction where pupils can add to or remove counters to calculate the result.

```
8 – 3 = 5
```

• Counters can be used with the Band of Ten to link numbers with place value (units, tens, hundreds). Band of Ten is a table with two rows and five columns, which can be drawn on the blackboard by the teacher or in pupils’ notebooks or slates. It is read from the top row, from left to right, and followed by the second row. When counters are placed in the cells of the table, it is placed from the top row left to right and then the second row left to right. This order of placing is very important as it helps develop pattern recognition and improves estimation skills in children.

Number Cards
Number cards are teaching aids that help children learn the numerical symbols and the quantity they represent. There are a variety of number cards that are useful at different stages of the child’s learning progression. In this session, you will be making the following types of cards but you can also improvise for your lessons.

**Number – Picture Cards** are used to draw the connection between context and its corresponding numerical symbol. For example, the picture of three fishes is associated with the numeral 3.

![Number – Picture Cards example](image)

**Picture Cards** are used to help children to associate the numeral with the number of objects represented in the picture card. The picture card only has different quantities of objects drawn on it like fish or birds or flowers but does not have the numeral representation of the quantity written on it. Alternatively, you can use the Number-Picture Cards by hiding the numeral so that children identify the numeral without prompting.

**Number – Dot Cards** are used to draw the connection between the number of objects and its corresponding numerical symbol. Associating the number of dots with its corresponding numeral is more difficult as a dot is not a real-life thing like an animal. We will make number-dot cards that follow the pattern of a Band of Ten with two rows and five columns filled out sequentially from top row left to right then bottom row left to right.
Number Cards are used in activities to assess if children have grasped the understanding of the quantitative value of each numeral and also to help with teaching how to read and write the numbers.

The variety of number cards can be used to teach maths concepts through games and activities to address the following objectives:

1. Associate numeral to the value it represents
2. Order numbers in increasing or decreasing order
3. Identify more or less than a number
4. Provide a connection between the concrete and abstract representation of quantity
5. Assess pupils’ understanding of the quantity represented by a numeral.
WRITE (5 MINUTES)

- Write down individually any questions or concerns you have after reading and discussing the core concept. It will be addressed during the next session.

MY QUESTIONS
**ACTIVITY – COUNTERS**

**SAY TO TEACHERS:**

“Let us begin by collecting seeds or stones or bottle caps or any small object that is easily found in the local environment in large quantities. These small objects are useful materials to develop number concept in children as they can use it to count with and do other number related activities.”

ENSURE THAT YOU HAVE A BOX OR CONTAINER TO USE AS THE TEACHING AID BOX AND SEVERAL LARGE EMPTY BOTTLES OR SMALLER CONTAINER TO HOLD THE COUNTERS BEFORE THE START OF THIS ACTIVITY.

<table>
<thead>
<tr>
<th>MAKE WITH HANDS (30 MINUTES)</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Read aloud the instructions below.</td>
</tr>
<tr>
<td>• Complete the activity.</td>
</tr>
</tbody>
</table>

### Counters

1. Based on your local environment, decide as a group whether it is easier to collect stones or one type of seed or bottle caps or some other small object easily found in large quantities.
2. Calculate the number of counters needed for your school based on the total number of Standard 1 and 2 children each working in groups of 3 to 6 pupils with up to 20 counters per group. At least 200 counters are needed for a class size of approximately 50 pupils so that when you have group activities.
3. Go outdoors and collect the counters. Alternatively, you can ask your pupils to each bring 20 to 50 counters each for the days you plan to use them in class but it is important that each teacher also has a supply available. Only use one type of object; do not mix stones and seeds.
4. Use empty bottles or some sort of container to store the counters.
5. Use a cardboard box or any container you can find to carefully store your bottle of counters and all other teaching aids that will be made during this session. You can label the box using a marker to identify it as the Teaching Aid Box.
ACTIVITY – USING BAND OF TEN WITH COUNTERS

SAY TO TEACHERS:
“Now we will do an activity using counters with the Band of Ten to develop pupils’ number concept. We will practice each activity described in the examples.”

ACTIVITY – USING BAND OF TEN WITH COUNTERS

SILENT REFLECTION (10 MINUTES)
• Read the activities plan below silently and think about how you can try it in your classroom.

| Learning Objective: Recognise whole number concept | Lesson Objective: Compare Numbers |
| Material: Band of Ten, Counters | Vocabulary or Phrase: More, less |
| Activity: Group Work |

Steps to follow:
1. Introduction (5 minutes):
   • Introduce that we will be exploring groups of objects to determine which group has more or less.
   • Draw on the board two columns of real life things that pupils will easily recognise and ask which group has more? You can explore the idea of more and less by drawing lines to match the objects.
   • Repeat this a few times.
2. New Knowledge (20 minutes):
   • Have the children seated in a circle on the ground in small groups of 3 to 5 or arrange desks to face each other like in the photo.
   • Place at the centre of each circle a slate or flip chart or paper with two Bands of Ten drawn on it.
   • Give each group 20 counters.
   • Instruct the groups to place 13 counters in the cells of the Bands of Ten starting from top left to right.
   • Pose the following questions:
     o How many counters do you see?
     o Is there another way to count and get to 13?
     o What are the ways to make 13?
   • Repeat this with different numbers.
   • Now, give children another paper with two Bands of Ten drawn on it and additional 20 counters.
   • Ask children to place the counters to represent 13 on the first and 17 on the second.
- Pose the questions:
  - Which Band of Ten has more counters?
  - Why?
- Repeat this activity several times with different numbers

| 13 | 10 with 3 more |
| 17 | 10 with 7 more |

| 9 | 1 less than 10 |
| 15 | 10 with 5 more |
| 12 | 10 with 2 more |
| 8 | 10 with 2 less |

3. **Knowledge Check** (5 minutes): From a pack of number cards (you can use Number-Picture cards or Number-Dot cards or plain Number Cards), pick up two cards randomly and ask pupils to write on their slate or notebook which number is more than the other number. Repeat for which number is less than the other number.

### Learning Objective
- Recognise the zero concept

### Lesson Objective
- Recognise the zero concept

### Material
- Band of Ten, Counters

### Activity
- Group Work

### Vocabulary or Phrase
- zero

### Steps to follow:
1. **Introduction** (5 minutes): Sing a song with the class

   How many horns do you have on your head?
   
   (hold head with hands searching for horns)

   I have no horns on my head
   
   That is to say, I have zero horns on my head
How many bananas do you see on that tree? (point to a tree outside that is not a banana tree)
There are no bananas on that tree
That is to say, there are zero bananas on that tree

How many elephants are in this room? (look around searching for elephants in the classroom)
There are no elephants in this room
That is to say, there are zero elephants in this room

2. **New Knowledge** (20 minutes):
- Have the children seated in a circle on the ground in small groups of 3 to 5 or arrange desks to face each other
- Place at the centre of each circle a slate or flip chart with two Bands of Ten drawn on it. Ensure all the children can see the slate or paper.
- Give each group 10 counters.
- Instruct the groups to place 7 counters in the second band.
- Ask pupils to indicate how many objects are in the first band and how many are in the second band.

<table>
<thead>
<tr>
<th>No objects - Empty</th>
<th>Several objects - filled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number : 0</td>
<td>Number : 7</td>
</tr>
</tbody>
</table>

- Repeat steps 4 and 5 with different numbers of counters. Alternate the band with zero counters.
- Write the number 0 on the blackboard and say “when there is no object or the band is empty, we call that zero and represent it by the numeral written as 0” to make the connection that emptiness or no objects is represented by the numeral 0.

3. **Knowledge Check** (5 minutes):
- Have pupils stand up and act out each of your commands.
- Call out commands like the examples below to assess if pupils understand the concept of zero:
  - “Mr. Monkey says jump ten times”
  - “Mr. Monkey says find four friends and make a circle holding hands”
  - “Mr. Monkey says clap your hands one time”
  - “Mr. Monkey says clap your hands seven times”
  - “Mr. Monkey says clap your hands zero times”
  - “Mr. Monkey says take five steps forwards”
  - “Mr. Monkey says take zero steps backward”

**ROLE PLAY (40 MINUTES)**
- In a group, practice each of the activities above. One teacher can play the role of the maths teacher and all the others can pretend to be pupils in Standard 1.
ACTIVITY

SAY TO TEACHERS:
“For this activity we need a pair of scissors, lots of cardboard, a ruler, markers and rubber bands. Here we will make different types of number cards.”

ENSURE THAT YOU HAVE COMPLETED THE TASK BELOW BEFORE THE START OF THE SESSION
1. Take a piece of cardboard, a ruler and pencil.
2. Draw 65 rectangles of dimensions 15 cm by 21 cm.
3. Now, take another piece of cardboard.
4. Draw 200 rectangles of dimensions 6 cm by 9 cm.

0 1 2 3 4 5 6 7 8 9 10

ACTIVITY – NUMBER CARDS

MAKE WITH HANDS (60 MINUTES)

• Read the instructions below and make Number-Picture, Number-Dot, Number Cards and Picture Cards to include in your Teaching Aid Box. At the end of this activity you should have:
  A. Pack of 0 – 10 Number-Picture Cards (large)
  B. Pack of fraction cards (large)
  C. Pack of 0 – 10 Number-Dot Cards (large)
  D. Pack of 0 – 30 Number Cards (large)
  E. 10 sets of 1 – 10 Number Cards (small for pupil use)
  F. 10 sets of Picture Cards (small for pupil use)

• Each teacher can make one of the sets from above listed from A to F.

Preparation
1. Take a piece of cardboard, a ruler and pencil.
2. Draw 65 rectangles of dimensions 15 cm by 21 cm.
3. Now, take another piece of cardboard.
4. Draw 200 rectangles of dimensions 6 cm by 9 cm.
A. Pack of 0 – 10 Number-Picture Cards (large)

1. Write in clear handwriting using a marker pen the numerals 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 on the top half of each rectangle drawn on the piece of cardboard.

2. On another cardboard, trace out with a pencil and cut out the shape of a familiar animal like the example of the fish.

3. Trace the figure on the number card under each digit to represent the value of the digit.
B. Pack of fraction cards (large)

1. Write in clear handwriting using a marker pen the fractions \(\frac{1}{2}, \frac{1}{4}, \frac{1}{3}, \frac{2}{3}\), and 1 on the top half of the card.
2. On another cardboard, trace out with a pencil and cut out the shape of a symmetrical object that can be easily divided into equal parts such as a circle or a rectangle.
3. Trace the shape on each card, divide it equally in 4s to shade \(\frac{1}{2}\) and \(\frac{1}{4}\) and divide equally in 3s to shade \(\frac{1}{3}\) and \(\frac{2}{3}\). You can shade with a marker.

C. Pack of 1 – 10 Number-Dot Cards (large)

1. Draw Number-Dot cards from 1 to 10. You can use the 0 card from the other pack or make a separate 0 card for this pack of cards. Write the numbers neatly with a marker from 1 to 10.
2. Draw the appropriate number of equally sized dots under each number to represent the value. You can use a 100 T Shilling coin to trace the circles before colouring them in.
3. Use the Band of Ten table and fill it in from left to right, top to bottom from 1 to 10. This pattern is important as it helps children to guess the number by recognizing the pattern.
4. You can make another pack using a different pattern such as the one below to exercise pupil's ability to see patterns and determine the number of objects in the group. In the example below, the dots are drawn in a different pattern from the Band of Ten.
D. Pack of 0 – 30 Number Cards (large)

1. Draw plain Number Cards from 0 to 30.

E. 10 Packs of 0 – 10 Number Cards (small for pupil use)

1. Write in clear handwriting using a marker pen the numerals 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ten times on the cardboard with the smaller rectangles.

**Complete Pack of Cards**

1. Neatly cut out the rectangles with a pair of scissors to make the pack of cards.
2. Put a rubber band around each group.
3. Store all pack of cards in the Teaching Aid Box.
LESSON PLANNING

SAY TO TEACHERS:

“

To improve pupils’ learning, it is very important that teachers are able to practice the teaching techniques they learn from INSET in their classrooms. For this, it would be beneficial to develop the lesson plans together as a group instead of individually. When we support each other through this process of lesson planning, we will be able to design better quality lessons. So let us dedicate at least 2 hours to lesson plan together. Let us decide now when we will meet next to complete this component of the INSET for this module.”

JOINTLY DETERMINE WHEN THE TEACHERS WILL MEET AGAIN TO COMPLETE THE LESSON PLANNING SECTION OF THIS MODULE. WHEN YOU MEET AGAIN TO WORK ON THIS SECTION, WALK AROUND AND SEE IF TEACHERS NEED HELP WITH THE PLANNING.

CONCLUSION

SAY TO TEACHERS:

“We have come to the end of the module. Please take minute to reflect on the session. Fill in the form to record your appraisal of today’s module. After you are finished, rip the page out and give it to me. Please be honest with your answers because your feedback will help to improve school based INSET in the future.”

COLLECT THE TEACHERS’ APPRAISAL FORMS AND BRING THEM TO THE NEXT WARD CLUSTER MEETING. WHILE THE TEACHERS ARE FILLING OUT THE APPRAISAL FORM, REFLECT ON THE OVERALL SUCCESSES AND CHALLENGES OF TODAY’S SESSION AND COMPLETE THE FORM BELOW.

LESSON PLANNING

LESSON PLANNING (2 HOURS)

To improve pupils’ learning, it is very important that teachers are able to practice the teaching techniques they learn from INSET. Therefore, it is important to set aside at least 2 hours to lesson plan together with other teachers.

- Set a time to meet in order to complete this activity before continuing on to the conclusion of today’s session.
- When you meet for the lesson planning, first review the core concepts covered in this module.
- Then as a group, plan two different lessons that incorporate at least one of the teaching techniques or core concepts covered in this module.
- As a group, determine the appropriate learning objectives for your lessons based on the concepts covered in this module.
- Complete the two lesson-plans using your lesson plan template.
- You are expected to implement the lesson plan in your classroom with your pupils
- Before beginning the new module, you will have an opportunity to share your challenges and successes in trying out the lesson plan.

CONCLUSION

WRITE INDIVIDUALLY (15 MINUTES)

Please fill in the following form to record your appraisal of today’s module. After you are finished, rip this page out and give it to your INSET Coordinator. Please be honest with your answers because your feedback will help to improve school based INSET in the future.

<table>
<thead>
<tr>
<th>Marking Scheme for the INSET Appraisal:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 points: I completely disagree with the statement</td>
</tr>
<tr>
<td>1 point: I partially disagree with the statement</td>
</tr>
<tr>
<td>2 points: I partially agree with the statement</td>
</tr>
<tr>
<td>3 points: I completely agree with the statement</td>
</tr>
</tbody>
</table>
## INSET Appraisal Form:

<table>
<thead>
<tr>
<th>School: ______________________</th>
<th>District: ______________________</th>
</tr>
</thead>
<tbody>
<tr>
<td>Region: ______________________</td>
<td></td>
</tr>
<tr>
<td>Appraisal for Module # _______</td>
<td>Topic of Module: ________________</td>
</tr>
<tr>
<td>Number of teachers who participated: _______</td>
<td>Did the Head Teacher participate: Yes/No</td>
</tr>
<tr>
<td>Was the INSET Coordinator present to facilitate: Yes/No</td>
<td></td>
</tr>
</tbody>
</table>

Read the statements below and tick the box that indicates whether your answer:

<table>
<thead>
<tr>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

1. The Core Concepts of today’s module was very clear. I feel like I have a very good understanding of the topics.

2. This module had many useful and relevant strategies that I will try in my class.

3. The amount of time it took to complete this module was appropriate. It did not feel too long.

4. This module prompted a lot of interesting discussion and reflection.

5. The INSET Coordinator was prepared for the session – he/she has clearly read the module and had all the materials ready.

6. The INSET coordinator effectively facilitated discussion – he/she knows how to get people talking and how to help with answers.

7. The INSET coordinator knows how to maintain a good group dynamic – he/she makes sure that teachers are supportive, collegial and energised.

8. The INSET coordinator knows how keep teachers motivated – he/she follows up with teachers who are absent/late and reminds us of why INSET is important.

- Close the session by setting the meeting time and date for the Lesson Planning session for this module and the meeting time and date for the new module.