Southern Nation Nationalities People's

Regional State Education Bureau

Teaching Environmental Science-I (TES-201) Module

Prepared for Diploma program

In College of Teachers Education

December, 2020

Hawasa, Ethiopia

Southern Nation Nationalities People's Regional State Education Bureau

Teaching Environmental Science-I (TES-201) Module

Prepared for Diploma program

In College of Teachers Education

Prepared by:

- Mulugeta Teshome (MSc.) Bonga CTE
- Tadesse Hailu (MSc.) A/Minch CTE
- Habtamu Abera (MSc.) Dilla CTE
- Debebe Biftu (MA) Hawassa CTE
- Yeheyes Dejene (MA) Hossana CTE

Editors:

-

Technical Advisors and Coordinators

-

Table of Contents

Acknowledgments v
Overview of the course vi
UNIT ONE: TEACHING ABOUT OUR EXTERNAL BODY 10
UNIT INTRODUCTION 10
Unit Objectives 10
Section 1: Teaching About Our External Body 11
Syllabus 12
Competency 13
Sample Lesson-1 13
Practical activity: Microteaching practice (2 Periods) 20
Section 2: Teaching about Basic Human Needs 21
Section 3: Teaching about Common diseases that affect us 23
Sample lesson-2 24
Practical activity: Microteaching practice (2 periods) 28
Section 4: Teaching about house hold materials 29
Sample Lesson 3 32
Practical activity: Microteaching practice (4 periods) 38
Section 5: Teaching about the five sense organs 40
Sample Lesson 4 42
Practical activity: Microteaching practice (5 periods) 46
Section 6: Teaching about hygiene, health and diet 47
UNIT TWO: TEACHING ABOUT OUR FAMILY AND COMMUNITY 52
Section 1: Teaching about family members & their basic needs 53
Sample Lesson-5 55
Practical activity: Microteaching practice (10 periods) 63
Section 2: Teaching about house hold materials 64
Sample Lesson-6 67
Practical activity: Microteaching practice (4 periods) 74
Section 3: Teaching about members of community & living in the community 76
Sample Lesson-7 79
Practical activity: Microteaching practice (4 periods) 82

Section 4: Teaching about sources of energy for our community 84
Sample Lesson-8 85
Practical activity: Microteaching activity (4 periods) 89
Section 5: Teaching about making objects 90
Sample Lesson-9 91
Practical activity: Microteaching practice (4 periods) 93
UNIT THREE: TEACHING OF OUR NATURAL ENVIRONMENT 95
Unit Introduction 95
Section1: Teaching about Our School Compound 95
3.1 Unit Objective: - 95
Sample Lesson-10 98
Practical activity: Microteaching practice (3 periods) 102
Section 2: Respecting rules and regulations 103
Sample Lesson-11 104
Practical activity: Microteaching practice (3 periods) 107
Section 3: Good personal relationship 109
Practical activity: Microteaching practice (2 periods) 110
Section 4: Teaching about Road safety 110
Sample Lesson-12 112
Practical activity: Microteaching practice (3 periods) 114
Section 5: Teaching about natural resources and phenomenon 116
Practical activity: Microteaching practice (2 periods) 117
Section 6: Teaching about plants and animals around us 118
Practical activity: Microteaching practice (2 periods) 119
UNIT FOUR: TEACHING ABOUT OUR LOCALITY 121
UNIT INTRODUCTION 121
Section 1: Teaching about Location of our kebele & wereda 122
Sample Lesson-13 124
Practical activity: Microteaching practice (3 periods) 127
Section 2: Teaching about Living & Non-Living things around us 129
Practical activity: Microteaching practice (6 periods) 131
Section 3: Teaching about common activities of our local people 132

Sample Lesson -13 134
Practical Activity: Microteaching practice (3 periods) 136
Section 4: Teaching about Transportation 137
Practical activity: Microteaching practice (2 periods) 139
Section 5: Teaching about Types of Land Forms of our Wereda 140
Sample Lesson-14 141
Practical Activity: Microteaching Practice (1 Period) 144
Section 6: Teaching about Institutions in our Wereda 145
Practical activity: Microteaching practice (2 periods) 146
References 149
Annex-I: Syllabus document for grade-1 Environmental Science subject i
Annex-II: Syllabus document for grade-2 Environmental Science subject vii

Acknowledgments

The successful completion of this module is a result of contribution and participation of several people and institutions. The Southern Nation Nationalities People's Regional (SNNPR) State Education Bureau would like to thank UNICEF for devoted financial support. Moreover, the Bureau acknowledges thankful gratitude for the contribution of all professionals from all regional CTEs' and education Bureau for their cooperative team work starting from its establishment to final stage of completion of this module integration and preparation. Finally, the Bureau is also grateful for the previous module writers and experts for their contribution during the previous preparation of this module.

Southern Nation Nationalities People's Regional State Education Bureau

Overview of the course

I. Course Introduction

Dear student teacher,

Welcome to the course Teaching Environmental Science -I (TES-201), which focuses on the applications of planning a lesson, applying various teaching strategies, use of different competency based assessment tools, utilizing diverse feedback provision mechanisms and recording students' learning progress in teaching of environmental science in primary schools. The course TES-201 is a three credit hour course with three contact hours. You will also take the course entitled "Teaching Environmental Science-II (TES-202)" in your next semester which focuses on teaching environmental science contents of grades 3 and 4.

The Module stresses the teaching techniques and procedures to be used to teach the stated skills in grades 1 and 2 Environmental science lessons. It attempts to explore learners' conceptions and misconceptions on how the aforementioned skills are learned and taught in primary schools. Moreover, issues on classroom use of teaching materials, competency based assessment techniques, lesson preparation and microteaching, and reflection are included to provide trainees with the actual practice of teaching the science contents of grades 1 and 2 syllabi. Under each unit sample lessons are also illustrated to help student teachers get starting practical experience.

This newly prepared module is different from the previous module because it is prepared based on competency-based prospectus. It also supports trainees to teach different science skills which are designed based on minimum learning competencies of classroom instructions. To this end, there are activities, sample lessons and microteaching lessons prepared for you under each basic contents of the module which provide you with genuine teaching practices during the training. Bear in mind that these microteaching activities do not have to restrict your input. You can create additional and design your own lessons based on the required competencies as extended activity for self-learning. Additionally, in this module your instructor who facilitates the training will carry out regular checks on your progress on each content area using assessment for learning (AfL), which is a type of continuous assessment. Thus, your competency will be assessed continuously to check your improvement and understanding of the content on regular basis.

There are four units in this module. Unit one emphasizes on teaching about our external body part. The second unit talks about teaching our family and community. Unit three focuses on

teaching about our natural environment and the last unit focuses on teaching about our locality. Therefore, you are expected to actively get involved in all activities so as to provide yourself with the abilities in teaching science skills grades from 1 up to 4. The course teacher can also give you additional activities. The detailed contents in each unit are selected and structured from the primary education curriculum, course syllabi for environmental science grades 1 and 2.

Teaching is a very personal activity and the strategies that good teachers use to create effective lessons will depend on a number of factors. The key issue is the teacher's active, ongoing involvement and reflection on the processes of teaching and learning, leading to a deeper understanding of the nature of effective teaching and how it can be achieved. The most important thing to remember is however, to develop the knowledge, skill and attitude of the learners for self -learning. This module will help you reflect on your own teaching beliefs and practices as you engage in the process of planning and teaching effective lessons.

This module help trainees to teach different environmental science knowledge, attitude and skills which are designed based on minimum learning competencies expected to be attained by Grades 1 and 2 children.

The terms learning competency and learning outcome are used interchangeably in teacher's guide and syllabus of grade 1 and 2 of environmental science. Learning competencies are the main ideas or skills you expect the pupils to master. A well-written learning competency should begin with an action verb (one verb), clear and concise (short), includes the pupils' behavior you can observe and measure. Learning outcomes are the specific abilities necessary to accomplish the learning competency. Thus, you can use either of the two when you prepare activities from students' text with their difference in mind.

Moreover, in the course Teaching Environmental science-I (TES-201), designing teaching-learning activities, using suitable teaching materials, managing classes, assessing children' performance using competency-based techniques, microteaching practice and portfolio development are among the issues addressed to further build up your professional skills in teaching the stated subject.

The Module is intended to be covered within a semester, and each unit is assumed to take classroom hours for sample lesson presentation and microteaching hours. We hope you will enjoy working through the Module.

II. Course Competencies

At the end of this Module, trainees will capitalize on competency-based training and:

- Identify and remedy learners' conceptions and misconceptions on how the different science contents are taught in primary schools.
- Plan and teach grades 1and 2 environmental science lessons effectively.
- Prepare different science lesson activities in such a way that they address knowledge, skills and attitude and tests for grades 1-4.
- Teach grades 1 and 2 students' science contents in the current grades 1 and 2 environmental science textbooks using different techniques effectively.
- Demonstrate their skills of managing classes, preparing lessons, using teaching materials, providing effective feedbacks and assessing learners' progress in their peer-teaching (microteaching) practice in grades 1 and 2 contents.
- Explain and demonstrate how science is taught interactively, lessons are planned and feedback is given to ensure students' learning;
- Give encouraging and descriptive feedback and comments to facilitate the teaching-learning process.

III. Assessment Methods

While you are working through the Module, obviously, your achievements need to be assessed, to enrich you by giving feedback on your microteaching, pair work, group work and all the activities you undertake throughout the module. Hence, the assessment scheme involves both continuous assessment and final examination. In addition to determining your achievement in the course, the assessment is basically meant to see the progress you are making and provide you with descriptive feedback.

Continuous assessment techniques based on MLC are used for evaluating trainees. Assessment for Learning (AfL) is important for generating real time information for both the teachers and learners during classroom instruction, and has the final goal of improving instruction and learners' outcomes. The AfL approach is based on the view that teachers conduct continuous assessment to find out what a trainee knows, understands, and is capable of. Teachers can better recognize their trainees learning needs and levels with the use of AfL. Therefore, it has become necessary to implement AfL to improve trainees' knowledge, skills and attitudes in an integrated way.

Different techniques of continuous assessment of assessment for learning like regular classroom activities, oral and written tests, assignments, portfolio development, presentation and final examinations will be carried out. The following techniques of continuous assessment modalities with recommended mark allocations are suggested to be implemented in all classes; however, the teacher is free to use his/her own choice in the course of assessing trainees.

Item number	Recommended competency based assessments	Recommended weight given	Remarks
1.	Lesson preparation	10	
2.	Instructional materials preparation & utilization	10	
3.	Microteaching (Round-I)	15	
4.	Microteaching (Round-II)	15	
5.	Portfolio development	10	
6.	Reflection on own and other trainees' teaching methods	10	
7.	Writing report on the overall experience gained (planning a lesson, instructional material preparation, methods of teaching selection and implementation, assessment tools used, ways of providing feedbacks and so on)	10	
8.	Final Exam	20	
	Total	100	

IV. Instructional Materials

The instructional materials to be used while training processes include pupils' textbooks, teacher's guide and syllabus. These materials are used to incorporate minimum learning competency and supplement assessment for learning in the practical training of trainees. These are taking into account the grade level of pupils' to be taught and the course to be practiced. The trainer and the trainees will use materials such as flash cards, pictures, charts, models, shapes etc. to facilitate the training.

UNIT ONE: TEACHING ABOUT OUR EXTERNAL BODY

UNIT INTRODUCTION

Dear learner, welcome to the first unit of the course Teaching Environmental science-I(TES-201); Application of different teaching methods, use of various competency based assessment tools, implementing different feedback provision strategies and conduct records on students learning progress. This unit presents the fundamental issues related to the teaching skills appropriate to teach science in lower grades (Grades 1-4).

To stay healthy, energetic and productive at their age children should have the proper understanding of their own body, the basic things their body needs and the basic care they should take for their body parts. This unit, therefore devotes itself on equipping would be primary science teachers with sound pedagogical knowledge of teaching the basics of human body structure and functioning, basic human needs, common diseases that could affect human beings, the sense organs, the diet we need, basic health and hygiene issues necessary for the wellbeing of children and their community.

Unit Objectives

At the end of this unit student teacher should be able to:

- Plan a lesson to teach contents of grade 1 and 2 environmental science subject.
- Use different teaching methods to teach about the content our selves.
- Apply various competency based assessment tools for teaching contents and sub contents of our selves
- Produce different instructional materials for teaching contents and sub contents of our selves
- Implement different feedback provision mechanism for teaching the content our selves.
- Organize student learning progress records to follow their learning progress.

Section 1: Teaching About Our External Body

Learning Outcomes

Up on completing this section the student teacher should be able to:

- Prepare assessment for learning integrated instructional lesson to teach about external body parts.
- Apply different teaching methods to teach the content external body parts.
- Use diverse competency based assessment tools in teaching the content external body parts.
- Demonstrate varied feedback giving mechanisms to deliver the content external body parts.
- Organize students' assessment records and check students learning progress.

Dear learner!

Have you ever thought about the different methods of teaching, competency based assessment instruments, methods of providing constructive feedbacks (Feed forward) for teaching a certain specific science content in lower grades? We hope you are familiar and equipped with different skills of teaching form the general teaching methodology course (TECS-112).

Start-up Activity (small group discussion)

1) Communicate to student teachers the importance of discussion and establish small groups (a group of four students).
2) Provide one question for each group from the learning competencies.
   - How do you prepare assessment for learning integrated instructional lesson to teach about external body parts? List the components to be included in the plan.
   - What are the different teaching methods that can be applied to teach the content external body parts?
   - List different competency based assessment tools that could be used in teaching the content external body parts.
   - How do you provide feedback to learners while teaching the content external body parts?
   - Explain the way you will organize students' assessment records and check students learning progress.

Based on the answer given your instructor will give you feedback. So, listen carefully and work to improve them. Effective feedback is designed to determine a learner's level of understanding and skill development in order to plan the next steps towards achieving the learning intentions or goals. Your instructor will summarize the discussion by identifying key points from the discussion.

Lesson content:

1) **Our selves**

   1.1 external body parts

   1.2 function of body parts

   1.3 Care of the external parts of body.

Learning outcomes of the lesson;

At the end of this lesson students should be able to

- Name their external body parts
- Show their external body parts
- Tell the function of their external body parts
- Care for the external body parts

The above lesson contents and minimum learning competencies are copied from grade 1 environmental science subject syllabus document. Please, note the alignment of MLCs' and contents indicated above.

Dear learner!

Do you have any idea about a syllabus, competency and outcomes? We hope you have studied about these points in your general methodology course. Read the following points for quick reference.

Syllabus

A syllabus is an outline of a course of studies, text, etc. The word syllabus can be also described as a document for teaching in that it serves to outline the basic elements of a course including what topics will be covered, teaching strategies and a list of assessment methods.

However, a syllabus has the power to do more than that, it can articulate connections between learning outcomes, assessments, content, and pedagogical practice – that is, the way in which the course is constructively aligned- in guiding students through their learning.

Competency

Competencies and learning outcomes are two related educational terms that can create confusion. Competencies and outcomes can be written to describe the learning gained by students in individual courses (course outcomes) or for the program as a whole (program outcomes). They DO NOT mean the same thing.

Competency: A *general* statement that describes the desired knowledge, skills, and behaviors of a student graduating from a program (or completing a course).

Competencies commonly define the applied skills and knowledge that enable people to successfully perform in professional, educational, and other life contexts.

Outcome: A very *specific* statement that describes exactly what a student will be able to do in some measurable way. There may be more than one measurable outcome defined for a given competency. Hartel and Foegeding (2004)

From the contents and minimum learning competencies indicated above, your instructor will take one competency and prepare a detail plan for the sample lesson and present it to you in the class room.

The sample lesson provides you skills on:

- Planning of an assessment for learning integrated lesson.
- Using various teaching methods.
- Preparation and utilization of instructional materials for science teaching.

Dear trainee!

You should carefully follow your instructor sample lesson. In case; from the presentation of sample lesson if you find things that are NOT clear to you keep record of them and ask your instructor after completion of the presentation in order to have a clear understanding of the material.

Sample Lesson-1

Lesson content: Our selves

Sub lesson content: External body parts

Learning Outcomes;

At the end of this lesson the student should be able to:

- Name their external body parts.

Present the following oral questions to students and listen their answers.

1. Students; what do we mean when we say human external body parts?
2. Who can tell us one example of his/her external body parts?
3. When children name their external body part provide them specific feedback.

The feedback or comment focus on the areas of achievement and improvement. The areas of achievement praised and treated for further activities and that of improvements need suggestions or helps as to how they achieve the lesson external body parts.

Basic external body parts include;

- ✓ Head
- ✓ Finger
- ✓ Mouth
- ✓ Nose
- ✓ Eye
- ✓ Ear
- ✓ Hair
- ✓ Hand
- ✓ Foot
- ✓ Leg
- ✓ Arm

Teaching Strategies

Based on the sub contents and the identified minimum learning competencies the teacher should think and select relevant teaching strategies used to convey the lesson. In your general pedagogy course (TECS-112) you have studied different strategies and assessment techniques. Hence, when we plan to teach any content we should think the nature of the content and the specific competency.

Teaching strategies are methods and techniques that a teacher will use to support their pupils or students through the learning process.

A teaching method comprises the principles and methods used by teachers to enable student learning. These strategies are determined partly on subject matter to be taught and partly by the nature of the learner. For a particular teaching method to be appropriate and efficient it has to be in relation with the characteristic of the learner and the type of learning it is supposed to bring about. Suggestions are there to design and selection of teaching methods must take into account not only the nature of the subject matter but also how students learn.

Science is better learned by doing. To do this teachers are required to facilitate science teaching and learning by selecting appropriate teaching methods, competency based assessment tools, providing timely and constructive feedbacks and supporting with teaching materials available

from the children s' environment. The teaching materials that could help in resulting concrete scientific knowledge are generally termed as instructional media.

Let us see the following old Chinese saying to understand the different experiences and their effect on students learning.

If I hear it, I forget it

If I see it, I remember it

If I hear, see and do it, I know and understand it.

Selected teaching strategies for the sample lesson

For teaching the content external body parts the following methods are identified. But student teacher should note that these are not the only methods; one can select other teaching methods what matter is the achievement of the stated competencies.

- Playing Game and
- Songs and Question and answer

Activity one: Playing Game

Take students outside the classroom and ask them to form a big circle. The teacher will be inside the circle and tell them what you exactly do with them.

The teacher being in the circle will start the game. He/she will point to your external body parts and name them. Start by pointing to your own nose and say 'nose' and continue with other external body parts. Play this for two to three times. Ask one volunteer student to come and lead the play like you.

Now make a game out of finding the right body part. Call out: “Where is your mouth?” Then ask children to point to their mouth. When children do it correctly, praise children. Repeat with other external body parts and soon your children will be able to identify many parts of their external body parts.

Activity two: Songs and Question and answer

The best tip for teaching children body parts is lots of action songs where they sing and touch or move the body parts they mention.

Before directly proceeding to the activity, the teacher should practice the following song alone. The teacher should tell students as you will first sing the song and they should listen the song. Then, students will sing the song with you by showing their external body part they are calling. (3 to 4 times)

Song to teach body parts

- Head, Mouth, Finger and Nose are external body parts
- Finger, Eye and Ear are external body parts
- Hair, Hand and foot are external body parts
- Leg, arm and lip are external body parts

Now tell children to sing the song by themselves touching the body they are describing. You should check each child for their correctness and make the necessary adjustment. If there are children who are unable to do the activity go to them and sing the song together until they can do it correctly.

After the song, ask each student to show you the main external body parts in the song. One child is asked to show one external body part and all children should be asked.

Assessment strategies

Assessment is an important component of the teaching and learning cycle. Teachers make professional judgments on learners' performance in every teaching and learning session undertaken, whether consciously or subconsciously. Using these professional judgments and translating them into feedback on the quality of individuals' work is the focus of assessment for learning. Successful Assessment for learning strategies result in improved learner progress on a continual basis. Assessment for learning supports practitioners and helps them focus on the learner and learning in individual classroom sessions. It also shows how one of the assessment for learning strategy's principal themes, quality feedback, can be used to help learners progress.

Assessment for learning is the process of seeking and interpreting evidence for use by learners and their teachers to decide where the learners are in their learning, where they need to go and how they best to go there.

Effectively employed assessment for learning provides the following benefits.

i. provide effective feedback to pupils;
ii. actively involves pupils in their own learning;
iii. enable to adjust teaching to take account of assessment results;

iv. recognize the influence of assessment on pupil motivation and self-esteem, both vital to learning

v. consider the need for pupils to be able to assess themselves and to understand how to improve.

The assessment strategies selected include;

- ✓ Peer assessment and
- ✓ Reflection

Assessment activity one: Peer assessment

1) Assign students in pair and write the competency based questions on the blackboard and instruct students to ask the question each other and listen the answer given. You should help reading the question and check each peer is conducting the peer assessment correctly.
2) Tell them when their peer made mistake they should correct the mistake.

Assessment activity two: Reflection

1. Ask children to come in front of students and describe in detail what they have learnt about external body parts. They should name the main external body parts as much as they can.
2. When they miss some external body parts the teacher should tell the student to ask other student to help him/her.

Feedback provision and record keeping

Feedback to pupils is very important, as it tells them how well they have done and what they need to do next in order to improve their work and maximize progress.

Children are given verbal feedback on their work whenever possible. This is usually done when children are working during the lesson although we sometimes give feedback on a particular lesson at the beginning of the next one. When written feedback is given to a child, we relate this to the learning objective. The children are encouraged to make comments about their own work and the work of fellow pupils. We encourage older pupils to be the first markers of some pieces of work. At the beginning of each lesson time is allowed for the children to absorb any comments written on their work and to act upon the feedback that has been given. This ensures that marking and feedback has a positive impact on the children's work and their progress.

As it is well known what matter most is not so much the form of assessment, but how the information gathered is used to improve students' learning feedbacks where given at different stages of students learning to help students to attain the required minimum learning competency.

While conducting the competency based assessment if students are identified who didn't yet achieved the minimum learning competency constructive feedback (feed for ward) should be given and it should indicate what to be improved and how it can be improved.

Teachers use a variety of methods to provide feedback to improve achievement in learning

Feedback causes thinking and provides guidance on how to improve. Effective feedback is designed to determine a learner's level of understanding and skill development in order to plan the next steps towards achieving the learning intentions or goals. Feedback in the form of comments, rather than grades, focuses on the task and includes what the student needs to do to improve. This helps students to move forward to the next stage of their learning.

Recording students' learning progress

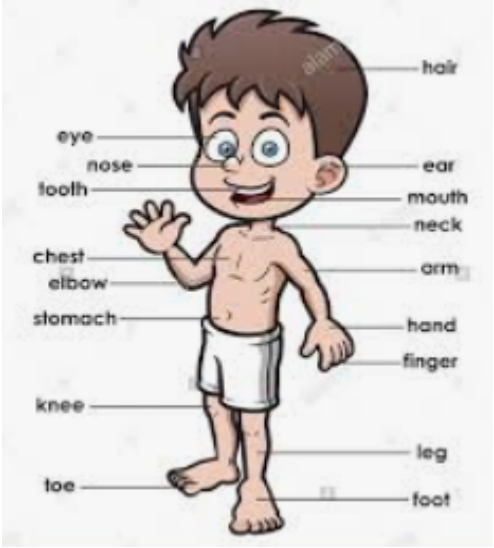
In recording students' learning progress we can use various formats. The following is an example format that can be used.

Statements of MLC

- ✓ Name their external body parts

S.No	Student's Name	Level of achievement				Constructive feedback
		Not yet meeting	Approaching/ developing	Meeting/ achieved	exceeding	
1.						
2.						

At the end of your lesson, post a picture showing different external parts of human body in the classroom.



Dear learner!

We hope you have attended the sample lesson presented by your instructor by taking one minimum learning competency on the content external body parts.

To confirm the skill you have gained try to answer the following oral questions. Your instructor will conduct assessment and verify your learning.

Oral questioning

Ask student-teachers to answer the following questions orally. They should answer turn by turn.

1. Do you clearly identify the source of ***MLC for the content*** to be taught?
2. Are you able to select ***different teaching strategies or techniques*** for teaching natural science based on the given MLC?
3. Can you ***organize different activities*** based on the selected strategies for teaching natural science contents in lower grades?
4. Are you able to use ***different competency based assessments*** in teaching environmental science?
5. Can you apply ***different feedback provision*** mechanisms to help students improve their learning?
6. Can you use different record keeping format to record students learning progress?

Collect the information gathered from the above assessment and make analysis of the information and use it to improve students' learning.

Depending the analysis result of the students assessment decide whether to proceed to the next activity (pairing students to perform micro teaching to practice the planning, conducting and practicing assessment for learning integrated contents in the classroom and get an intensive feedbacks for further improvements of your teaching skill which validate students learning) or add one more additional sample lesson preparation and presentation to help improve the gaps indentified in students learning.

Dear students!

It is your turn now to prepare assessment for learning integrated lesson as the sample presented under the content list of family members by your instructor.

In doing so, you need to consider components of assessment for learning integrations like;

- *MLCs', assessment for learning teaching strategies selected based on the MLC,*
- *Competency based assessment tools,*
- *Ways of providing feedbacks and*
- *Methods of recording students' progress and so on.*

Practical activity: Microteaching practice (2 Periods)

Dear students!

Your instructor will assign every student in the classroom and form a pair of two students to ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning as the sample lesson presented previously.

The following contents (contents from grade 1 environmental science subject) will be shared to you.

Lesson contents: Ourselves

2. **Our external body parts**

   2.1.***External body parts***. ***(Sample lesson prepared and demonstrated by the instructor)***

   2.2.Functions of external body parts

   2.3.Care of the external parts of the body.

Learning outcomes of the lesson

At the end of the above lesson students should be able to;

- ***Name their external body parts (Sample lesson prepared and demonstrated by the instructor)***
- Show their external body parts.
- Tell the functions of their external body parts.
- Care for the external body parts of their bodies.
- Demonstrate helpfulness, kindness and responsibility to other family members.

Dear trainee!

Prepare a lesson plan with your partner and get comment from your instructor on your plan. Especially, your instructor will check the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the lesson in the classroom.

Note: It is very crucial to get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice with your partner to improve them.

Dear student-teachers congratulations!

You have completed the first round micro teaching by planning, practicing and presenting assessment for learning integrated lesson. You have received comments and feedbacks (both written and oral) for your future teaching improvement. Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

A portfolio is a way to document your professional journey and demonstrate your skills and abilities. It can be a collection of your work and accomplishments in either a physical or digital format.

Section 2: Teaching about Basic Human Needs

Learning outcomes

At the end of this section the student teacher should be able to:

- Prepare assessment for learning integrated instructional lesson to teach about basic human needs.
- Apply different teaching methods to teach the content basic human needs.
- Use diverse competency based assessment tools in teaching the content basic human needs.
- Demonstrate varied feedback giving mechanisms to deliver the content basic human needs.
- Organize students' assessment records and check students learning progress.

Brainstorming (individual activities and presentation)

Dear trainee!

Before we proceed to the discussion of how the content basic human needs is taught with integration of AfL component perform the following brainstorming activity.

1. Individually, think about the different teaching methods that can be employed for teaching the content basic human needs in grade-1 environmental science, and list them all.
2. What are the competencies based assessment tools to be suggested to deliver the above content.
3. Recommend the ways to provide feedback in delivering the content basic human needs.
4. How do you record students' learning progress and improvements?

When you complete responding the above questions your instructor will invite you to present to the whole class students. At the end of the presentation of students' work comments will be given on your ideas that are helpful to think again about each questions.

Lesson content: Our basic needs

2) Basic human needs

2.1. The three basic human needs

2.2. Importance of these basic needs

Learning outcomes;

- List the three basic needs.
- Explain the importance of each of the three basic human needs.

Key Points

Basic needs are generally defined in terms of a minimal list of elements that human beings necessitate, in order to fulfill basic requirements and achieve a decent life. Typically, the list includes basic commodities, such as food, clothing, and shelter.

Dear students!

Your instructor will assign four students two of them will prepare a 25 minutes lesson on the first sub content and minimum learning competency: list three basic needs and the other two students on the second on the second sub contents and MLC: explain the importance of each of the three basic needs. The lesson preparation is an individual task. Totally four students will present lesson prepared as per the above allotment. In your lesson preparation, you need to consider components of assessment for learning integrations like;

- *MLCs', assessment for learning teaching strategies selected based on the MLC,*
- *Various competency based assessment tools,*
- *Different ways of providing feedbacks and*
- *Methods of recording students' progress and others.*

Prepare a lesson plan and get remark from your instructor on your plan. Particularly, your instructor will check the integration of assessment for. When your plan is approved you will conduct the lesson in the classroom.

Note: you will get feedbacks on your presentation of the lesson from your instructor and classmates. Take a note on each comment and perform to improve them.

Section 3: Teaching about Common diseases that affect us

Learning outcomes

At the end of this section the student teacher should be able to:

- Arrange assessment for learning integrated instructional lesson on teaching about common diseases that affect us.
- Use different teaching methods to teach the content common diseases that affect us.
- Utilize diverse competency based assessment tools in teaching the content common diseases that affect us.
- Display varied feedback giving mechanisms to deliver the content common diseases that affect us.
- Manage students' assessment records and check students learning progress.

Dear student teacher!

Under this section you are going to study the skills of teaching environmental science, common diseases that affect us. Children can learn about common diseases that affect us by using them in exploring their natural environment.

Start-up Activity (Individual reflection activity)

Student teacher your instructor will write the following start-up activities on the blackboard and you will reflect what you already know about each activity to your classmates. Student teachers should reflect turn by turn.

1) Suggest at least three different teaching methods to teach the content common diseases that affect us to grade 1 child.
2) State three competency based assessment tools in teaching the content common diseases that affect us in grade 1.
3) Discuss how you provide feedback before, while and after teaching the content common diseases that affect us in grade 1.

Lesson content: Common diseases that affect us

Content: Common diseases

1.1. AIDS

1.2. Prevention of diseases

✓ Responsibility to others not to spread diseases such as colds and dysentery

Learning outcomes of the contents

Upon completion of this section students should be able to;

- name some common diseases that might affect them
- describe precautions that help to avoid these diseases

In order to help you develop different components of the teaching skills, we will prepare and present you numerous sample lessons in respective sections of the unit and throughout the course module.

Sample lesson-2

Lesson content: Common diseases that affect us

Sub lesson content: Common diseases

3. Common diseases

3.1. AIDS

3.2. Prevention of diseases

✓ Responsibility to others not to spread diseases such as colds and dysentery

Learning outcomes of the contents

Upon completion of this section students should be able to;

- name some common diseases that might affect them
- describe precautions that help to avoid these diseases

The teacher should always begin lesson preparation by identifying the content and the learning competency students are expected to achieve. Based on that the teacher will start deciding and selecting the appropriate teaching methods, assessment tools, instructional materials and ways of providing feedbacks and so on.

Total duration: 40 Minutes

Warm up Activity (Turn and Talk)

In a turn and talk, a question is posed to the class and students simply turn to the person next to them to discuss. This can serve as a comfortable way for students to share their ideas with others and set the stage for them sharing with the larger group.

The instructor doesn't need to hear all (or any) of the ideas shared– the important aspect of this strategy is for the peers to share and for individuals to access their prior knowledge about a topic. Ask students to turn to someone next to them and discuss their responses to the following question.

1) Think about diseases, and tell them to describe what diseases are using their own words.
2) Name disease that affects them.

The teacher should check as every student is involved in the turn and talk activity.

Key notes

A simple definition of disease is an "illness or sickness characterized by specific signs or symptoms"

Disease is a disordered or incorrectly functioning organ, part, structure, or system of the body resulting from the effect of genetic or developmental errors, infection, poisons, nutritional deficiency or imbalance, toxicity, or unfavorable environmental factors; illness; sickness; ailment.

Teaching strategies

The teaching strategies selected to deliver the content selected above are;

- Simulation and
- Question and answer

Activity One (Simulation)

Simulation teaching method is a creative role-play activity and is a useful tool for encouraging pupils to engage in discussion about a particular issue and to share information. In simulation children react to a specific c problem within a structured environment.

- One child is assigned to carry out a role plays as a medical doctor and define what a disease is and ask children to name some common disease that affect the children.
- The teacher will list the names mentioned by the student on the blackboard.
- In the middle of the simulation the teacher should ask questions to the children and get more ideas.

Finally, the teacher will summarize by indicating the names of disease listed by students and add other diseases missed.

Assessment approaches

Assessment for learning helps teachers gather information to:

- Plan and modify teaching and learning program for individual students, groups of students, and the class as a whole
- Pinpoint students' strengths so that both teachers and students can build on them.
- Identify students' learning needs in a clear and constructive way so they can be addressed and so on.

For students

- Provides students with information and guidance so they can plan and manage the next steps in their learning
- Uses information to lead from what has been learned to what needs to be learned next.

Assessment Activity (Thumbs up!)

Check class understanding of what they have learnt by asking them to show their thumbs. Tell them the meanings of the sign of each thumb.

Thumbs up = I understand; thumbs half way = I understand some; thumbs down = I don't understand.

Ask the following questions;

a) Can you define the word disease? What is disease?
b) Can you name some common diseases that affect you? List them.

Feedback provision mechanism and recording students' learning progress

Feedback causes thinking and provides guidance on how to improve. Effective feedback is designed to determine a learner's level of understanding and skill development in order to plan the next steps towards achieving the learning intentions or goals. Feedback in the form of comments, rather than grades, focuses on the task and includes what the student needs to do to improve. This helps students to move forward to the next stage of their learning.

Based on the assessment activities you have conducted; provide oral feedbacks to modify the teaching and learning activities in which students are engaged.

Dear learners!

Good! You have attended the sample lesson planned and conducted by your instructor. It is essential for you to recognize what teaching methods used, competency based assessment tools used, instructional methods used and the feedback giving methods used in the sample lesson presented.

Therefore, you have to learn to plan, practice and apply a variety of teaching methods, assessment tools, instructional materials and feedback provision mechanisms in your micro teaching skills.

Now, in your next micro teaching activity your instructor will allocate you one learning competency for each student and you will be given time to plan your lesson and get comments on your plan from your instructor and your classmates. Incorporate the comments given from your instructor and practice your lesson with your classmates and you will conduct a microteaching in your classes.

Practical activity: Microteaching practice (2 periods)

Dear students!

Based on the sample lesson you have observed get ready to conduct a micro teaching in the classroom. You should ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning.

Your instructor will assign one of the following learning competencies (From grade 1 environmental science subject).

Content: Common diseases

1.1. AIDS

1.2. Prevention of diseases

- ✓ Responsibility to others not to spread diseases such as colds and dysentery

Learning outcomes of the contents

Upon completion of this section students should be able to;

- name some common diseases that might affect them
- describe precautions that help to avoid these diseases

Dear student teacher!

It is time to prepare a lesson plan and get comment from your instructor on your plan. Your instructor will check the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the micro teaching in the classroom.

Note: It is very crucial to get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice with your partner to improve them.

Dear student-teachers congratulations!

You have completed your micro teaching by planning, practicing and presenting assessment for learning integrated lesson. Get comments and feedbacks (both written and oral) from your instructor and classmates as they are helpful for your future teaching improvement.

Record each feedback given or collect written feedbacks given and arrange them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Dear learner congratulations!

It is time to celebrate your successes and work on your area of improvement. Record your improvements and put a copy in your portfolio.

Section 4: Teaching about house hold materials

Dear trainee!

Under this section of your teaching your learning of teaching skill will based on the teaching about house hold materials. Similar to the first section your lesson planning, practice and presentation will centrally focus on assessment for learning integrated lesson.

In order to help you develop additional teaching strategies, use of various competency based assessment tools your instructor will present one sample lesson. Hence, you have to attend the sample lesson and get clear with each components of the lesson.

Whenever there are things you found not clear record them and ask when your instructor complete the sample lesson presentation to be familiar with each components.

Learning outcomes;

Upon completion of this section students should be able to;

- outline the conceptions and misconception in teaching house hold materials.
- distinguish specific teaching, assessment and feedback provision strategies to avoid the misconceptions.
- implement different teaching, assessment and feedback provision strategies to teach the content household materials..

Total duration: 60 Minutes

Start-up Activity: Think-Pair-Share (TPS)

1) Individually **think** what you know or have learned about the conceptions and misconception in teaching house hold materials. Write on piece of paper the conceptions and misconceptions you thought. (2 minutes). Suggest the types of teaching methods, competency based assessment tools and the feedback provision mechanisms to be used to correct the misconception through teaching. (list all strategies or techniques on piece of paper)
2) Now get together in **pairs** and talk about noted points turn by turn. (3 minutes)
3) Finally, **Share** your ideas to the whole class. Your instructor will listen and comment your ideas. Listen comments and work to improve your learning based on the comments given.

Students come into the classroom with prerequisite knowledge (existing schemas) and as they progress through their education these schemas are progressively (or sequentially) built upon.
One of the greatest privileges of being a science teacher is having the chance to remedy students' deeply held misconceptions (alternative conceptions). It is the job of the teacher to help them build more accurate understandings of these topics. However, this often requires the teacher to address some of his or her *own* misconceptions about *how to teach* the nature and process of science. Doing so can make the act of teaching the nature and process of science more effective and more fun! The following list of teaching misconceptions was developed by pre service teacher educators and researchers.

Misconception: Considering house hold materials as only kitchen materials.

Conception: House hold materials include all materials that we use for daily activities at home.

Lesson Content:

1. House hold materials

1.1. Household items

- Furniture
- Electrical equipment
- Utensils

1.2. Uses of household items

- Furniture

- Electrical equipment
- Utensils
- Safety at home; Danger of electricity, water, stove, iron, knives, etc.

1.3. Materials used to make household item

1.4. Care when using household items and cleaning them.

- Keeping safe (keeping cleaning chemicals like bleach out of reach.

The contents indicated above are found in grade 1 environmental science subject. From grade 1 environmental science syllabus the competencies for the above contents are taken and listed below.

Learning outcomes for the above contents;

Upon completion of these contents students should be able to;

- ✓ name items of furniture
- ✓ give examples of electrical equipment
- ✓ name utensils
- ✓ describe the use of some furniture
- ✓ describe the use of some electrical equipment
- ✓ describe the use of some utensils
- ✓ identify household dangers
- ✓ name common materials used to make household items
- ✓ describe how to use and care for household items
- ✓ demonstrate care for household items
- ✓ describe how to avoid household dangers

Dear student teachers carefully look at the contents and learning competencies under this section and realize their alignment.

Before we proceed to the practice of planning and doing your independent teaching on the contents under this section you will critically attend the sample lesson prepared and implemented by your instructor. Your instructor will take one competency and its content and conduct a sample lesson.

Note in preparing a lesson you need to plan. When you plan a lesson the following points should be taken into consideration.

a) ***Identifying the content and competency.***
b) ***Use of varieties of teaching methodology.***

c) ***Application of different assessment tools.***

d) ***Use of instructional materials.***

e) ***Ways of provision feedback.***

To help you attain the required skills of teaching science your instructor will present you the second sample lesson. Here, your role is to seriously attend the lesson presentation and learn the flow of the lesson components (start up activities, communication of learning competencies to the students teaching methodology used, instructional materials used, competency based assessments used and how feedbacks are given to the learner).

You can look at the following to see each components of the planed lesson.

Sample Lesson 3

Content: Households materials

Sub contents: Households items

Learning outcomes;

Upon completion of this sub content students should be able to;

- name items of furniture.

Total duration: 40 Minutes

Brain storming activity (oral questioning)

1) Students do you know what household materials? What are they? Raise your hand and explain what household materials are.
2) Students now name some of the things in your homes.
3) Can you describe what household items are?
4) Now each of you should get ready to give at least one example of household items.

Ask the students to list household items found in their home and also ask them to identify ways in which we use furniture. Direct their suggestions towards items of furniture, electrical equipment and utensils. Summarize by identifying common items of furnitures.

Teaching Methodology: - Presentation and Guided Practice

Activity One (Presentation)

Ask pupils to describe the name of items of furniture from their households. Following students' response describe household items and present the idea by showing the pictures or photographs of the items of household furniture.

In the middle of the presentation present oral questions to the class and individually ask each student to list at least one house hold item from furniture, electrical equipments and utensils.

Describe also house **hold items are classified** into;

a) Furniture

b) Electrical equipments and

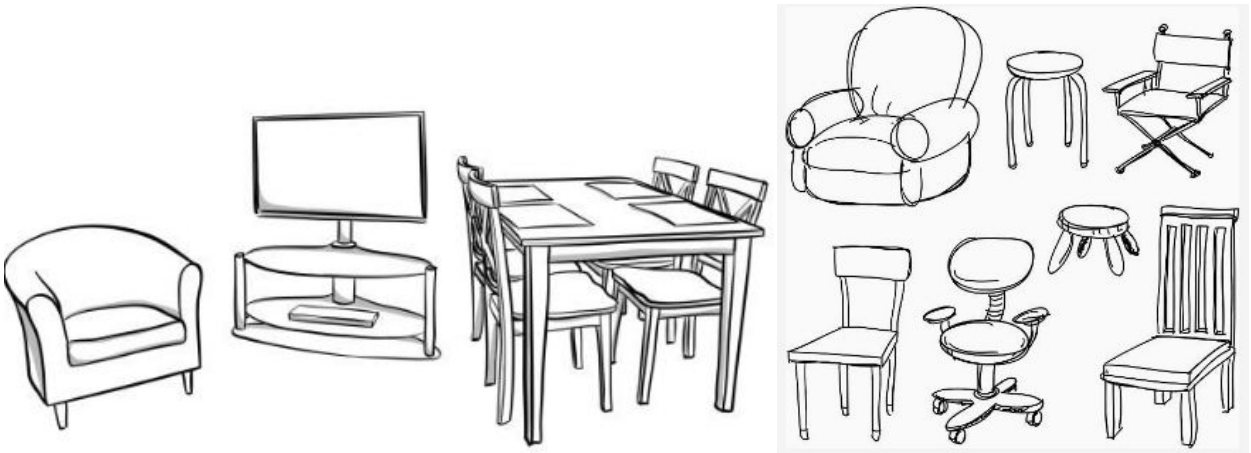
c) Utensils

Household goods are products that we buy and use within our homes. They usually represent all our personal property.

Household goods are also described as products that members of the household buy and use within their home.

Examples include kitchenware, furniture, clothing, bedding, tools, beds, blankets, towels, books, dressers, chairs, clothes, computers, cooking utensils, sofas, dishes,, entertainment centers, fans, freezers, , hand tools, irons and ironing boards, lamps, table, mattresses, medical equipment,, mirrors, pillows, pots and pans, refrigerators, sewing machines radios, tables, towels, toys, televisions and umbrellas.

The followings are some lists of household furniture items. Furniture includes objects such as tables, chairs, beds, desks, dressers, and cupboards. These objects are usually kept in a house or other building to make it suitable or comfortable for living or working in.



Summarize your presentation by naming different house hold furniture to the students.

Activity Two (Guided Practice)

Ask the students to take randomly one picture of household furniture items from the different picture of items placed on the table in the classroom and **name** it in front of the classroom. The instructor should guide the practice by telling the procedure of the activity.

At each step children should get clear feedback and correction.

Resource needed: Picture or photograph containing different household furnitures, 10 piece of picture of individual household furniture, 8-10 pieces of pictures of electrical equipment, and 8-10 pieces of pictures of household utensils.

Assessment strategies

Dear student teachers as you know assessment is central to the teaching and learning process in the classroom, not only to measuring student achievement and progress but also improves students' learning and progress. To conduct effective assessment in your teaching you need always to consider the following key points.

- ✓ **Select methods** for assessing learners' knowledge skill and attitude
- ✓ **Prepare assessment tools**
- ✓ **Develop questions for objectives**, written/practical examinations
- ✓ **Administer** and **score** assessments
- ✓ **Use** assessment **results to improve** performance
- ✓ **Design formats for low-literacy learners**

Assessment Activity One (Sorting activity)

1. Students will be given different piece of pictures of house hold items. Then you will look at each piece of picture and name it. After naming you will sort them into two categories **'household furniture item'** and '**NOT house hold furniture item'**.
2. Students will carefully listen to the comments given by the instructor or classmates and write the comments and work to improve them.

Assessment Activity Two (Home Work)

Students will be given a homework task to complete at home for the next class.

1) Ask them to listen and instruct them the following.
2) When they go to home they have to see each household item and try to name them.

3) For the next class they should select **ten household furniture items** from their home and name them orally and practice this at home. They will orally name ten household furniture items in the classroom.

When they name household items in the classroom the teacher will listen and if household items that are not furniture are included the teacher will correct by telling their types.

Providing effective Feedbacks

Quality feedback is viewed as a fundamental aspect in the use of assessment for learning. Teacher feedback about student learning is essential for students and integral to teaching, learning and assessment. Feedback can clarify for students:

- how their knowledge, understanding and skills are developing in relation to the syllabus outcomes and content being addressed.
- how to improve their learning.

Feedback enables students to recognize their strengths as well as areas for development, and to identify and plan with their teacher the next steps in their learning. Students should be provided with opportunities to improve their knowledge, understanding and skills through feedback that:

- is timely, specific and related to the learning and assessment intention
- is constructive and provides meaningful information to students about their learning in a variety of forms
- focuses on the activity and corrects misunderstandings
- identifies and reinforces students' strengths
- provides information about how they can improve
- facilitates the development of and provides opportunities for self-assessment and reflection during the learning process
- informs future teaching and learning opportunities.

Feedback can occur at any point in the teaching, learning and assessment cycle. It may:

- include regular teacher–student dialogue to guide student learning
- focus on particular knowledge, understanding and skills related to content, and/or processes applied to an activity.

Students may benefit from opportunities to self-assess, self-monitor and make judgments about their work in relation to standards and should be provided with regular opportunities to reflect on their learning.

Therefore, the teacher in his teaching should provide feedback based on the above discussions. Specifically, the feedbacks should be given at different stages of instruction timely and should indicate what students do well and what they need to improve and how they can improve it.

Based on the feedbacks to check and follow students learning progress we can use different styles of record keeping of students learning.

Recording evidence for assessment may take a variety of forms, including individual comments or notations, marks, grades, conversations, digital recordings and/or audio or visual representations.

Recording evidence:

- ✓ needs to be manageable
- ✓ may be formal and/or informal
- ✓ should focus on student progress in relation to outcomes, particular strengths and areas for improvement.

You can use the foolowing format to give feedback to your learners and can also help you to follow students learning progress.

Student's Name:	
Date of class conducted:	
Competency:	
Level of Achievement of competency: ***(Not Yet achieved, Approaching, Achieved or Exceeding***)	
Specific, constructive feedback***:(What the student is doing right and what he/she needs to improve and how he/she can improve should be described)***	
Evidence of students learning improvement or achievement of learning competency:	

After completing the presentation of a sample lesson in the classroom the instructor will conduct an assessment to check student teachers learning. The instructor will use ***focused discussion and quick Write*** assessment methods.

i. Focused discussion

Based on the sample lesson presented your instructor will ask you a variety of open-ended questions on the skill of teachings you should acquire at this stage of your learning. You are

expected to reflect freely and inform what you can perform and what you need to improve. The questions to be raised for discussion focus on;

- ***Application of different teaching methods*** for teaching science.
- ***Organization different MLC based activities***
- ***Application of competency based assessments*** in teaching environmental science
- ***Use of feedback provision*** mechanisms to help students improve their learning
- Recording students' progress.

ii. Quick Write

Your instructor will give you 5 minutes to write a brief writing activity to reflect on and summarize your learning. Therefore, write what you can do confidently and what you need to improve regarding your teaching skills. Depending on the analysis result of the students' assessment the teacher will decide whether to proceed to individual peer teaching or add one more sample lesson presentation to help you improve your identified gaps.

Dear students!

Now it is your turn to prepare assessment for learning integrated lesson as the sample presented under the content list of family members by your instructor. In doing so, you need to consider components of assessment for learning integrations like **MLCs**', **assessment for learning teaching strategies selected based on the MLC**, **competency based assessment tools**, **ways of providing feedbacks** and **methods of recording students' progress**.

Practical activity: Microteaching practice (4 periods)

Dear students!

Individually, you will ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning as the sample lesson presented previously.

The following contents (contents from grade 1 environmental science subject) will be shared to you.

Lesson Content:

1. House hold materials

1.1. Household items

- ***Furniture (Sample lesson prepared and presented by the instructor)***
- Electrical equipment
- Utensils

1.2. Uses of household items

- Furniture
- Electrical equipment
- Utensils
- Safety at home; Danger of electricity, water, stove, iron, knives, etc.

1.3. Materials used to make household item

1.4. Care when using household items and cleaning them.

- Keeping safe (keeping cleaning chemicals like bleach out of reach.

You will prepare a lesson plan with your partner and get comment from your instructor on your plan. Especially, your instructor will check the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the lesson in the classroom.

Note: It is very crucial to get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice with your partner to improve them.

Learning outcomes for the above contents of your microteaching;

Upon completion of these contents students should be able to;

- ✓ name items of furniture
- ✓ give examples of electrical equipment
- ✓ name utensils
- ✓ describe the use of some furniture
- ✓ describe the use of some electrical equipment
- ✓ describe the use of some utensils
- ✓ identify household dangers
- ✓ name common materials used to make household items
- ✓ describe how to use and care for household items
- ✓ demonstrate care for household items
- ✓ describe how to avoid household dangers

Dear student-teachers congratulations!

You have completed the second round micro teaching by planning, practicing and presenting assessment for learning integrated lesson. You have received comments and feedbacks (both written and oral) for your future teaching improvement.

Compare your first round teaching and second round teaching and identify the strength and weakness of both round teaching and attach your evaluation with your portfolios. To improve the weaknesses you identified consult your instructors and work accordingly for their improvement.

Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

A portfolio is a way to document your professional journey and demonstrate your skills and abilities. It can be a collection of your work and accomplishments in either a physical or digital format.

Section 5: Teaching about the five sense organs

Dear student teacher!

This is the fourth section of practicing and applying teaching your learning of teaching skill. You will apply the different components of teaching in a specific lesson; teaching about the five sense organs. Children can learn about the five sense organs by using them in exploring their natural environment. Children must learn to use their senses and handle things, which is a good opportunity to ask them to deal with risk. It is essential that they are safe at all times but that they are given opportunities to consider what they are doing and are encouraged to consider the risks involved, not simply the threats to their own safety but also the safety of others.

We can teach children important science process skills like observing and exploring using the five senses. Using words to describe what is seen, felt, heard, smelled, and (if appropriate) tasted. Notice details. Guide students break things into parts. Name and describe the parts. Draw what they see and label parts of the drawing can be a good strategy in dealing with the five sense organs. To help children achieve the above mentioned skills we have to think about and use appropriate teaching strategies, assessment tools, and feedback giving mechanism and so on.

Learning outcomes;

At the end of this section students should be able to;

- Implement different teaching strategies to teach about the content the five sense organs.
- Apply various assessment tools and teach the content the five sense organs and
- Provide appropriate feedback after teaching the content the five sense organs.

Total duration: 50 Minutes

Brainstorming activity: Pair discussion

Tell students to be in pair and write the following question on the blackboard and ask them to discuss in pair. When they complete their pair discussion invite one of the pair to present their points to the class. After you listen and comment the idea of some pair discussion proceed to your next activity.

1) Describe different teaching methods to teach about the sense organ to a grade 1 child.
2) What are competency based assessment (CBA) tools? Which types of CBA tools can be used in teaching the above content?
3) How you provide feedback before, while and after teaching the above content?

Lesson Content:

2. The five sense organs

2.1. Names of sense organs

2.2. The general function of sense organs

2.3. general function of sense organs

- The eyes
  - Seeing light sources
  - Identify color
- The ears
  - Identifying common sounds
- The tongue
  - The taste of common substances
- The nose
  - Function of the nose
  - The smell of common substances

Learning outcomes for the above contents

After the of these contents students should be able to;

- name the five sense organs
- explain the function of sense organs
- identify common sources of light
- identify at least seven colors
- make relevant observations using the sense of sight
- identify common sources of sound
- make relevant observations using the sense of hearing
- describe the tastes of common substances
- make relevant observations using the sense of taste
- describe the smells of some common substances as pleasant or unpleasant
- make relevant observations using the sense of smell

Dear learner!

Remember! The contents and the learning competencies are aligned. Check it.

As in the previous sections, after attending the sample lesson in this section also you will conduct independent micro teaching. Hence, the sample lessons will assist you to practice the planning and implementing your independent teaching.

Sample Lesson 4

2. The five sense organs

2.1. Names of sense organs ***(already presented as sample lesson by your instructor)***

2.2. The general function of sense organs

2.3. **G**eneral function of sense organs

- The eyes
  - Seeing light sources
  - Identify color
- The ears
  - Identifying common sounds
- The tongue
  - The taste of common substances
- The nose
  - Function of the nose
  - The smell of common substances

Learning outcomes for the above contents

After the of these contents students should be able to;

- name the five sense organs ***(already presented as sample lesson by your instructor)***
- explain the function of sense organs
- identify common sources of light
- identify at least seven colors
- make relevant observations using the sense of sight
- identify common sources of sound
- make relevant observations using the sense of hearing
- describe the tastes of common substances
- make relevant observations using the sense of taste
- describe the smells of some common substances as pleasant or unpleasant
- make relevant observations using the sense of smell

Warm up activity (Students explanation)

Bring a picture showing the external body parts into the classroom and ask children to name the external body parts they have studied under the first unit of section one. Tell what human sense organs mean. Then, ask children to tell you which of the external body parts are named as sense organ.

Teaching Methodology: - Flash card Game and Guided Practice

We can teach children important science process skills like observing and exploring using the five senses. Using words to describe what is seen, felt, heard, smelled, and (if appropriate) tasted. Notice details.

Activity One (Flash card game)

Flash Cards: Flash cards with images of sense organs can incorporate a visual element in the classroom while helping students learn the five sense organs.

Put the flash card to students with group five students. The flash cards should contain images of five sense organs. Then each of the five students will take one flash card and try to name it. When all the five students complete naming the flash card, they will put them again and turning them upside down. Again they will take one flash card and name it to the group. This game will continue three times. The teacher will rotate and check whether each student is engaged in the game or not. Summarize your presentation by naming the five sense organs to the students.

It is also important to guide students locate the different sense organs by displaying a chart of the human sense organs like the one indicated below.

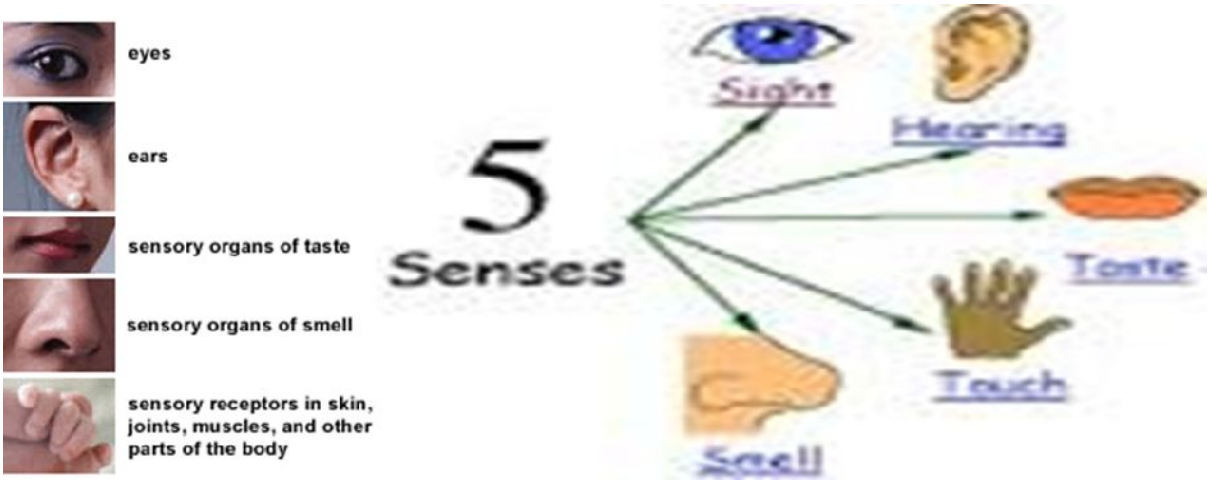


Figure 1. The Human sense organs

Activity Two (Guided Practice)

Guide students to follow you showing five sense organs and naming them. Your will say there are five sense organs these are;

- Eye (touch your eye)
- Nose
- Ear
- Tongue
- Hand and

When you call the sense organs you should touch them. Children should practice this many times with your guidance.

Resource needed: Picture of external body parts, Flash card game

Using instructional materials enables students to learn faster, remember longer, and helps them to understand. As is in our daily lives, variety is always attractive. Instructional materials can provide us varieties of learning opportunities by helping students move about, talk, laugh, question, comment upon, and in other ways act in a natural manner as they do outside the classroom.

Assessment strategies

Dear student teachers you were assessing students at their different stages of learning. Now you have to check the achievement of learning competency by applying appropriate assessment strategy.

Assessment Activity (Presentation)

Call each student in front of students and ask them to name the five sense organs by showing each sense organ. When students present correctly you should praise them and when there are students who don't carry out the task call another student and allow them to do the task together.

Providing effective Feedbacks

Based on the information collected above indicate what students do well and what they need to improve and how they can improve it.

Recording students' progress

Based on the feedbacks to check and follow students learning progress you can use different approaches of record keeping of students learning.

The following form can be used to record students' feedback and can also help you to follow students learning progress.

Student's Name:	
Date of class conducted:	
Competency:	
Level of Achievement of competency: ***(Not Yet achieved, Approaching, Achieved or Exceeding***)	
Specific, constructive feedback***:(What the student is doing right and what he/she needs to improve and how he/she can improve should be described)***	
Evidence of students learning improvement or achievement of learning competency:	

Practical activity: Microteaching practice (5 periods)

Dear students!

Your instructor assign you one competency and individually, you will ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning as the sample lesson presented previously.

Lesson Content:

3. The five sense organs

3.1. Names of sense organs ***(already presented as sample lesson by your instructor)***

3.2. The general function of sense organs

3.3. **G**eneral function of sense organs

- The eyes
  - Seeing light sources
  - Identify color
- The ears
  - Identifying common sounds
- The tongue
  - The taste of common substances
- The nose
  - Function of the nose
  - The smell of common substances

Learning outcomes for the above contents;

After the of these contents students should be able to;

- name the five sense organs ***(already presented as sample lesson by your instructor)***
- explain the function of sense organs
- identify common sources of light
- identify at least seven colors
- make relevant observations using the sense of sight
- identify common sources of sound
- make relevant observations using the sense of hearing
- describe the tastes of common substances
- make relevant observations using the sense of taste
- describe the smells of some common substances as pleasant or unpleasant
- make relevant observations using the sense of smell

You will prepare a lesson plan and get comment from your instructor on your plan. Especially, your instructor will check the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the lesson in the classroom.

Note:

Get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice more to improve them.

Dear student-teachers!

You have completed your section 4 micro teaching by planning, practicing and presenting assessment for learning integrated lesson. You have received comments and feedbacks (both written and oral) for your future teaching improvement.

Compare your previous round teaching with this one and identify the strength and weakness of both round teaching and attach your evaluation with your portfolios. To improve the weaknesses you identified consult your instructors and work accordingly for their improvement.

Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 6: Teaching about hygiene, health and diet

Dear learners!

This is the last section of the first unit. The section will also create you an exposure on different components of teaching in a specific lesson; teaching about hygiene, health and diet.

Learning outcomes;

Upon completion of this section students should be able to;

- Apply different teaching strategies to teach about the content the five sense organs.
- Use various assessment tools and teach the content the five sense organs and
- utilize appropriate feedback after teaching the content the five sense organs.

Total duration: 50 Minutes

Brainstorming activity: Oral questioning

Answer the following question orally.

1) What are the different teaching methods to teach about hygiene, health and diet to a grade 1?
2) Which types of competency based assessment tools can be used in teaching the above content?
3) How you provide feedback before, while and after teaching the above content?

Lesson Content:

3. Teaching about hygiene, health and diet

3.1. We are healthy!

- What is health?

3.2. Importance of good health.

- It is normal to be happy and unhappy
- Respect and responsibility for disabled and sick people

3.3. Comparison of healthy and sick people.

- Concern and caring for sick people

3.4. Symptoms of sickness

3.5. What should we do when we feel these symptoms***?***

3.6. We keep our personal hygiene

- ✓ Why do we keep our hygiene?
- ✓ What can happen to other people if we don't keep clean?
- ✓ Diseases caused due to poor hygiene
- ✓ AIDS as a disease passed by blood.
- ✓ If somebody has an accident, tell an adult immediately
- ✓ Practicing personal hygiene
- ✓ Showing responsibility for the health of others

Learning outcomes for the above contents;

After the of these contents students should be able to;

- define health as physical and social wellbeing
- explain the importance of being healthy
- compare the features of a sick person with a healthy person
- explain the importance of helping sick people
- state some symptoms of sickness

- appreciate the importance of telling others when they experience the symptoms of sickness
- explain the importance of good hygiene
- name some diseases caused by poor hygiene
- state that AIDS can be passed on by blood contact
- demonstrate proper personal hygiene

Dear learner!

You have attended more than three sample lesson demonstrated by your instructor. We hope you have also conducted micro teaching. By now you have an experience and skill of teaching children by applying the concept of assessment for learning, which primarily focus on the improvement of students learning.

Under this section your instructor will assign you one of the above learning competency and their corresponding contents. You will prepare a lesson plan under the supervision of your instructor.

Get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice more to improve them. Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Science teaching by analogies strengthens scientific knowledge and avoids common misconceptions. Analogous to a 'fuel', food provides the body with the energy needed to carry out life processes. Besides, it's important to help primary school children that, food is important during the growing years as a source of raw material for building our bodies, and even after we stop growing is still vital as the body is continually repairing itself.

We should guide students that the food we eat is composed of different nutrients helpful to give us energy, growth and to stay healthy. Human diet is the food we eat having these essential nutrients. In teaching human diet it is essential to demonstrate sample of the foods having the different nutrients. Besides to this it can also be useful to use chart of the common human diet.

One common misconception about food is that primary students may believe the only reason why we eat food is to get energy. Analogous to a 'fuel', food provides the body with the energy needed to carry out life Processes. Pupils can forget, however, that many nutrients carry out additional functions within the body. After proteins and fats in the diet have been digested and absorbed into the blood they are often reassembled into new protein and fat molecules that build our body.

Thus, food is important during the growing years as a source of raw material for building our bodies, and even after we stop growing is still vital as the body is continually repairing itself due to loss of cells during everyday wear and tear, and illness.

Furthermore, carbohydrates (e.g. from fruits, bread, rice, sugar) are normally broken down into glucose by the body for use as the 'fuel' in respiration, providing energy, although if eaten in excessive amounts become converted into body fat and stored under the skin. The same outcome ensues when an excess of dietary fat is consumed. Minerals can similarly become integrated into bodily structures, such as calcium in bones and teeth; vitamins are important for certain chemical reactions inside the body.

Figure 2. Foods rich in carbohydrates, fats, proteins and vitamins

Reflective Activity

Answer the following self-reflection activities for each microteaching you have conducted and put it in your portfolio.

1) How effective was your planning of learning? Example; the lesson plan, the structure of the session, making the session inclusive. What impact did this have on the learners / learning?
2) Consider your microteaching and write specifically what did you do in detail in your microteaching.
3) Think about your microteaching and specify what you wanted to achieve?
4) Consider your microteaching and write briefly what you thought was successful. (Reflect on your lesson planning, teaching methods, competency based assessment used, instructional materials, feedbacks and recording students' learning progress.
5) Think about your microteaching and write in brief on What you feel was not so successful and how you would correct it when teaching similar things (Reflect on your lesson planning, teaching methods, competency based assessment used, instructional materials, feedbacks and recording students' learning progress.
6) Were you able to effectively judge attainment and achievement through the assessment methods you chose? How?

UNIT TWO: TEACHING ABOUT OUR FAMILY AND COMMUNITY

Unit Introduction

Dear Students!

In unit one you have studied about the conception and misconceptions on diet and different strategies , competency based assessment, instructional materials, alignment of different activities with minimum learning competency and provision of feedback on teaching the contents ourselves, our external body parts, Basic needs, common diseases that affect us, the five sender organs and diets.

Under this unit you will have more practice on different aspects teaching environmental science in lower grades about our family and community. Particularly, you will get an exposure on designing and presenting assessment for learning integrated lesson and get feedbacks from your instructors for the enrichments of your skills to become an effective and experienced teacher.

To help you improve your teaching skills, sample lessons on selected sub contents are presented to you and your instructor will demonstrate how the sample lessons are implemented in the actual classrooms.

This unit consists of five sections. The first section is about family members and their basic needs, the second is about house hold materials, the third is about members of the community and living in the community, the fourth unit is about source of energy for our community and the last section is about making objects.

Finally, we will strongly advise you to practice the preparation, implementation and evaluation of your assessment for learning integrated lesson and acquire the knowledge, attitude and skills of science teaching in lower grades.

2.1. Unit Objectives

At the end of this unit students should be able to;

- Understand the conceptions and misconceptions of our family and community.
- Know the different strategies used in teaching contents under this unit.
- Distinguish the different types of competency based assessment tools for teaching the contents mentioned under this unit.
- Demonstrate assessment for learning integrated lesson on the content our family and community.
- Demonstrate scientific enquiry skills along the unit: Observing, questioning, communicating, working cooperatively and classifying.

Section 1: Teaching about family members & their basic needs

Dear student- teachers!

Under this section you will recognize different teaching strategies or techniques, competency based assessment tools, instructional materials to be used, ways of providing constructive feedbacks and how students learning progress is recorded for teaching about family members and acquire the appropriate skills for your future teachings. Before proceeding to the learning process read each of the following minimum learning competencies (MLCs') carefully and get yourself ready for the achievement of them.

Learning outcomes;

Upon completion of this section students should be able to;

- realize conceptions and misconception of family members.
- identify specific teaching, assessment and feedback provision strategies to avoid the misconceptions.
- apply different teaching, assessment and feedback provision strategies to teach environmental science contents.

Pre-Lesson Assessment (Individual Activity and presentation)

1. Use two different spider diagrams and indicate the possible conception in one of the spider diagram and the misconceptions on the other on the content our family members.
2. Think about the conception and misconceptions on the above content and try to suggest appropriate teaching strategies, instructional materials, assessment tools and feedback provision mechanisms to be used to deliver the content and deal with the conceptions.
3. When you complete the above activities on a paper your instructor will ask student teachers to present their work to the class, by then you will present and comments will be given on each presentation for enrichment of ideas.

Dear student teachers note the following point!

When teachers provide instruction on concepts in various subjects, they are teaching students who already have some pre-instructional knowledge about the topic. These erroneous understandings are termed alternative **conceptions** or **misconceptions** (or intuitive theories). Teachers should prepare the environment to help each child build on what they already know and ensure the achievement of appropriate conceptual knowledge.

For example when a teacher presents instruction on the content our family members the following possible misconceptions and conceptions are identified.

Lesson content: Our family members	
Misconceptions	***Conceptions***
✓ Regarding family members as father, mother brother & sister.	✓ Family members are those who live in one house hold together.

For elementary school children, teaching about families is an important part of making sense of the world and their relationship to it. Many students in primary grades are realizing for the first time that their family might look different from someone else's.

Now your instructor will prepare a ***sample lesson*** on how the content our family to demonstrate how instruction is provided using play and game. Through play children can develop social and cognitive skills, mature emotionally, and gain the self confidence required to engage in new experiences and environments.

Lesson content:

1. Family members and their basic needs

1.5. List of family members.

1.6. Respect for elders and extended family.

1.7. What do our family members do for their living.

1.8. Keeping good relationships with other family members.

1.9. Food

- Sources of food
- Crop products
- Common crops

1.10. Clothing

- Types of clothing
- Materials used to make clothes

1.11. Shelter

- Types of shelter
- Building materials

Once the lesson content is identified, we need to find out the learning competencies from the syllabus (The copy of syllabus is annexed at the end of the module). The following competencies are identified from grade 1 environmental science subject syllabus document.

Learning Outcomes

At the end of the above lesson students should be able to;

- List their family members.
- State the occupation of their family members.
- Demonstrate helpfulness, kindness and responsibility to other family members.

The sample lesson provides you a framework that will help students talk about their own and others' families in safe, caring ways. The sample lesson makes use of artistic outlets and play methods to help children both construct and learn language for asking about other families and talking about their own.

Before directly proceeding to the demonstration of sample lesson content look the arrangements of contents and sub contents and the minimum learning competencies of the identified contents. Here, from the above contents the sub content family members is selected to deliver a sample lesson.

Sample Lesson-5

Lesson sub content: List of family members

Learning outcomes;

At the end of this lesson students should be able to;

- List their family members.

Total duration: 80 Minutes

Brainstorming Activity (Individual task)

When you use a brainstorming activity you will select a topic, question, statement or issue and write this on the board. You need also to set up the rules for the brainstorm as shown below;

- share whatever comes to mind

- the more ideas the better
- every idea counts – no answer is wrong
- no 'put downs' or criticisms
- build on others' ideas
- write ideas as said – no paraphrasing
- record each answer unless it is a repeat
- set a time limit and stop when that time is up.

Students consider the topic and respond. Ideas can be written randomly on the board and have students cluster the responses after the brainstorm.

Read and discuss the recorded ideas and clarify any questions where necessary. Discuss the remaining ideas as a group and decide how the information can be further used.

1) The teacher should first ask children to think about the meaning of family and decide the total number of their family.
2) Now ask students to tell the meaning of family they have given and how many family members they have identified.
3) The teacher should comment on their answer and enable them to properly describe what a family is.

The teacher should provide feedback which focus on the attainment of MLC and tell the students ***what they have achieved and where they need to improve***.

Teaching strategies

A key element to consider is 'learning through play', or 'playful learning', which is central to quality children pedagogy and education.

Based on the sub content and the identified minimum learning competencies the teacher should think and select teaching strategies used to convey the lesson.

In your general methodology course (TECS- 112) you have studied different strategies and assessment techniques.

But, in science teaching particularly in lower grades the strategies selected should allow children to play and learn. Play is one of the most important ways in which young children gain essential knowledge and skills.

Some of the strategies recommended in teaching science for children in lower grade include;

Inquiry-based Learning

- Observing
- Measuring
- Classifying
- Inferring
- Hypothesizing
- Engaging
- Predicting
- Explaining
- Communicating

Cooperative learning

- Mixed ability
- Small group discussion
- Enhanced critical thinking

Problem solving

Guided practice

Field trip

Role play

Guided Inquiry

Demonstration

Explanation

Mind map

Writing and Reading science

Reflection

Observation

Selected teaching strategies for the above content selected

The selected strategies to teach **list of family members** are;

- **Strategic Questioning and answering**
- **Presentation**
- **Songs**

Activity One (Oral questioning and answering)

1. The teacher asks the following MLC based oral question to students.
   - ***Students orally list your family members. Now the teacher should compare the number of list of the family members answered by each student with the total number of families they have counted under the start up activity.***
   - ***When there is a difference students should be asked to explain why they give different answers.***

Activity Two (Presentation and Song)

1) Based on activity one present the lesson by using the resource and clearly checking the misconception and conceptions of the members of a family.
   - ✓ Family members are those who live in one house hold together.

Picture 3: Family members

2) Ask students to tell you how many family members are found in the picture presented to the classroom.
3) Now sing the song which lists the family members and ask students to sing the song with you and finally let them to sing the song two wise. Check who is singing the song and who is not doing it.

Resources Needed: Pictures or posters indicating family members and Response card

Assessment strategies

Assessment is an essential component of the teaching and learning process. Assessment for, assessment as & assessment of learning are approaches that enable teachers to gather evidence and make judgments about student achievement.

Assessment for learning is any assessment for which the first priority in its design and practice is to serve the purpose of promoting pupils' learning. It thus differs from assessment designed primarily to serve the purposes of accountability, or of ranking, or of certifying competence.

An assessment activity can help learning if it provides information to be used as feedback, by teachers and by their pupils in assessing themselves and each other, to modify the teaching and learning activities in which they are engaged.

In AFL-focused classrooms, students:

- are fully aware of their learning objectives and expected learning outcomes
- play an important role in managing their own learning
- are provided with plenty of practice opportunities to work towards the learning goals.

Teachers promote learning through:

- delivering formative feedback
- identifying students' strengths and weaknesses
- showing them what they can do to close the gap between their current performance and desired performance

In AFL, active student involvement is crucial –as students have to learn for themselves. It is important for teachers to engage students in self-assessment so that they understand their own strengths and weaknesses in learning, come up with strategies to help themselves improve learning, and take responsibility for their own learning. Through assessing their own learning, students will be able to set goals to further their learning.

The assessment strategies to the content selected include;

- ✓ Ask students to reflect
- ✓ Response cards
- ✓ Misconceptions check (Present students with common or predictable misconceptions about members of a family. Ask them whether they agree or disagree and to explain why.)
- ✓ Practice frequency (Check for understanding when students sing a song based on the list of their family members.)

Assessment Activity One (Ask students to reflect)

1) Individually ask students to list all their respective family members. The teacher and the rest of the classroom students should listen to the reflection of each individual student.

Feedback/comment should be given and should focus on achievement of MLC (able to list their family members) and tell students what they have achieved and where they need to improve.

Assessment Activity Two (Response Card)

1. Notify children how they can use the response card given to them briefly. Now ask them if they can list their member of a family.
   - Can you list the members of your family? **Yes/No**
2. Family members are father, mother brother & sisters ONLY. **Agree/Disagree** (Children should explain the why question)

Assessment Activity Three (Practice frequency)

1) Now students are expected to sing a song based on their list of family members (Don't forget our target MLC!). They should sing the song at least two wise. Encourage them to repeat the song while they are at home and playing and so on.
2) When there are students facing challenges to sing a song the teacher should sing together to help children sing.

As it is well known what matters most is not so much the form of the assessment, but how the information gathered is used to improve students' learning. Feedbacks were given at different stages of students learning to help student attain the required minimum learning competency.

While conducting the competency based assessment if students are identified who didn't yet achieved the minimum learning competency constructive feedback (Feed forward) should be given and it should indicate **what to improve** and **how it can be improved.**

In keeping record for feedbacks different ways can be used. The followings are some of the formats that could be used for record keeping of feedbacks given.

Statement of MLC

- ✓ List their family members.

S.No	Student's Name	Level of achievement				Constructive Feedback given
		Not yet Meeting	Approaching/ Developing	Meeting/ Achieved	Exceeding	
1.	Mulugeta Teshome	√				
2.	Yeheyis Dejene			√		
3.	Habtamu Abera		√			
4.	Debebe Biftu			√		
5.	Tadesse Hailu				√	

After putting into practice the above sample lesson in the classroom the instructor will conduct an assessment on the clarity of each components of the lesson delivered. The instructor can use the following assessment methods.

a) Traffic lights card

Give student-teachers red, yellow and green cards. Ask them to choose a card and show it to you to show how much they understand (Red = don't understand, Yellow = partly understand, Green = totally understand). You will ask the following questions.

1) Do you clearly identify the source of ***MLC for the content*** to be taught?
2) Are you able to select ***different teaching strategies or techniques*** for teaching natural science based on the given MLC?
3) Can you ***organize different activities*** based on the selected strategies for teaching natural science contents in lower grades?
4) Are you able to use ***different competency based assessments*** in teaching environmental science?
5) Can you apply ***different feedback provision*** mechanisms to help students improve their learning?

6) Can you use different record keeping format to record students learning progress?

b) Post-it

Use post-it notes to evaluate your learning. Give to groups, pairs or individuals the following questions written separately on a piece of paper and ask them to answer questions and post it on the wall.

- ✓ What have I learnt from the sample lesson presented?
- ✓ What have I found easy from the lesson presented by the instructor?
- ✓ What have I found difficult from the sample lesson presented?
- ✓ What do I want to know now?

Collect the information gathered from the above two different assessment and make analysis of the information and use it to improve students' learning.

Depending the analysis result of the students assessment decide whether to proceed to the next activity (pairing students to perform micro teaching to practice the planning, conducting and practicing assessment for learning integrated contents in the classroom and get an intensive feedbacks for further improvements of your teaching skill which validate students learning) or add one more additional sample lesson preparation and presentation to help improve the gaps indentified in students learning.

Dear students!

It is your turn now to prepare assessment for learning integrated lesson as the sample presented under the content list of family members by your instructor. In doing so, you need to consider components of assessment for learning integrations like **MLCs**', **assessment for learning teaching strategies selected based on the MLC**, **competency based assessment tools**, **ways of providing feedbacks** and **methods of recording students' progress**.

Practical activity: Microteaching practice (10 periods)

Dear students!

Your instructor will assign every student in the classroom and form a pair of two students to ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning as the sample lesson presented previously.

The following contents (contents from grade 1 environmental science subject) will be shared to you.

1. **Family members and their basic needs**

1.5. ***List of family members***. ***(Sample lesson prepared and demonstrated by the instructor)***

1.6. Respect for elders and extended family.

1.7. What do our family members do for their living.

1.8. Keeping good relationships with other family members.

1.9. Food

- Sources of food
- Common crops
- Crop products

1.10. Clothing

- Types of clothing
- Materials used to make clothes

1.11. Shelter

- Types of shelter
- Building materials

Learning Outcomes;

At the end of the above lesson students should be able to;

- List their family members.
- State the occupation of their family members.
- Demonstrate helpfulness, kindness and responsibility to other family members.

You will prepare a lesson plan with your partner and get comment from your instructor on your plan. Especially, your instructor will check the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the lesson in the classroom.

Note: It is very crucial to get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice with your partner to improve them.

Dear student-teachers congratulations!

You have completed the first round micro teaching by planning, practicing and presenting assessment for learning integrated lesson. You have received comments and feedbacks (both written and oral) for your future teaching improvement. Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

A portfolio is a way to document your professional journey and demonstrate your skills and abilities. It can be a collection of your work and accomplishments in either a physical or digital format.

Section 2: Teaching about house hold materials

Dear learners!

Under this section of your teaching your learning of teaching skill will based on the teaching about house hold materials. Similar to the first section your lesson planning, practice and presentation will centrally focus on assessment for learning integrated lesson.

In order to help you develop additional teaching strategies, use of various competency based assessment tools your instructor will present one sample lesson. Hence, you have to attend the sample lesson and get clear with each components of the lesson.

Whenever there are things you found not clear record them and ask when your instructor complete the sample lesson presentation to be familiar with each components.

Learning outcomes;

Upon completion of this section students should be able to;

- outline the conceptions and misconception in teaching house hold materials.
- distinguish specific teaching, assessment and feedback provision strategies to avoid the misconceptions.
- implement different teaching, assessment and feedback provision strategies to teach the content household materials..

Total duration: 60 Minutes

Start-up Activity: Think-Pair-Share (TPS)

1. Individually **think** what you know or have learned about the conceptions and misconception in teaching house hold materials. Write on piece of paper the conceptions and misconceptions you thought. (2 minutes). Suggest the types of teaching methods, competency based assessment tools and the feedback provision mechanisms to be used to correct the misconception through teaching. (list all strategies or techniques on piece of paper)
2. Now get together in **pairs** and talk about noted points turn by turn. (3 minutes)
3. Finally, **Share** your ideas to the whole class. Your instructor will listen and comment your ideas. Listen comments and work to improve your learning based on the comments given.

Students come into the classroom with prerequisite knowledge (existing schemas) and as they progress through their education these schemas are progressively (or sequentially) built upon.

One of the greatest privileges of being a science teacher is having the chance to remedy students' deeply held misconceptions (alternative conceptions). It is the job of the teacher to help them build more accurate understandings of these topics. However, this often requires the teacher to address some of his or her *own* misconceptions about *how to teach* the nature and process of science. Doing so can make the act of teaching the nature and process of science more effective and more fun! The following list of teaching misconceptions was developed by pre service teacher educators and researchers.

Misconception: Considering house hold materials as only kitchen materials.

Conception: House hold materials include all materials that we use for daily activities at home.

Lesson Content:

2. House hold materials

2.1. Household items

- Furniture
- Electrical equipment
- Utensils

2.2. Uses of household items

- Furniture
- Electrical equipment
- Utensils
- Safety at home; Danger of electricity, water, stove, iron, knives, etc.

2.3. Materials used to make household item

2.4. Care when using household items and cleaning them.

- Keeping safe (keeping cleaning chemicals like bleach out of reach.

The contents indicated above are found in grade 1 environmental science subject. From grade 1 environmental science syllabus the competencies for the above contents are taken and listed below.

Learning outcomes for the above contents

Upon completion of these contents students should be able to;

- ✓ name items of furniture
- ✓ give examples of electrical equipment
- ✓ name utensils
- ✓ describe the use of some furniture
- ✓ describe the use of some electrical equipment
- ✓ describe the use of some utensils
- ✓ identify household dangers
- ✓ name common materials used to make household items
- ✓ describe how to use and care for household items
- ✓ demonstrate care for household items
- ✓ describe how to avoid household dangers

Dear student teachers carefully look at the contents and learning competencies under this section and realize their alignment.

Before we proceed to the practice of planning and doing your independent teaching on the contents under this section you will critically attend the sample lesson prepared and implemented by your instructor. Your instructor will take one competency and its content and conduct a sample lesson.

Note in preparing a lesson you need to plan. When you plan a lesson the following points should be taken into consideration.

a) Identifying the content and competency.

b) ***Use of varieties of teaching methodology.***

c) ***Application of different assessment tools.***

d) ***Use of instructional materials.***

e) ***Ways of provision feedback.***

To help you attain the required skills of teaching science your instructor will present you the second sample lesson. Here, your role is to seriously attend the lesson presentation and learn the flow of the lesson components (start up activities, communication of learning competencies to the students teaching methodology used, instructional materials used, competency based assessments used and how feedbacks are given to the learner).

You can look at the following to see each components of the planed lesson.

Sample Lesson-6

Content: Households materials

Sub contents: Households items

Learning outcome;

Upon completion of this sub content students should be able to;

- name items of furniture.

Total duration: 40 Minutes

Brain storming activity (oral questioning)

5) Students do you know what household materials? What are they? Raise your hand and explain what household materials are.
6) Students now name some of the things in your homes.
7) Can you describe what household items are?
8) Now each of you should get ready to give at least one example of household items.

Ask the students to list household items found in their home and also ask them to identify ways in which we use furniture. Direct their suggestions towards items of furniture, electrical equipment and utensils. Summarize by identifying common items of furniture.

Teaching Methodology: - Presentation and Guided Practice

Main Teaching

Activity One: Presentation

Ask pupils to describe the name of items of furniture from their households. Following students' response describe household items and present the idea by showing the pictures or photographs of the items of household furniture.

In the middle of the presentation present oral questions to the class and individually ask each student to list at least one house hold item from furniture, electrical equipments and utensils.

Describe also house **hold items are classified** into;

d) Furniture

e) Electrical equipments and

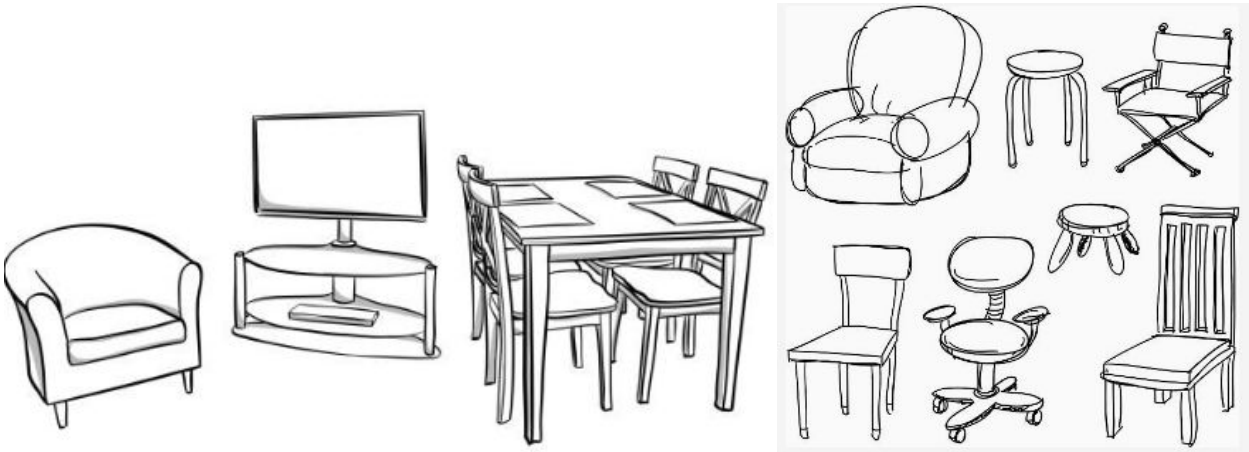
f) Utensils

Household goods are products that we buy and use within our homes. They usually represent all our personal property.

Household goods are also described as products that members of the household buy and use within their home.

Examples include kitchenware, furniture, clothing, bedding, tools, beds, blankets, towels, books, dr essers, chairs, clothes, computers, cooking utensils, sofas, dishes,, entertainment centers, fans, freez ers, , hand tools, irons and ironing boards, lamps, table, mattresses, medical equipment,, mirrors, pillows, pots and pans, refrigerators, sewing machines radios, tables, towels, toys, televisions and umbrellas.

The followings are some lists of household furniture items. Furniture includes objects such as tables, chairs, beds, desks, dressers, and cupboards. These objects are usually kept in a house or other building to make it suitable or comfortable for living or working in.



Summarize your presentation by naming different house hold furnitures to the students.

Activity Two (Guided Practice)

Ask the students to take randomly one picture of household furniture items from the different picture of items placed on the table in the classroom and **name** it in front of the classroom. The instructor should guide the practice by telling the procedure of the activity.

At each step children should get clear feedback and correction.

Resource needed: Picture or photograph containing different household furnitures, 10 piece of picture of individual household furniture, 8-10 pieces of pictures of electrical equipment, and 8-10 pieces of pictures of household utensils.

Assessment strategies

Dear student teachers as you know assessment is central to the teaching and learning process in the classroom, not only to measuring student achievement and progress but also improves students' learning and progress. To conduct effective assessment in your teaching you need always to consider the following key points.

- ✓ **Select methods** for assessing learners' knowledge skill and attitude
- ✓ **Prepare assessment tools**
- ✓ **Develop questions for objectives**, written/practical examinations
- ✓ **Administer** and **score** assessments
- ✓ **Use** assessment **results to improve** performance
- ✓ **Design formats for low-literacy learners**

Assessment Activity One :Sorting activity

3. Students will be given different piece of pictures of house hold items. Then you will look at each piece of picture and name it. After naming you will sort them into two categories **'household furniture item'** and '**NOT house hold furniture item'**.
4. Students will carefully listen to the comments given by the instructor or classmates and write the comments and work to improve them.

Assessment Activity Two: Home Work

Students will be given a homework task to complete at home for the next class.

4) Ask them to listen and instruct them the following.
5) When they go to home they have to see each household item and try to name them.
6) For the next class they should select **ten household furniture items** from their home and name them orally and practice this at home. They will orally name ten household furniture items in the classroom.

When they name household items in the classroom the teacher will listen and if household items that are not furniture are included the teacher will correct by telling their types.

Providing effective Feedbacks

Quality feedback is viewed as a fundamental aspect in the use of assessment for learning. Teacher feedback about student learning is essential for students and integral to teaching, learning and assessment. Feedback can clarify for students:

- how their knowledge, understanding and skills are developing in relation to the syllabus outcomes and content being addressed.
- how to improve their learning.

Feedback enables students to recognize their strengths as well as areas for development, and to identify and plan with their teacher the next steps in their learning. Students should be provided with opportunities to improve their knowledge, understanding and skills through feedback that:

- is timely, specific and related to the learning and assessment intention
- is constructive and provides meaningful information to students about their learning in a variety of forms

- focuses on the activity and corrects misunderstandings
- identifies and reinforces students' strengths
- provides information about how they can improve
- facilitates the development of and provides opportunities for self-assessment and reflection during the learning process
- informs future teaching and learning opportunities.

Feedback can occur at any point in the teaching, learning and assessment cycle. It may:

- include regular teacher–student dialogue to guide student learning
- focus on particular knowledge, understanding and skills related to content, and/or processes applied to an activity.

Students may benefit from opportunities to self-assess, self-monitor and make judgments about their work in relation to standards and should be provided with regular opportunities to reflect on their learning.

Therefore, the teacher in his teaching should provide feedback based on the above discussions. Specifically, the feedbacks should be given at different stages of instruction timely and should indicate what students do well and what they need to improve and how they can improve it.

Based on the feedbacks to check and follow students learning progress we can use different styles of record keeping of students learning.

Recording evidence for assessment may take a variety of forms, including individual comments or notations, marks, grades, conversations, digital recordings and/or audio or visual representations.

Recording evidence:

- ✓ needs to be manageable
- ✓ may be formal and/or informal
- ✓ should focus on student progress in relation to outcomes, particular strengths and areas for improvement.

You can use the foolowing format to give feedback to your learners and can also help you to follow students learning progress.

Student's Name:	
Date of class conducted:	
Competency:	
Level of Achievement of competency: ***(Not Yet achieved, Approaching, Achieved or Exceeding***)	
Specific, constructive feedback***:(What the student is doing right and what he/she needs to improve and how he/she can improve should be described)***	
Evidence of students learning improvement or achievement of learning competency:	

After completing the presentation of a sample lesson in the classroom the instructor will conduct an assessment to check student teachers learning. The instructor will use ***focused discussion and quick Write*** assessment methods.

iii. Focused discussion

Based on the sample lesson presented your instructor will ask you a variety of open-ended questions on the skill of teachings you should acquire at this stage of your learning.

You are expected to reflect freely and inform what you can perform and what you need to improve. The questions to be raised for discussion focus on;

- ***Application of different teaching methods*** for teaching science.
- ***Organization different MLC based activities***
- ***Application of competency based assessments*** in teaching environmental science
- ***Use of feedback provision*** mechanisms to help students improve their learning
- Recording students' progress.

iv. Quick Write

Your instructor will give you 5 minutes to write a brief writing activity to reflect on and summarize your learning. Therefore, write what you can do confidently and what you need to improve regarding your teaching skills.

Depending on the analysis result of the students' assessment the teacher will decide whether to proceed to individual peer teaching or add one more sample lesson presentation to help you improve your identified gaps.

Dear students!

Now it is your turn to prepare assessment for learning integrated lesson as the sample presented under the content list of family members by your instructor. In doing so, you need to consider components of assessment for learning integrations like **MLCs**', **assessment for learning teaching strategies selected based on the MLC**, **competency based assessment tools**, **ways of providing feedbacks** and **methods of recording students' progress**.

Practical activity: Microteaching practice (4 periods)

Dear students!

Individually, you will ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning as the sample lesson presented previously.

The following contents (contents from grade 1 environmental science subject) will be shared to you.

Lesson Content:

2. House hold materials

2.1. Household items

- ***Furniture (Sample lesson prepared and presented by the instructor)***
- Electrical equipment
- Utensils

2.2. Uses of household items

- Furniture
- Electrical equipment
- Utensils
- Safety at home; Danger of electricity, water, stove, iron, knives, etc.

2.3. Materials used to make household item

2.4. Care when using household items and cleaning them.

- Keeping safe (keeping cleaning chemicals like bleach out of reach.

You will prepare a lesson plan with your partner and get comment from your instructor on your plan. Especially, your instructor will check the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the lesson in the classroom.

Note: It is very crucial to get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice with your partner to improve them.

Learning outcomes for the above contents of your microteaching;

Upon completion of these contents students should be able to;

- ✓ name items of furniture
- ✓ give examples of electrical equipment
- ✓ name utensils
- ✓ describe the use of some furniture
- ✓ describe the use of some electrical equipment
- ✓ describe the use of some utensils
- ✓ identify household dangers
- ✓ name common materials used to make household items
- ✓ describe how to use and care for household items
- ✓ demonstrate care for household items
- ✓ describe how to avoid household dangers

Dear student-teachers congratulations!

You have completed the second round micro teaching by planning, practicing and presenting assessment for learning integrated lesson. You have received comments and feedbacks (both written and oral) for your future teaching improvement.

Compare your first round teaching and second round teaching and identify the strength and weakness of both round teaching and attach your evaluation with your portfolios. To improve the weaknesses you identified consult your instructors and work accordingly for their improvement.

Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 3: Teaching about members of community & living in the community

Dear learners!

We hope you have successfully completed the first two sections of learning teaching skills of science. By now you are able to use different methods of teaching science subjects, apply different assessment tools to help improve students' learning and achievements and organizing competency based questions and so on.

This section focuses on teaching about members of a community and living in the community. This section will also create you an exposure to develop additional teaching strategies; use of various competency based assessment tools your instructor will present one sample lesson. Hence, you have to attend the sample lesson and get clear with each components of the lesson.

Learning Outcomes;

Upon completion of this section students should be able to;

- outline the conceptions and misconception in teaching members of a community and living in the community.
- distinguish specific teaching, assessment and feedback provision strategies to avoid the misconceptions.
- implement different teaching, assessment and feedback provision strategies to teach environmental science contents.

Total duration: 60 Minutes

Warm-up Activity: Oral presentation

1. Student teachers now individually think about:
   - The **misconception and conception** of teaching about members of community and living in the community.
   - The **various methods of teaching appropriate** to teach about members of community and living in the community.
   - Different **competency based assessment tools** applied to teach about members of community and living in the community.
   - Variety of **ways for providing feedback** (feed forward) on teaching about members of community and living in the community and ***present the key points orally*** to the classroom.

After your presentation the instructor will provide you oral feedbacks on your presentation that will help you to see what you have done well and what you need to improve and how it can be improved. So, take each feedback and use them properly.

Concepts can be considered as ideas, objects or events that help us understand the world around us. Misconceptions, on the other hand can be described as ideas that provide an incorrect understanding of such ideas, objects or events that are constructed based on a person's experience including such things as preconceived notions, nonscientific beliefs, naïve theories, mixed conceptions or conceptual misunderstandings.

It is necessary to underline that a misconception is not a mistake and it does not stem from lack of knowledge (Abayneh, 2012; Kind, 2004; Taber, 2002). Rather, misconception is the understanding of a concept in a wrong or missing way. If a student has a misconception, his/her conception is not true or missing whereas it is true for himself/herself. Although it is wrong, it works for the student (Abayneh, 2012; Taber, 2002; Yasin, 2004).

Lesson sub content: Members of community	
Misconceptions	***Conceptions***
✓ Considering community as the whole society	✓ Communities are group of people who are bind by common goals.
Lesson sub content: Living in the community	
Misconceptions	***Conceptions***
✓ Ignoring their responsibility.	✓ …….. and responsibilities are parts and parcel.

The content member of community and living in the community is found in grade 2 environmental science subject on the second unit. The sub contents under section three are copied from the syllabus and help you in your micro teachings. You can find the contents and the learning competencies in the syllabus of grade 2 environmental science.

Lesson Content: Our community

3. Our community

3.1. Members of our community

- Member of the community.
- To which group of the community do we belong?
- What makes you feel that you belong in your community?
- What rights do we have?
  - ✓ Rights of the child
  - ✓ Violation of child right
  - ✓ Protection of child right
  - ✓ Practical action to take and who to talk to if there is a problem.

3.2. Living in the community

- Planning daily activities
  - ✓ Drawing a day or week planner
- Self management skills
- Participating in community activities
  - ✓ Working in clubs, environmental clubs, girls club, etc.

Learning competencies for the above contents are taken from the syllabus document and help you to conduct your micro teaching.

Learning Outcomes:

Upon completion of these contents students should be able to;

- ✓ classify members of their community based on age.
- ✓ categorize themselves as children within the community.
- ✓ state some rights of the child.
- ✓ give examples of how the rights of the child may be violated.
- ✓ suggest ways of protecting the rights of the child.
- ✓ practice planning their daily activities.
- ✓ practice planning their daily activities.
- ✓ demonstrate self management skill for their own level.
- ✓ show willingness to participate in community activities required by their age level.

Dear student teachers!

Have you seen the alignment of earning competencies with the contents in the above lists?

So far, under this unit you have attended two sample lessons presented by your instructors with different the applications of various teaching methods, competency based assessment tools, different feedback giving mechanisms and so on.

Under this section also another sample lesson will be presented to enable you become a good science teacher who is equipped with various methods of teaching, numerous assessment tools and a range of feedback giving strategies.

Sample Lesson-7

Content: Member of our community

Sub contents: Members of the community

Learning outcome;

Upon completion of this sub content students should be able to;

- Classify members of their community based on age.

Total duration: 40 Minutes

Brain storming activity (Predicting)

1.Ask children to predict what community means?

2. Invite children to predict the classification of member of their community based on age. Give children clue for their prediction. For example, take one family as an example and ask them their prediction depending the age of their family members.

This start up activity will help the teacher to identify the prior knowledge and experience.

Teaching Methodology: - Presentation, Small group and Field Trip

Activity One: Presentation

Present the definition of community. You should tell what a community is with appropriate pace of students understanding. Use a picture indicating classifications of members of their community based on age.

Ask pupils to describe the different classes of members of the community based on age to the class. The different class of member of the community based on age can be categorized into four groups. These are:

1) Babies
2) Young adults
3) Middle-aged adults and
4) Old adults.

Activity Two: Small Group Discussion

Divide the class into groups of four students. Assign one student as a chair person who can lead the discussion. Provide groups with one of the following questions. (One question for one small group will be given).

1) What is a community?
2) Who are members of the community?
3) List the different classes of members of a community based on age.

You should follow and facilitate the group discussion. Tell as groups report back and class discussion follows. When groups present their ideas the teacher comments on their presentation and appreciate their success and indicate what they have to improve and how they can improve it.

Resource needed: Picture or photograph showing the classification of members of the community based on age.

Assessment strategies

The assessment methods planned to be used include **choral response** and **talk partner**

Assessment Activity One (Choral Response)

1. Ask the class students to tell the different class of members of the community based on age. After listening students' answers the teacher should comment on them.

Assessment Activity Two (Talk Partner)

1. Now students will be asked to talk to one partner turn by turn what they have learnt about:
   - The meaning of community
   - Classes of members of community based on age.(Tell them orally until all the pair get clear what to do.)

The teacher will check the entire partner what each pair is doing and talking about and gather information on how well each child is learnt. Use the information gathered to help improve children learning.

Providing effective Feedbacks

Based on the assessment conducted the teacher should point what students need to improve their learning and clearly indicate how it can be improved.

Dear learners!

Good! Now you have attended the lesson planned and conducted by your instructor for the third time. It is important to perceive as the teaching methods used, the competency based assessment tools used, the instructional methods used and the feedback giving methods are not the same throughout the lesson presented.

Therefore, you have to learn to plan, practice and apply a variety of teaching methods, assessment tools, instructional materials and feedback provision mechanisms in your teaching skills.

In the next micro teaching activity your instructor will allocate you one learning competency for each student and you will be given time to plan your lesson and get comments on your plan from your instructor and your classmates. Incorporate the comments given from your instructor and practice your lesson with your classmates and you will conduct a micro teaching in your classes.

Practical activity: Microteaching practice (4 periods)

Dear students!

Based on the sample lesson you have observed get ready to conduct a micro teaching in the classroom. You should ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning.

Your instructor will assign one of the following learning competencies (From grade 2 environmental science subject).

Lesson Content:

3. Our community

3.1. Members of our community

- Member of the community.
- To which group of the community do we belong?
- What makes you feel that you belong in your community?
- What rights do we have?
  - ✓ Rights of the child
  - ✓ Violation of child right
  - ✓ Protection of child right
  - ✓ Practical action to take and who to talk to if there is a problem.

3.2. Living in the community

- Planning daily activities
  - ✓ Drawing a day or week planner
- Self management skills
- Participating in community activities
- Working in clubs, environmental clubs, girls club, etc.

Learning Outcomes:

Upon completion of these contents students should be able to;

- ✓ classify members of their community based on age.
- ✓ categorize themselves as children within the community.
- ✓ state some rights of the child.
- ✓ give examples of how the rights of the child may be violated.
- ✓ suggest ways of protecting the rights of the child.
- ✓ practice planning their daily activities.
- ✓ practice planning their daily activities.
- ✓ demonstrate self management skill for their own level.
- ✓ show willingness to participate in community activities required by their age level.

Prepare a lesson plan and get comment from your instructor on your plan. Especially, your instructor will check the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the lesson in the classroom.

Note:

It is fundamental to get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and work to improve them in your next micro teaching.

Dear learner congratulations!

It is time to celebrate your successes and work on your area of improvement. Record your improvements and put a copy in your portfolio.

Section 4: Teaching about sources of energy for our community

Dear learners!

This section focuses on teaching about sources of energy for our community. It will also create you an exposure to develop additional teaching strategies, use of various competency based assessment tools, how feedbacks could be given based on the assessment conducted and ways of recording students' progress.

Here your instructor will select one student teacher who can present the sample lesson planed in this part of the module and the student teacher will present it to the classroom. Hence, you have to attend the sample lesson and get clear with each components of the lesson.

Learning Outcomes;

At the end of this section students should be able to;

- Implement various teaching methods to teach about sources of energy for our community.
- Use different assessment tools to teach about sources of energy for our community.
- Demonstrate diverse feedback provision strategies to teach about sources of energy for our community.

Total duration: 70 Minutes

Warm-up Activity: Oral Question

- Student teachers answer the following questions orally.

1) What are the various **methods of teaching appropriate** to teach about on teaching about sources of energy for our community?
2) List different **competency based assessment tools** that can be used to teach about sources of energy for our community.
3) What instructional materials can be utilized for teaching sources of energy for our community?
4) How do you provide **feedback** (feed forward) on teaching about sources of energy for our community? Listen the feedback given by your instructor on your answers.

The sub contents and the learning competencies are located in grade 2 environmental science. In this grade environmental science subject syllabus both sub contents and learning competencies are clearly indicated. For the purpose of practicing and developing your teaching skill the sub contents and learning competencies are indicated below.

Lesson Content: Source of energy for our community

4. **Our community needs energy**
   - **4.1.** The need for energy
   - **4.2.** Sources of energy

Use the following learning competencies for the above contents to conduct your micro teaching.

Learning Outcomes:

At the end of these contents students should be able to;

- explain the importance of energy to their community.
- name sources of energy

Dear learners!

Check the alignment of earning competencies with the contents in the above lists. As the main objective of the course is to enable you become an effective teacher who is capable of applying the different components of assessment for learning we will provide you frequent practice opportunities.

Hence, in this section one sample lesson will be accomplished. One learning competency is taken from the above learning competencies and the way the sub content is taught is indicated in detail in the following part. Now your instructor will assign one student teacher who will present the sample lesson. The selected student teacher will prepare him/her self in consultation with the instructor and conduct the lesion in the classroom.

Sample Lesson-8

Content: Source of energy for our community

Subcontents: Our community needs energy

Learning Outcome;

Upon completion of this sub content students should be able to;

- explain the importance of energy to their community.

Total duration: 40 Minutes

Warm-Up activity (questioning answering)

1) The teacher questions and observes students in order to assess student's current understanding and to adapt teaching to meet student's needs. You can ask the whole class.
   - What is energy?
   - What do you think about the importance of energy to our community?
2) Listen carefully their answers and identify their level of prior knowledge and understanding about the meaning and importance of energy to our community. When there are answers to be corrected correct them immediately.

Teaching Methodology: - Presentation and Questioning and answering

Activity: Presentation and questioning and answering)

Tell the definition of energy and write it on the blackboard. The definition should be short and include the key points of the word energy. In short terms try to explain the importance of energy. When explaining the importance repeat the importance and confirm as children are attending your lesson.

In the middle of your presentation, ask questions and listen to their answers.

- What is energy?
- List the importance of energy.

Depending students answer the teacher should provide Specific and clear feedback helps learners to understand and evaluate what they have done to meet the criteria so far and what they need to do next. Children are encouraged to become reflective, curious learners, confident in assessing their own and others' progress, knowing that they will be supported in their next steps to achieve the learning competency set.

What is Energy?

Energy is essential to life and all living organisms. The sun, directly or indirectly, is the source of all the energy available on Earth. We can define energy as the strength to do any kind of physical activity.

The simplest definition of energy is "the ability to do work". Energy is how things change and move. It's everywhere around us and takes all sorts of forms. It takes energy to cook food, to drive to school, and to jump in the air.

There are many different forms of energy, including

- Heat
- Light
- Motion
- Electrical
- Chemical
- Gravitational

Energy comes in many different forms and we use it in many ways. In this section, we will show you why we need energy, the history of how we learned to change energy from one form to another, and some of the characteristics of energy.

Why We Need Energy?

Energy is an essential part of our daily lives!

We use energy to heat and cool our homes, schools, and businesses. We use energy for lights and appliances. Energy makes our vehicles go, planes fly, boats sail, and machines run.

All living things need energy too. Plants use the light from the sun to grow. Animals and people eat the plants and use the energy that was stored. Food is fuel for our bodies' energy needs like muscle power.

We also use our own bodies to make heat energy. When you have been running or working really hard, your body produces heat energy. When you wear clothing like a jacket in the winter, it holds in that heat energy and keeps you warm.

Assessment strategies

Peer and self-assessments are the assessment tools to be used here to gather information about how well students have learned the materials and achieved the learning competency. Peer and self-assessment are ways of engaging children in understanding their progress in learning and identifying next steps in their learning that can be used in addition to oral and written feedback from teachers and practitioners. The aim is to involve children in the analysis and constructive

criticism of their own work. They are important additional forms of assessment which engage children in becoming self- critical and independent.

Assessment Activity One: Peer Assessment

In **peer assessment methods** classmate evaluates peer work as compared to a set criteria; rubric, checklist, etc.

Ask the class students to be in pair and perform the following tasks.

One student will ask the following question and the other will give answer. In turn the other students will ask & the peer will answer. Write the questions on the blackboard.

- Describe the importance of energy?

The teacher should listen the peer assessment and identify children who need support and work to help improve their learning.

Assessment Activity Two: Self Assessment

In **self assessment methods** students evaluate their own work as compared to a set criteria; rubric, checklist, etc.

Now you will write competency based question and ask children to think the answer for the question provided. When they complete their answer write the correct answer (as a rubric) on the blackboard and read it to them. Tell them to compare their answer with the answer written on the blackboard and ask them what they found.

Providing effective Feedbacks

Based on the assessment conducted the teacher should point what students need to improve their learning and clearly indicate how it can be improved.

Self Reflection Activity

After the completion of the lesson presentation ask student teacher to conduct self reflection in his/her overall teaching performance.

Student teacher can use the following self evaluation questions.

1) What were I most pleased about?
2) What do I need more help with?
3) What did I find difficult?
4) What did I already know about it?
5) What did I find easy?
6) What helped I move on to learn something new?

Dear learners!

Good!

Now you have seen a sample lesson presented by a student teacher. We hope you have identified the strength and areas that need to be improved. You should share the strong side of the lesson and suggest which area has to be improved and how they can be improved.

You are expected to share the good skills and learn how you can improve the weak sides of the different lessons you have observed.

Practical activity: Microteaching activity (4 periods)

Dear students!

Good! Now get ready to conduct a micro teaching in the classroom. You should ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning.

Your instructor will assign one of the following learning competencies (From grade 2 environmental science subject).

Lesson Content: Source of energy for our community

4. Our community needs energy

4.1. The need for energy (Sample lesson is already presented by assigned student teacher).

4.2. Sources of energy

Use the following learning competencies for the above contents to conduct your micro teaching.

Learning Outcomes:

At the end of these contents students should be able to;

- explain the importance of energy to their community. ***(Already taken)***
- name sources of energy

Dear learner congratulations!

It is time to celebrate your successes and work on your area of improvement. Record your improvements and put a copy in your portfolio. Don't forget to conduct an assessment on your different steps of teaching.

Section 5: Teaching about making objects

This section is the last part of the unit and deals with making simple objects.

Dear learner the following competences describe the skills and knowledge you have to apply and enable you successfully perform your actual teaching when you become a teacher. So, look at them and work to achieve them in your learning process.

Learning Outcomes;

Upon completion of this section students should be able to;

- Implement various teaching methods to teach about making objects.
- Use different assessment tools to teach about making objects.
- Demonstrate diverse feedback provision strategies to teach about making objects.

Total duration: 60 Minutes

Brainstorming Activity: Questioning answering

1) Ask student teachers to answer the following questions;
   a) **What types of teaching methods do you think appropriate** to teach about making objects for teaching children learning in grade 2?
   b) Suggest **competency based assessment tools** applied to teach about making objects for teaching children learning in grade 2.
   c) Mention variety of **ways for providing feedback** applied to teach about making objects for teaching children learning in grade 2.

The content and sub contents under this section are taken from grade 2 environmental science subject on the second unit. This is because these sub contents are located in TES-201course.

Lesson Content: Making Objects

5. Making Objects

5.1. Making objects from clay or plastics and paper

- Sketching
- Decorations
- Models

The following learning competencies for the above contents are taken from the syllabus document and help you to conduct your micro teaching.

Learning Outcomes;

At the end of these contents students should be able to;

- ✓ draw rough sketches of models
- ✓ use glue, tape and stitches for joining materials to make simple decorations from paper
- ✓ make simple models from clay, plastic or paper

Dear student teachers!

Under this section also another sample lesson will be presented to enable you become an effective science teacher who can ensure students learning by applying various methods of teaching, numerous assessment tools and a range of feedback giving strategies.

Sample Lesson-9

Content: Making Objects

Sub contents: Making objects from clay or plastics and paper

Learning Outcomes;

Upon completion of this sub content students should be able to;

- ✓ draw rough sketches of models.

Total duration: 40 Minutes

Teaching Methodology: - Oral questioning, cooperative learning & practical work

Activity One (Oral questioning and Cooperative learning)

The learning competency is to enable children to draw rough sketches of models. Therefore, when we ask questions they should be based on the learning competency. Ask the following oral question;

- What is rough sketch of model? (Students may not answer this question)
- Put a rough sketch model prepared earlier in front of the class and ask children to discuss what the rough sketch of model describe and try to draw a rough sketch they have

observed. Children are encouraged and motivated to help one another to learn (rather than being in competition with one another) and that they are dependent on the efforts of one another to achieve success. They are also responsible for the learning of both themselves and the group. The teacher should move around the class to check each students work.

Activity Two (Practical work)

1) Provide each student with one A-4 size paper and ask them to draw one rough sketches of any model they are interested in.
2) Observe the effort of children and encourage and support them to help them draw one rough sketch. Comment on their selection not to be too difficult.

Resource needed: rough sketch of model, pencil color, white paper, Chair

Assessment strategies

Practical task is the assessment methods planned to be used.

Assessment Activity One (Practical task)

1. Ask children to draw a rough sketch of the model of chair they are observing in front of them in the classroom.
2. Collect their paper and check their work intensively. If you find a child/children who don't perform as per the learning competency arrange another time and work with them until they improve the skill required.

Providing effective Feedbacks

You have collected and checked students work and commented it. For children who achieved the stated competency encouragement should be given with additional tasks. For those who don't perform well you should identify each student's level of achievement of learning competency and support accordingly. Your feedback should enable to enhance children's learning.

Dear learners!

You have attended the second sample lesson planned and presented by a student teacher.

It is important to perceive as the teaching methods used, the competency based assessment tools used, the instructional methods used and the feedback giving methods are not the same throughout the lesson presented.

You are expected to share the good skills and learn how you can improve the weak sides of the different lessons you have observed and conduct the next micro teaching in your classes.

Practical activity: Microteaching practice (4 periods)

Dear students!

Based on the sample lesson you have observed get ready to conduct a micro teaching in the classroom. You should ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning.

Your instructor will assign one of the following learning competencies (From grade 2 environmental science subject).

Lesson Content: Making Objects

5. Making Objects

5.1. Making objects from clay or plastics and paper

- Sketching
- Decorations
- Models

The following learning competencies for the above contents are taken from the syllabus document and help you to conduct your micro teaching.

Learning Outcomes;

At the end of these contents students should be able to;

- ✓ draw rough sketches of models
- ✓ use glue, tape and stitches for joining materials to make simple decorations from paper
- ✓ make simple models from clay, plastic or paper

Reflective Activity

Answer the following self-reflection activities for each microteaching you have conducted and put it in your portfolio.

1) How effective was your planning of learning? Example; the lesson plan, the structure of the session, making the session inclusive. What impact did this have on the learners / learning?

_____

_____

2) Consider your microteaching and write specifically what did you do in detail in your microteaching.

_____

_____

3) Think about your microteaching and specify what you wanted to achieve?

_____

_____

4) Consider your microteaching and write briefly what you thought was successful. (Reflect on your lesson planning, teaching methods, competency based assessment used, instructional materials, feedbacks and recording students' learning progress.

_____

_____

5) Think about your microteaching and write in brief on What you feel was not so successful and how you would correct it when teaching similar things (Reflect on your lesson planning, teaching methods, competency based assessment used, instructional materials, feedbacks and recording students' learning progress.

_____

_____

6) Were you able to effectively judge attainment and achievement through the assessment methods you chose? How?

_____

_____

_____

UNIT THREE: TEACHING OF OUR NATURAL ENVIRONMENT

Unit Introduction

Dear trainees, welcome to the third unit of the module. In unit two you have been skilled how different science contents are planned and taught by applying different teaching strategies, competency based assessment tools, using instructional materials, feedback is given to students and recording students learning progress. You have also conducted micro teaching in different lessons from grade grades 1 and 2 environmental science student textbooks in order to get familiarity with the contents and to get insight on the method of teaching them. This unit deals with the teaching about our natural environment. You will learn about natural phenomenon, natural resources and how these contents are planned and delivered by integrating assessment for learning. Under this unit you will also plan and conduct lesson on the subcontents of the content under this unit. The activities require collaborative learning; therefore, you should effectively work with your partners in class as well as outside the class.

3.1 Unit Objective: -

At the end of the lesson the students should be able to be;

- Used different teaching strategies to teaches about the contents of school compounds
- Apply various competencies based on assessments tools for teaching contents
- Implements different feedback provision mechanism for teaching the contents of school
- Prepare lesson plane based on learning competencies
- Apply various competencies based on assessments tools for teaching contents and sub content of school compounds.
- Organize the students learning progress records
-

Dear Learners, in this topic you will be able to recognize different types of competence based assessment strategies, and teaching learning methods to conduct for different lesson as well as to provide specific feedback and record the student progress in order to cheek or evaluate the attainment of the learning competency.

Before proceeding to what the contents our school compound is and how they can be taught we need to be familer with the minimum learning competencies and get clear what is expected of us.

Learning Outcomes;

Upon completion of this section students should be able to:-

- ✓ apply different teaching, assessment and feedback provision strategies to teach environmental science contents

Pre- lesson Assessments (Brainstorming)

- ☞ From day to day school life experiences the students think individually about meaning of school compounds and
- ☞ the teacher asks the students " where are now ,the students response, in the class room
  The teacher appreciate the students, next, therefore, what do you mean school compounds?

Dear student teacher!

You have been arealdy pre-instructional knowledge about the general methods of teaching and assessment. Students in lower grades may have misconception about school compounds. Hence, teachers should create opportunity to help each child build up on what they already know and to ensure the achievement of appropriate conceptual knowledge, attitude and skill.

Leson content: Our natural environment

1.school and our school compounds

1.1 Layout and content of the school compound

- o Explanation of how to use toilet or latrine
- o Explanation of how to wash their hands

1.2 Activities that go on at school

1.3 Getting on with other children at play

1.4 We respect rules and regulations

2. School rules

2.1 Rules at home and neighborhood

- o Respect for others at home, school and neighborhood

2.2 We have good personal relationship

2.3 Road safety

2.4 Common road accidents

2.5 Prevention of common road accidents

2.6 Road safety code

- Helping others (smaller children, disabled people

2.7 Activities we can do in our school

2.8.Constructing figures using paper

- kite
- wind turbine

The above contents are contents indicated in your teaching environmental science-I (TES-201) course. These contents are also indicated in grade one environmental science subject unit three which is about our school compound. This indicates that in this course you are expected to acquire the different skills of planning a lesson, selecting and utilizing different teaching methods, apply various competency based assessment tools in teaching the contents indicated in the syllabus.

The learning competencies for the contents indicated can be obtained from the syllabus document of grade one environmental science subject.

Learning Outcomes:-

After completing this section, the students will be able to:

- describe their school compound
- explain the activities of their school
- explain who they play with, what they play at, and how they make friends
- demonstrate respect for school rules
- d demonstrate good relationships at school
- demonstrate respect for rules at home and neighborhood
- express willingness to conform to good personal relationships at home and neighborhood
- describe some causes of road accidents
- explain how road accidents may be prevented
- practice crossing the road safely and assisting others to cross
- construct kites and wind turbines using paper

To help you develop appropriate teaching skills such as planning a lesson through integration of assessment for learning, applying different teaching methods, use various competency based assessment tools and so on we will present you sample lesson which can be an example of AfL integrated lesson. You have to work constantly and improve your limitations and become a professional teacher.

Dear learner! Give due attention and check the alignment of contents and learning competencies indicated above.

Sample Lesson-10

Lesson contents: school compounds

Learning Outcomes:-

At the end of the Lesson the students should be able to:

- describe their school compound

Total time duration: **40 Minutes**

Brainstorming activity: Oral questioning

i. First ask child to think and tell you about the meaning of school compounds.
ii. Ask children to tell you orally about materials or objects found in the school compound.
iii. Listen their ideas and ask them to describe school compound based on the objects they have listed.

Feedback will only become useful if they are used to guide further work or 'close the learning gap', and if the teacher checks that past 'next steps' have been met.

In the previous two sections you have conducted microteaching using different teaching strategies, assessments techniques, instructional materials and feedback giving mechanisms. A number of sample lessons are prepared to enrich your practical skills of teaching. In each steps of your microteaching reflect on your teaching for further improvements.

Teaching Resources: School map, photograph or picture of a school compound

Teaching methods

In order to deliver the content school compound the teaching strategies proposed are school observation, presentation (oral) and pair work.

Activity one: School compound observation

- ☞ The teacher should introduce about the school compound and inform children what they should observe before directly proceed to the observation.
- ☞ When introducing about the school compound raise different questions to children that initiate to conduct critical observation on school compound.
  - What is a school compound?
  - What do you find in the school compound? List them.
- ☞ Children should be aware as they will orally present what they have observed in the school compound after school compound observation.

Activity two: Oral report presentation

After completing the school compound observation children will come back to the classroom and orally present each and every point they have observed. After describing their observation the teacher should ask children what the school compound is to mean. When student finish their oral presentation the teacher can ask guiding questions to explore more information and direct them to the concept of school compound.

Activity Three: Pair discussion

- ☞ Pair each student and tell them to conduct pair discussion on their observation. Check children whether they are discussing turn by turn. Give them adequate time and guide pair discussion to the learning competency.
- ☞ Ask some pairs to summarize and tell the class on the key points of their discussion. Tell them also to describe what a school compound is to the class students.

Assessment strategy:

To conduct an assessment of students' learning the following assessment strategies are proposed.

- ✓ Oral questions and
- ✓ Thumb up thumb down

Assessment Activity one: Oral question

Our assessment activities should enable us to check the achievement of learning competencies. So, in the assessment activities it is important to collect information about how well children have learnt based up on the learning competencies. Ask the following oral questions.

1. What is a school compound?
2. Write at list six materials found in your school compound?

Assessments Activity two: Thump up-Thump down

"Thumbs up! Thumbs Down!" is an excellent strategy for questioning children during science lessons. It can also be used as a fun way to test the children's knowledge of their multiplication tables.

The teacher should ask the class a question (based on the topic being studied at the time). When the children have an answer, they should indicate this to the teacher by nodding their head (rather than calling out, or putting up their hands). When most of the children have an answer, the teacher should choose one of the children to say their answer. The child can be chosen at random, or you might want to choose specific children for assessment purposes. When the child has stated his / her answer, the teacher should call out "Thumb Up! Thumbs Down!". The rest of the class should put their thumbs UP if they think the answer is correct, and their thumbs DOWN if they think it is incorrect.

If the answer is correct, congratulate the child and quickly fire another question at the class. If it is incorrect, ask another child for their answer (repeat until the correct answer is found), and again ask another question. You could of course, stop after the answer has been given, to explain or discuss the question / answer with the children

Once the children are used to this questioning technique, you can begin to speed up the process. They will enjoy the faster pace of the questioning, as it requires them to quickly recall facts and information, or use mental strategies to work out the answer.

Provide children different description of school compound and ask them to show you Thumbs up or Thumbs Down. Your descriptions should contain correct and incorrect descriptions.

Providing feedback

Feedback should inform learners about gaps in their knowledge, understanding ok skills and how to fill those gaps. Appreciate students working above minimum requirements level and give them additional exercise and support learners who didn't yet achieved the learning competency.

Recording students' learning progress

In keeping record for students' learning improvement different ways can be used. The followings are some of the formats that could be used for record keeping of the learning progress students are proving.

Statements of MLC

- ✓ Describe the school compounds.

S.No	Student's Name	**Level of achievement**				Constructive Feedback given
		Not yet Meeting	Approaching/ Developing	Meeting/ Achieved	Exceeding	
6.						
7.						
8.						

Dear students!

Now it is your turn to prepare assessment for learning integrated lesson as the sample presented under the content school compound. In doing so, you need to consider components of assessment for learning integrations like MLCs', assessment for learning teaching strategies selected based on the MLC, competency based assessment tools, ways of providing feedbacks and methods of recording students' progress.

Practical activity: Microteaching practice (3 periods)

Dear students!

Now ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning as the sample lesson presented previously. The following contents (contents from grade 1 environmental science subject) will be shared to you.

Lesson Content: school compounds

Learning Outcomes;

After completing this section, the students will be able to:

- ☞ describe their school compound
- ☞ explain the activities of their school
- ☞ explain who they play with, what they play at, and how they make friends.

Dear trainee!

Prepare a lesson plan and obtain comment from your instructor on your plan. You should consider the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the lesson in the classroom.

It is very crucial to get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice with your partner to improve them.

Section 2: Respecting rules and regulations

Introduction

Dear learner!

This is the second section for the third unit about respecting rules and regulation. Alike to the first section your lesson planning, practice and presentation will centrally focus on assessment for learning integrated lesson. In order to help you develop additional teaching strategies, use of various competency based assessment tools your instructor will present one sample lesson. Hence, you have to attend the sample lesson and get clear with each components of the lesson. Whenever there are things you found not clear record them and ask when your instructor complete the sample lesson presentation to be well-known with each components.

Learning Outcomes;

By completing this section, the trainees will be able to:-

- ☞ Plan AfL integrated lesson on the content respecting rules and regulations.
- ☞ Use different teaching methods to deliver a lesson on the content and sub contents of respecting rules and regulations.
- ☞ Apply different assessment and feedback strategies to teach the content of respecting rule and regulation.

Total duration: 80 Minutes

Start-up Activity: (Think-Pair-Share)

- ☞ Tell student teacher to think about what they already know or have learned about the rule and regulation of school. Write on piece of paper list at least three rules to implement in your school. Suggest the types of teaching methods, competency based assessment tools and the feedback provision system to conducted the lesson.
- ☞ Now get in pairs and discus about the identified rules and regulations of school turn by turn.
- ☞ Finally, Share your ideas to your classmate. Your instructor and other classmates will listen and give comment on your ideas. Listen comments and work to improve your learning based on the comments given.

3. We respect rules and regulations

1. School rules

- Rules at home and neighborhood
- Respect for others at home, school and neighborhood

Learning Outcomes;

After completing this section, the trainees should be able to:

- ☞ demonstrate respect for school rules
- ☞ demonstrate respect for rules at home and neighborhood

Dear learner! Check the section contents and minimum learning competencies (MLC) alignment. Before we proceed to the practice of planning and doing your independent teaching on the content under this section, you will critically attend the sample lesson prepared and implemented by your instructor.

Sample Lesson-11

In order to enrich you with various skills of teaching science, your instructor will present you another sample lesson. Here, your role is to seriously be present at the lesson presentation and learn the flow of the lesson components (brains storming activity, minimum learning competencies, teaching methodology used, instructional materials used, and competency based assessments used and how feedbacks are given to the learner and so on).

Lesson Content: Rules and regulations

3. We respect rules and regulations

1. School rules

- Rules at home and neighborhood
- Respect for others at home, school and neighborhood

Learning Outcomes:-

After completing this section, the trainees should be able to:

- ☞ demonstrate respect for school rules
- ☞ demonstrate respect for rules at home and neighborhood

Brain storming activity: Small group discussion

Arrange small groups (a group of four students in one group) in the class room and give prepared quations and follow the samall group discussion. Ask the following oral questions (competency based) for their small group discussion.

- ☞ What are rules?
- ☞ What are the rules and regulations of your the school? Give hints to the children. (Don't come late to school)

Ask the students to demonstrate the rules and regulation of the school and also in their own your homes in addition to this ask them to identify the ways in which we use school rules. Direct their suggestions towards school rules, Suggest that they think about such things as: cleanliness, punctuality, caring for school property, performing school tasks on time and respecting teachers.

Teaching methodology:

As you now there are different teaching techniques applied to conduct lessons in different disciplines. When we select the teaching methods we need to consider the nature of our students, contents and the learning competencies planned to be achieved. Student's presentation and drama methods are proposed methodologies for teaching the content rules and regulations.

Activity One: Prsesntation

The teacher ahead of this lesson would assign two students from the classroom and tell them to prepare themselves for the pressentation to be held in the classroom for the coming class. In their oral presentation they should give emphasis on major rules and regulations set by the school. Afetr their presentation children should be given chance to ask questions on the oral presentation.

Home is different from school in its organization, the people there, and the rules and regulations that exist at each setting. For example children may be required to speak at classrooms by first rising their hands and when they are allowed to speak by their teachers. Such regulations do not exist at home. Thus, transition from an environment that requires some rules that does not exist in the environment they are accustomed with may be painful. Thus, teachers should be aware of this and assist their students in the successful transition.

Other rules students should respect includes classroom ground rules like peer work, individual work, time for class start and end, use of school and personal belongings, examination sessions etc.

Students are also helped in respecting other rules and regulations such as hand washing before and after meal.

Activity Two: Drama method

Drama strategies – also known as drama techniques or drama conventions – are the everyday tools of the drama teacher. They help to develop enquiry skills, to encourage negotiation, understanding and creativity. They can enhance performance skills such as character development and storytelling and be used across the curriculum to actively involve students in their own learning. Every drama teacher has a preferred way of using different drama methods, so there isn't really a definitive rule about what method should be used in what situation, but some work better than others in certain contexts.

The teacher will select two students whom he/she thinks can do the drama activity. The selected students will be awared of what they actually are expected to do. In the drama,one of the child will play a role of respecting the school rules and regulations and the other child will demonstrate the role of school rules and regulations. But at the end the drama should be desined to convey the message of respecting rules and regulations of schools as per the learning competency of the content.

Finally, the teacher will summerize by emphesizing the semonstartion of students in obeying rules in school, home, and society.

Resource materials: Posters or charts indicating school rules and regulations.

Assessment Strategies:

To conduct effective assessment techniques you need always to consider the following key points.

- ✓ Select assessment methods based on the competency.
- ✓ Prepare assessment tools
- ✓ Develop questions based on competence
- ✓ Administer and score assessments
- ✓ Use or record assessment results to improve performance
- ✓ Design formats for low-literacy learners

In order to assess student's learning different methods can be used. For this sample lesson individual oral questions and observations of students' work.

Assessment Activity: Individual oral question & observation of students' work (demonstration of respecting school rules & regulations)

Now the teacher asks competency based oral question to the whole class. And listen student's oral answer and provide appreciation and support to students. When there are students who didn't achieve the learning competency emphasis should be given to help them improve it.

The teacher should conduct an observation of students' activities and check their demonstration of rules and regulation of school.

Providing effective Feedbacks

Immediate feedback is considered as a primary aspect in the use of assessment for learning. Teacher gives feedback about the lesson which essential for students and integral to teaching, learni ng and assessment. Feedback should be clarified for students.

You can apply the foollowing format to give feedback to your learners and can also help you to follow students learning progress.

Student's Name:	
Date of class conducted:	
Competency:	
Level of Achievement of competency: ***(Not Yet achieved, Approaching, Achieved or Exceeding***)	
Specific, constructive feedback***:(What the student is doing right and what he/she needs to improve and how he/she can improve should be described)***	
Evidence of students learning improvement or achievement of learning competency:	

Practical activity: Microteaching practice (3 periods)

Dear students! Good!

Now you will individually prepared the plan, practice and conduct lesson presentations for 25 min utes by integrating assessment for learning as the sample lesson presented previously. The following sub contents with their respective competencies will be shared to you.

Your instructor will share you the contents and learning outcomes to you before you start your microteaching.

Lesson Content: Rules and regulations

3. We respect rules and regulations

1. School rules
   - Rules at home and neighborhood
   - Respect for others at home, school and neighborhood

Learning Outcomes:-

After completing this section, the trainees should be able to:

- ☞ demonstrate respect for school rules ***(Presented as sample lesson)***
- ☞ demonstrate respect for rules at home and neighborhood

You will prepare a lesson plan and get comment from your instructor on your plan. Especially, your instructor will check the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the lesson in the classroom. Get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice with your colleague to improve them.

Dear student-teachers

Good! You have completed the second round micro teaching by planning, practicing and presenting assessment for learning integrated lesson. You have received comments and feedbacks (both written and oral) for your future teaching improvement.

Compare your first round teaching and second round teaching and identify the strength and weakness of both round teaching and attach your evaluation with your portfolios. To improve the weaknesses you identified consult your instructors and work accordingly for their improvement.

Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 3: Good personal relationship

Introduction

Dear learner!

Well come to the third section of unit three. This section will also create you an exposure to practice your skills on different teaching methods, assessment strategies, feedback forwarding mechanisms and recording keeping mode on students' progress for teaching the content and sub contents mentioned under the section.

Learning Outcomes;

At the end of this section students should be able to:-

- Plan by a lesson by selecting relevant methods, assessment tools and feedback forwarding mechanism and record keeping.
- apply various teaching and assessment methods that are appropriate for teaching the content good personal relationship.
- employ various teaching methods on teaching about good personal relationship.

Brainstorming Activity: Oral questions

Complete the following individual activity to enable think about the different components of teachings in relation to the content and sub contents good personal relationships.

1) Suggest teaching methods are suitable in teaching the content good personal relationships.
2) What assessment tools do you think is advisable to be used in teaching the content good personal relationships?
3) How do you provide feedback to your students in teaching the content good personal relationships?

Lesson Content: Relationships

We have good personal relationship

- Relationships at school, home and in the neighborhood

Learning Outcomes;

Upon completion of these contents students should be able to;

- ☞ demonstrate good relationships at school
- ☞ express willingness to conform to good personal relationships at home and neighborhood

Practical activity: Microteaching practice (2 periods)

Dear learner!

Under the previous section you have attended sample lesson presented by your instructor. Your instructor will assign one MLC for each student from the following MLCs'. By then, you will plan, practice and conduct lesson presentations for 25 minutes by integrating assessment for learning.

Learning Outcomes:

Upon completion of these contents students should be able to;

- ☞ demonstrate good relationships at school
- ☞ express willingness to conform to good personal relationships at home and neighborhood

Well done!

You have completed your microteaching. We hope you have gone through different steps of planning, practicing and presenting assessment for learning integrated lesson. You should receive written and oral feedbacks for the improvements of your teaching skill. Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 4: Teaching about Road safety

Dear trainee!

This is the fourth section under unit three. The section deals on teaching about road safety. It helps us to focus on child learning about road safety from a young age to prevent accidents later on in life. Road safety education in schools aims to prepare and equip this vulnerable road user group with the knowledge, skills and positive attitudes that will enable them to stay safe. So, you will learn different teaching skills; methodology to teach the sub contents, competency based assessment tools, instructional materials to be used in teaching about road safety. You should pay due attention to the sample lesson to be presented by your instructor and identify your gaps from your microteaching and work to improve them.

Learning Outcomes;

Upon completion of this section students should be able to;

- plan to conduct Assessment for learning based teaching on road safety.
- apply various teaching methods on the content road safety.
- utilize different competency based assessment tools in teaching about road safety.
- Perform students' learning progress record.

Car accident is one of the top ranked killers in Ethiopia. The reason for death toll is violation of traffic and road safety rules both by drivers and pedestrians. Thus, the teaching road safety at primary level is a top priority in our country that can save thousands of lives each year.

Children don't have the same ability to judge distances, speed, and noise direction of traffic and vehicles as teens and adults can. Therefore, it's really important to ensure that children have a good understanding of basic street safety when they start walking around the local and city streets without you accompanying them.

Brainstorming Activity: Think-Pair-Share

Dear learner! Before we directly proceed to your lesson planning, conducting peer teaching and evaluate the strength and weaknesses of your teaching perform the following think pair share activity. Think-pair-share (TPS) is a collaborative learning strategy where students work together to solve a problem or answer a question about an assigned reading.

1) Tell student teachers to think individually about answer to the following questions;
   - ✓ What teaching methods do you suggest to conduct teaching about road safety to teach children in grade two?
   - ✓ What assessment tools do you use to assess their learning?
   - ✓ How do you provide feedbacks to students?
2) Now inform student teachers to discuss with a partner on what they have already in their mind about the above questions.
3) Finally invite student-teachers to share ideas with classmates.

The instructor and other class students will attend the presentation and comment ideas.

Lesson Content: Safety road

4. Safety road
4.1Common road accidents
3.2Prevention of common road accidents
- Road safety code
- Helping others (smaller children, disabled people

Learning competencies for the above contents are taken from the syllabus document and help you to conduct your micro teaching

Learning Outcomes:-

Upon completion of these contents students should be able to;

☞ describe some causes of road accidents

☞ explain how road accidents may be prevented

☞ practice crossing the road safely and assisting others to cross

Dear student teachers!

In the previous section we have seen sample lessons presented by your instructor and you have conducted microteaching which significantly contributes to the improvement of your skill of planning teaching and reflecting on your teaching. The following sample lesson will also assists you to share experiences on the teaching skills. So, carefully attend the sample lesson and get ready to conduct your micro teaching.

Sample Lesson-12

Lesson Content: Safety road

Learning Outcome;

Upon completion of these contents students should be able to;

☞ describe some causes of road accidents.

Total Duration: 40 Munities

Warm up activity: Picture based questions

Before proceeding to the actual teaching the teacher will bring a picture or photograph showing road accidents that can be used as a resource for your teaching.

a) Post the picture or the photograph showing road accident in front of the class.
b) Tell students to critically observe the picture and say anything they have understood.
c) Guide children to tell you some causes of road accidents.
d) Comment on their answer and enable them to describe some causes of road accidents.

Teaching Methods: Presentation and questioning and answering

Various teaching methods could be used to teach the content road safety. But, in this particular sample lesson presentation and questioning and answering methods are used.

Activity: Presentation and questioning and answering

1) When checking children prior knowledge about road safety using a picture or photograph they have presented some ideas they think are causes of road accident.
2) Based on their answer mention some causes of road accidents like;
   - Over Speeding
   - Drunken Driving
   - Distractions to Driver
   - Red Light Jumping
   - Avoiding Safety Gears like Seat belts and Helmets.
3) Ask children to tell you if they come across a road accident. Invite them to tell to the class students what the cause of the road accident they think from their observation.
4) Listen their answer and direct them to mention the cause.
5) Present some causes of road accident to the class.
6) Ask children to describe orally some causes of road accidents.

Resources needed: - picture or photograph showing possible causes of road accident

Assessment Strategies

The following assessment strategy is proposed to review students' learning.

- Oral questioning

Assessment Activity: Asking oral question

1. Inform students to listen the oral questions and the answers given by each student.
2. Individually, ask children to tell you at least two causes of road accidents and listen their answer carefully.
3. Ask students to comment student's response.
4. The teacher should finally identify students who can't list causes of road accident and support until they can list as per the competency.

Feedback Provision and Recording students' progress

Feedback is something that tells you if you're on the right track or not. Feedback is information provided on the performance or understanding of a task which can then be used to improve this performance or understanding. Feedback helps to close the gap between actual performance and intended performance.

While conducting the competency based assessment support students who didn't yet achieved the minimum learning competency. Constructive feedback (Feed forward) should be given on the spot and it should indicate what to improve and how it can be improved.

In keeping records of students' progress different ways can be used. The followings are some of the formats that could be used for record keeping of feedbacks given.

Recording students' learning progress

S.No.	Students' Name	Observations /AfL/	Learning outcomes achieved	Learning outcomes not yet achieved	Others
1.					
2.					

Practical activity: Microteaching practice (3 periods)

Dear learners!

You have observed a serious of presented sample lessons. Now you should get ready to practice the teaching skills you have gained. You should ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning. Your instructor will assign the following learning competencies and competencies indicated under section 5 and 6 for your microteaching.

Lesson Content: Safety road

4. Safety road
   4.1Common road accidents
   4.2Prevention of common road accidents
   - Road safety code
   - Helping others (smaller children, disabled people

Learning competencies for the above contents are taken from the syllabus document and help you to conduct your micro teaching

Learning Outcomes;

Upon completion of these contents students should be able to;

- ☞ describe some causes of road accidents ***(sample lesson is already presented).***
- ☞ explain how road accidents may be prevented
- ☞ practice crossing the road safely and assisting others to cross

Dear student teachers!

If you are one of the students assigned to prepare and conduct microteaching using the above learning competencies and competencies from section 5 and 6 you have to prepare a lesson plan and obtain comment from your instructor on your plan. When your plan is accepted you will conduct microteaching in the classroom.

Getting feedbacks on your microteaching will clearly show you what you need to improve and how you can improve it. Take a short note on each comments and practice with your partner to improve them.

Dear learner Good!

You have completed your microteaching successfully. You have done the planning, practicing and presenting phase of assessment for learning integrated lesson. You have received oral and written comments and feedbacks which helps you to improve your future teaching skills. Gather feedbacks given organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 5: Teaching about natural resources and phenomenon

Dear trainees!

This is the fifth section of unit three. This section will also give you an exposure to practice your skills on different teaching methods, assessment strategies, feedback forwarding mechanisms and recording keeping mode on students' progress for teaching the content and sub contents about natural resources and phenomenon.

Day and night, summer and winter, wind, birth, growing and aging, light and sound are the common natural phenomena primary students can have conceptions, partially conceptions and misconceptions. Thus, primary science teachers should use the students' ideas about these natural phenomena as starters for the development of scientific knowledge about them.

In order to help children learn and understand science concepts, we must first understand the nature of their ideas about the world around them. A number of factors influence children's conceptions of natural phenomena. Children's conceptions stem from and are deeply rooted in daily experiences, which are helpful and valuable in the child's daily life context. However, children's conceptions often are not scientific and these nonscientific ideas are called "alternative conceptions." Some of the possible sources for alternative conceptions are sensory experience, language experience, cultural background, peer groups, mass media, and even science instruction.

Learning Outcomes;

Upon completion of this section student teachers should be able to:-

- ☞ Prepare plan by selecting relevant methods, assessment tools and feedback forwarding mechanism and record keeping.
- ☞ apply various teaching and assessment methods that are appropriate for teaching the content natural resources and phenomenon.
- ☞ employ various teaching methods on teaching about natural resources and phenomenon.

Brainstorming activity: Oral questioning

Answer the following oral questions individually.

1) What teaching methods do you think are suitable in teaching the content natural resources and phenomenon?

2) Suggest the assessment tools that are convenient to be used in teaching the content natural
3) How do you provide feedback to your students in teaching the content natural resources and phenomenon?

Lesson Content

Lesson Content: Our Natural Environments

5. Natural Environments
   5.1. Natural phenomena
   - Season
   - Rainbow
   - Drought
   - Flood

   5.2. Life stages (birth-growth-death)

   5.3. Natural resource
   - types of natural resource
   - uses of natural resource

Learning Outcomes:

Upon completion of these contents students should be able to;

- ☞ explore seasons, day and night, and life processes as cycles of nature.
- ☞ explore rainbow and flood as occasional happenings in nature.
- ☞ list down the natural resources of their environment.
- ☞ explain the general uses of natural resources.

Practical activity: Microteaching practice (2 periods)

Dear trainee!

Under section four of this unit and in the previous sections your instructor has presented to you various sample lessons using different teaching methods and competency based assessment tools. It is clearly indicated as the learning competencies of section five and six will be shared out to you so that you can prepare and present a microteaching in the classroom.

Dear student teacher perfect!

You have taken one learning competency and after planning, practicing you have completed your microteaching. It is time to get written and oral feedbacks from your instructor for the improvements of your teaching skill.

Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 6: Teaching about plants and animals around us

Dear trainee!

This is the last section of this unit. This section will also create you an exposure to practice your skills on different teaching methods, assessment strategies, feedback forwarding mechanisms and recording keeping mode on students' progress for teaching the content and sub contents about plants and animals around us.

The environment in which we live is composed of different plants and animals. These plants and animals support each other to survive. Thus, primary science students need to know the different types of plants and animals with which they live together and how they support each other while living in their environment.

Learning Outcomes;

At the end of this section student teacher should be able to:-

- plan by selecting relevant methods, assessment tools and feedback forwarding mechanism and record keeping.
- Use various teaching and assessment methods that are appropriate for teaching the content plants and animals around us.
- Implement various teaching methods on teaching about plants and animals around us.

Start up activity: Pair work and presentation

The following questions are prepared as a start up activity. Carry out the pair work and you present your discussion points to the class.

a) List different teaching methods that are suitable in teaching the content plants and animals around us for children of grade 2.

b) What assessment tools do you think is worthwhile in teaching the content plants and animals around us in grade 2?

c) In what ways do you provide feedback to your students in teaching the content plants and animals around us in teaching environmental science in grade 2?

Lesson Content: - Plant and Animals around Us

6.1 Parts of a plant and their functions

- Stem, leaf, flower, root
- Collecting specimens of parts of a plant and sorting and grouping them

6.2 Growing crops

- What do plants need to groping them
- Materials and equipment for growing crops

6.3 Animals around us

- Classifying animals
- Items made from animal products

Learning Outcomes;

- name and show parts of a plant
- tell functions of parts of a plant
- collect and sort parts of a plant
- indicate what plants need to grow
- indicate the materials and equipment needed for growing crops
- give a simple classification of animals based on their reproduction, locomotion, feeding habit, habitat and body cover
- identify items made from animal products

Practical activity: Microteaching practice (2 periods)

Dear learner!

You were given content and its learning competency under this unit of section four to conduct microteaching. Before you proceed directly to your micro teaching preparation and presentation you need to consider the different skills obtained from your instructor sample lesson presentation. Each time, practice the planning, selecting and utilizing various teaching methods and the wide range of competency based assessment tools in your different rounds of microteaching in the classroom.

Dear trainee!

Good! You have been practicing and learning the different skills of teaching and learning and getting constructive feedbacks for further improvement. It is mandatory to conduct self reflection and collect written feedbacks and assessment report from your instructor and collect in your portfolio. The portfolio will help you to check your professional development and identify the areas of improvement for future improvements.

Reflective Activity

Answer the following self-reflection activities for each microteaching you have conducted and put it in your portfolio.

1) How effective was your planning of learning? Example; the lesson plan, the structure of the session, making the session inclusive. What impact did this have on the learners / learning?

_____

_____

2) Consider your microteaching and write specifically what did you do in detail in your microteaching.

_____

_____

3) Think about your microteaching and specify what you wanted to achieve?

_____

_____

4) Consider your microteaching and write briefly what you thought was successful. (Reflect on your lesson planning, teaching methods, competency based assessment used, instructional materials, feedbacks and recording students' learning progress.

_____

_____

5) Think about your microteaching and write in brief on What you feel was not so successful and how you would correct it when teaching similar things (Reflect on your lesson planning, teaching methods, competency based assessment used, instructional materials, feedbacks and recording students' learning progress.

_____

_____

6) Were you able to effectively judge attainment and achievement through the assessment methods you chose? How?

_____

_____

_____

UNIT FOUR: TEACHING ABOUT OUR LOCALITY

UNIT INTRODUCTION

Dear Students!

This is the fourth unit which deals with physical location, types and varieties of the living and non-livings, common activity in the community, transportation, landforms and institutions around children locality. The unit helps you to think, plan and apply various teaching strategies, assessment tools, instructional materials, feedback and record keeping on students' achievement and progress on the different contents and sub contents of this unit. Teacher need to understand that first cycle primary is the age of knowledge integration. Children at this age conceptualize things around them holistically. At this age children cannot understand things in a fragmented way like as geography, history, biology, chemistry, physics etc. Hence, teaching at this stage is preferable to be thematic like our locality.

Learning Outcomes;

At the end of this unit, students should be able to:-

- Produce plan to teach the contents and sub contents under our locality.
- Develop teaching methods to correct misconception about the content our locality,
- Use appropriate teaching methods, assessment strategies, feedback, and provision mechanisms and feedback record keeping related to the contents of our locality.
- Apply the skill of selecting and using different teaching methods, assessment tools, delivering and record keeping on different topics of our locality.

Section 1: Teaching about Location of our kebele & wereda

Dear learner!

Under this section you will be able to aware of; different teaching strategies or techniques, competency based assessment tools, instructional materials to be used, methods of providing constructive feedbacks and how students learning progress is recorded for teaching about location of students kebele and wereda and acquire the appropriate skills for your future teachings.

Learning Outcomes;

After the completion of this section students should be able to;

- Recognize misconceptions and conceptions about location of our kebele and wereda.
- Develop plan to conduct Assessment for learning based teaching on location about our kebele and wereda.
- Implement various teaching methods on the content location of our kebele and wereda.
- Demonstrate how to teach the direction of sun rise and sun set.
- Use different competency based assessment tools in teaching about location of our kebele and wereda.
- Perform students' progress record.

Pre-Lesson Assessment: Individual Activity and presentation

We hope that, from your general teaching method (TECS-112) course you can suggest methods of teaching and assessment tools to conduct teaching different contents and sub contents. Now perform the following individual activity individually.

1. Invite one student and tell him/her to come in front of the class and ask him/her to show the left, right, front and back directions.
2. Ask students to show the direction of the blackboard in reference to him/her.
3. The instructor asks other students to comment student's presentation and proceed to the introduction of the lesson.

Dear student teachers note the following point!

When teachers provide instruction on concepts in various subjects, they are teaching students who already have some pre-instructional knowledge about the topic. .These understandings should enable teachers to prepare the learning environment to help each child build on what they already know and ensure the achievement of appropriate conceptual knowledge.

Lesson Content

1. Teaching about Location of our kebele and wereda.

   1.1 Location of our kebele (9 periods}

   - Telling directions
   - Locations to and from home, school and kebele.

Now we have identified the minimum learning competencies (MLCs') from the syllabus. The following competencies are taken from grade 1 environmental science subject syllabus document

Learning Outcomes;

Upon completion of this lesson students should be able to:-

- Identify Left, right, front and back direction.
- Indicate the location of their schools, home and neighborhood.

Location is the relative position of a given area against the geographical location. The geographical locations are north, south, east and west. Children should have the basic knowledge of the relative position of their locality against the geographical locations. Teaching of location of places for children can start with the direction of sun rise and sun set. Students should be asked the direction in which the sun rises and sets. They need to know direction in which sun rises is known as east and the direction in which the sun sets is west.

Dear students!

In the previous units you have seen various sample lessons and conducted micro teaching which significantly contribute to the improvement of your skill of planning teaching and reflecting on your teaching. Similarly, the following sample lesson assists you to share experiences on the teaching skills. So, carefully attend the sample lesson and get ready to conduct your micro teaching.

Sample Lesson-13

Lesson Content: **Telling Direction**

Learning Outcome;

At the end of this lesson the students should be able to:-

- Identify left, right, front, and back directions

Total Duration: 40 Munities

Start up activity (Individual Task)

When you begin your teaching it is important to check what children already know about the content to be taught. You can do these by different ways, like using brainstorming or start up activities.

e) Ask children to think about the directions left, right, front and back. (Individual task)
f) Tell students to show individually the left, right, front and back direction by referring things around them.
g) Comment on their answer and enable them to describe the left, right, front and back direction.

Teaching Methods: Demonstration, questioning and answering, presentation and Playing

Based on the sub content and the identified minimum learning competencies the teacher should think and select teaching strategies used to teach the lesson.

Selected Teaching Strategies

The selected strategies to teach the content direction (left, right, front and back direction) are.

- Demonstration and oral questioning and answering
- presentation
- Pair playing

Activity One: Demonstration, Presentation and Game

7) Demonstrate the left, right, front and back directions to students. So, tell students to carefully follow your demonstration. (The instructor being in front of students will locate the four directions appropriately)
8) Ask students to describe the left, right, front and back direction of the things around them by referring their position.

   Example;

   ✓ Where is the director office in reference to your position? It is ***to the left/right /in front of/at the back*** of…...

   ✓ Where is the school library? It is ***to the left/right /in front of/at the back*** of…...etc.
9) The teacher should observe students task and give adjustment when they made mistakes. The teacher should go to the student who needs to be assisted and support him/her to identify the correct direction.
10) Organize pair game to allow students play in pairs. Give them the rule/procedure on how to play the pair game by telling the following sentences.
    - One student say: "show me your **right**.", ""show me your **left**."
    - The second student will say: "This is my right." "This is my left." Include the front and back directions in the game.

Activity Two: Presentation and questioning

1) The teacher presents the idea of directions left, right, front and back through explanation. Use locally prepared model instructional material to show the left, right, front and back direction.
2) When you present the idea indicate the correct directions and ask students to show their relative positions as you indicate using the instructional material.
3) Ask the whole class to identify the four directions in relation to their position.

Figure: 2 Showing left, right, front and back direction

Resources needed: - Prepared model instructional material showing the direction, sentences (having sentences Show me your right ……)

Assessment Strategies

The Assessment Strategies selected to the content include:

- Practical assessment.
- Practice frequency (check for understanding when students are playing a game in pair).

Assessment Activity: Ask students to reflect

5. Individually, ask students to show the direction of the things around them by referring their direction. (Left, right, front and back). Students should practice describing the direction of things in reference to their position.
6. The teacher and the rest of the class room students should listen and observe students' presentation and comment accordingly.

Feedback Provision and Recording students' progress

While conducting the competency based assessment support students who didn't yet achieved the minimum learning competency. Constructive feedback (Feed forward) should be given on the spot and it should indicate what to improve and how it can be improved.

In keeping records of students' progress different ways can be used. The followings are some of the formats that could be used for record keeping of feedbacks given.

Statement of MLC

- ✓ Call and show the four direction (left, right, front and back)
- ✓ Where is the school library?
- ✓ Where is the director office?

S.No	Student's Name	Level of achievement				Constructive Feedback given
		Not yet Meeting	Approaching/ Developing	Meeting/ Achieved	Exceeding	
1.						
2.						

Practical activity: Microteaching practice (3 periods)

Dear students!

You have observed a serious of sample lessons on different contents and sub contents on environmental science subject. Now it is your turn to put in to practice the teaching skills you have gained. You should ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning. Your instructor will assign one of the following learning competencies (From grade 1 one environmental science subject).

Lesson Content:

4) **Our locality – kebele**

4.1. **Location of our Kebele**

- ***Telling directions (Already your instructor presented a sample lesson)***
- Locations to and from the home, school, and kebele

Learning Outcomes;

After the completion of this section students should be able to;

- ***identify left, right, front, and back directions (Sample lesson is presented by the instructor)***
- indicate the locations of their schools, home and neighborhood

Dear trainee!

Now prepare a lesson plan and obtain comment from your instructor on your plan. When your plan is approved you will conduct micro teaching in the classroom. For each student teacher in the classroom your instructor will give you **one learning outcome from the above content** and from the next Section-2: Teaching about living things and non living things, to prepare and conduct instructional teaching.

Note:

Getting feedbacks on your presentation will clearly show you what you need to improve and how you can improve it. Take a short note on each comments and practice with your partner to improve them.

Dear student-teachers well done!

You have done your micro teaching successfully by planning, practicing and presenting assessment for learning integrated lesson. You have received comments and feedbacks (both written and oral) for your future teaching improvement. Collect each feedback given organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 2: Teaching about Living & Non-Living things around us

Introduction

The natural environment in which students live is composed of living and non-living things. We need to ask students to list what substances or objects they have observed in their houses and at the school environment and guide students to categorize the list of things they come up into living and non-living. We have to tell them before classify something as alive it needs to be capable of all of the seven processes of life:

1) Movement
2) Respiration
3) Sensitivity
4) Growth
5) Reproduction
6) Excretion
7) Nutrition

Students should be asked the basic and common characteristic of plants and animals. They should be guided to tell that plants and animals share in common with the above life process that differentiates them from non-living things.

Students can have some possible misconceptions in the classification of living and non-living thing. One common misconception could be seeds are not alive by the belief that seeds do not move as movement is one of the criteria of life process that characterize a creature to be alive. Teachers should help students understand that a seed that has yet to germinate does not respire, grow, etc.; however, because it is capable of these things given the right conditions it is regarded as being alive but dormant.

Learning Outcomes;

After the completion of this section students should be able to;

- Recognize misconceptions and conceptions about living things around us
- Develop plan to conduct Assessment for learning based on teaching living things around us.
- Implement various teaching methods to teach about living things around us.
- Demonstrate how to teach about living things around us.
- Use different competency based assessment tools in teaching about living things around us.
- Perform students' progress and record.

Brainstorming Activity: Posters & gallery walk

Dear learner!

You will be given a gallery walk activity and you will perform it. Read the following instruction and perform accordingly.

- ✓ Work in group and present your ideas on a sheet of chart paper.
- ✓ Once you have completed your poster, have them display it on the wall.
- ✓ One of the groups will stay with the poster and help to explain it as the class circulates to look at all of the posters.
- ✓ Students take turns standing by their poster so that each of them have the chance to visit the other groups' posters.

Questions

1) What misconceptions and conceptions do you think children will have on living things around us?
2) List different teaching methods that could be used to teach about living and non living things around us.
3) What assessment for learning tools are do you think appropriate to teach about living and non living things around us?

Lesson Content

4.1. Living and nonliving things around us

4.2.1.Plants

- Grouping
- Use of plants
- Caring for plants

4.2.2.Animals

- Grouping animals
- Uses of animals
- Caring for animals
- No cruelty to animals or other living creatures

4.2. Non living things around us

4.2.1. Air

- ✓ Presence
- ✓ Importance

4.2.2.Water

- ✓ Where water is found
- ✓ Importance

4.2.3.Soil

- ✓ Importance in agriculture
- ✓ Importance in art

The above lesson contents are copied from grade 1 environmental science subject. The competencies of co ntents are indicated in the syllabus document of the subject environmental science.

Learning Outcomes;

At the end of this lesson students should be able to:-

- group plants into trees, shrubs and small plants
- tell some uses of plants
- tell about the care for plants
- group animals into domestic and wild
- tell some uses of animals
- show the presence of air and tell why it is important
- show the presence of water in ponds, wells, streams and rivers
- tell why water is important
- tell why it is important as a medium in which to
- grow plants
- fashion simple shapes and figures using clay

Practical activity: Microteaching practice (6 periods)

Well done!

Dear learner, based on the sample lessons presented and the micro teaching conducted and commented you will conduct a micro teaching in the classroom. You should ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning.

Your instructor will offer you one MLC from the following lists for each of you and you will plan a lesson based on the given MLC and conduct a micro teaching in the classroom.

Learning Outcomes;

At the end of this lesson students should be able to:-

- group plants into trees, shrubs and small plants
- tell some uses of plants
- tell about the care for plants
- group animals into domestic and wild
- tell some uses of animals
- show the presence of air and tell why it is important
- show the presence of water in ponds, wells, streams and rivers
- tell why water is important
- tell why it is important as a medium in which to
- grow plants
- fashion simple shapes and figures using clay

Section 3: Teaching about common activities of our local people

Introduction

The common activities of local people around primary students can differ depending whether they live in rural areas and urban areas. For students living in the rural areas the common activities of the people inhabiting the rural area may include farming, harvesting, irrigating, terracing, and making small dams. For those living in the urban setting the common activities of the local people may include trading, wood and metal works, building, coble stone works and office works.

In this section, we will perform activities that enrich your skills of planning a lesson, use different teaching methods, and demonstrate various assessment tools in teaching the contents and sub contents under this section.

Learning Outcomes;

After the completion of this section students should be able to;

- Develop plan to conduct Assessment for learning based teaching on common activities of our local people.
- Implement various teaching methods on about the importance of work.
- Use different competency based assessment tools in teaching about Pride in work
- Perform students' progress record

Warm up Activity: Individual activity and Presentation

Dear learner, think about the following individual activity and complete them. You will present them to the class.

- ✓ Explain how you develop instructional plan to conduct a lesson on common activities of our local people.
- ✓ What are the various teaching methods that can be used to teach about the importance of work?
- ✓ Suggest different competency based assessment tools in teaching about importance of work.
- ✓ How do you record students' progress in your teaching?

Lesson Content:

4.3. **Common activities of our local people**

1. The importance of work ***(Sample lesson is prepared and presented)***
2. Grouping types of work
3. Pride in work
   - Pride in simple domestic tasks which help other family members

Once the lesson content is identified, we need to find out the learning outcome from the syllabus. The following competencies are identified from grade 1 environmental science subject syllabus document

Learning Outcomes;

At the end of this lesson students should be able to:

- Tell the importance of work ***(Sample lesson is prepared and presented)***
- Group types of work into self-employed, working for someone and working for the government
- Demonstrate pride in their work and in simple tasks at home

Conduct self assessment on your microteaching and identify the strength and areas of improvement for your future presentation. When you identify these keep forward with the strength and plan how you can improve your limitations. Attending frequent sample lesson presentation will extensively help you how you can improve your teaching skills that you identified as a gap.

Sample Lesson -13

Lesson content: - The importance of work

Learning Outcomes;

Upon completion of this lesson students should be able to:

- Tell the importance of work.

Brain storming Activities: Oral questioning and answering.

1) Ask children to think and tell you about the meaning of work.
2) Call one child and ask him/her tell you the importance of work.

The teacher should comment on their answer and enable them to describe properly what work is and its importance. (Direct students to the definition of work and to its importance taking specific examples from their surroundings)

Teaching Strategies

The following teaching methods are suggested by the instructor to be employed in the sample lesson.

- Presentation and
- Oral questioning and answering

Activity One: Presentation

Explain the importance of work to children by describing as it is source of income by using the pictures indicating its importance. It is an income source to fulfill human basic needs; food, clothing and shelter. (Human Beings should work to fulfill their basic needs).

The teacher should prepare different pictures or photographs showing various types of works used as a source of income.

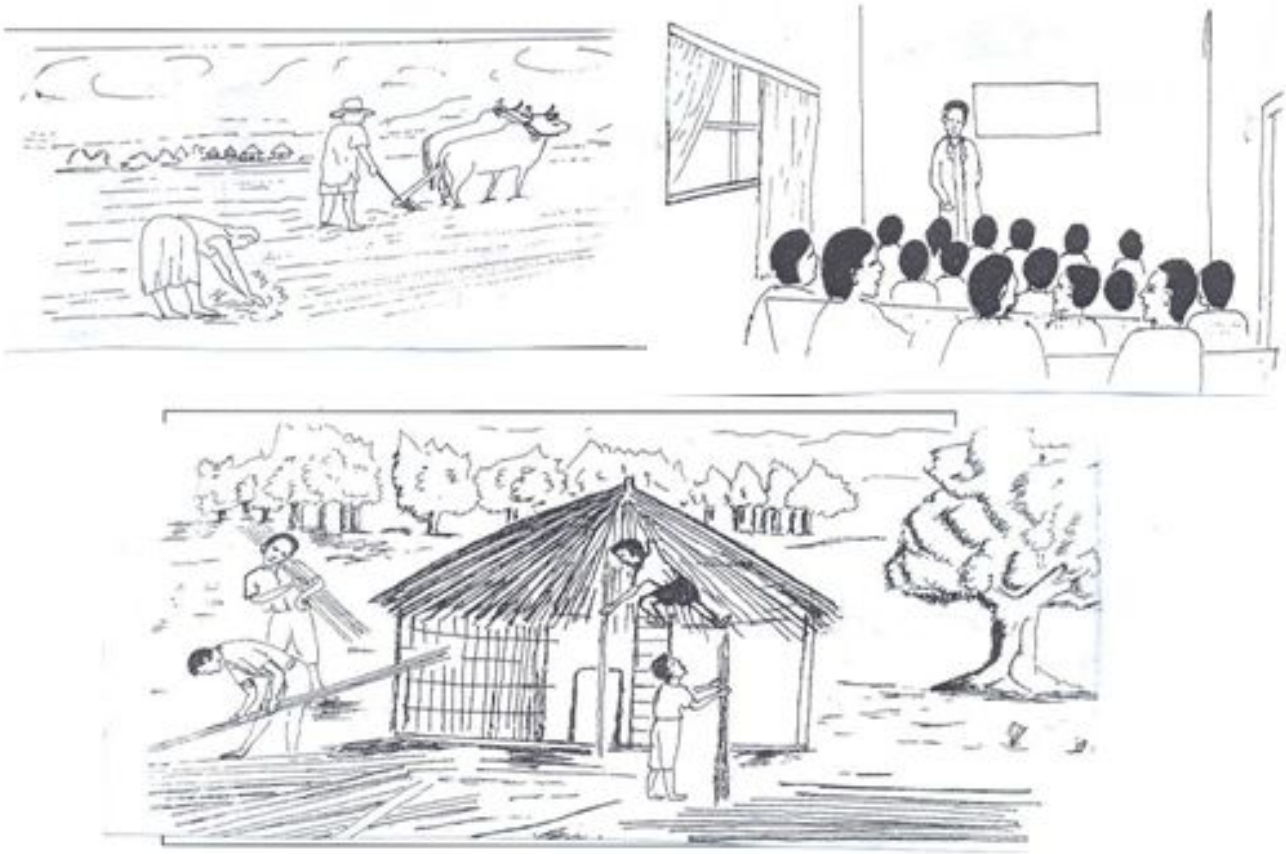


Figure: 4 Picture showing different types of work

Activity Two: Oral questioning and answering

1. Ask students to tell you what would happen if their parents didn't earn money.
2. Based on their answer for question number 1 above guide children to express the importance of work by their own.
3. Summarize the lesson by repeating the importance of work shortly to the children.

Depending up on students answer, the teacher should provide feedback that enables learners to guide towards the achievement of stated learning competency.

Resources needed: Pictures that show peoples engaged in different tasks,

Assessment Strategies

Assessment provides information to the teacher about students' achievement in relation to the stated learning objectives. The assessment tool panned to be employed under this content is oral questioning.

Assessment Activity: Oral questioning and answering

- Ask the students to state the importance of work to the class.

- Listen students answer and comment their answer and mention the importance of work they have missed to the class.

Providing effective Feedbacks

Based on the assessment conducted, the teacher should point what students need to improve their learning and clearly indicate how it can be improved.

Recording students' progress

It is a systematic process of documenting and using empirical data on knowledge, skill, attitudes and beliefs to refine progress and improve students' learning.

Practical Activity: Microteaching practice (3 periods)

Dear students!

Based on the sample lesson you have observed get ready to conduct a micro teaching in the classroom. Your instructor will assign one of the following learning competencies (From grade one environmental science subject). So, ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning.

Lesson Content:

4.4. **Common activities of our local people**

4. The importance of work ***(Sample lesson is prepared and presented)***
5. Grouping types of work
6. Pride in work
   - Pride in simple domestic tasks which help other family members

Once the lesson content is identified, we need to find out the minimum learning competencies (MLCs') from the syllabus. The following competencies are identified from grade 1 environmental science subject syllabus document

Learning Outcomes;

At the end of this lesson students should be able to:

- Tell the importance of work ***(Sample lesson is prepared and presented)***
- Group types of work into self-employed, working for someone and working for the government
- Demonstrate pride in their work and in simple tasks at home

Dear student-teachers well done!

You have completed your microteaching by planning, practicing and presenting assessment for learning integrated lesson. We hope you have received written and oral feedbacks for the improvements of your teaching skill. Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 4: Teaching about Transportation

Introduction

Dear Student Teacher!

This is our fourth section under unit four which focuses on teaching about the content transportation. This section will also helps you to get acquainted with different teaching methods, assessment strategies, feedback forwarding mechanisms and recording keeping mode on students' progress for teaching the content and sub contents about transportation.

You are expected to practice, observe and recognize diverse methods of teaching, assessment tools and other components of teaching that are appropriate to teach science in primary school of the first cycle.

Learning Outcomes;

At the end of this section students should be able to:-

- Recognize misconceptions and conceptions about location of our kebele and wereda.
- Develop plan by selecting relevant methods, assessment tools and feedback forwarding mechanism and record keeping.
- Implement various teaching methods on teaching about transportation.
- Perform students' progress record.

Pre- Lesson Assessment: Individual Activity

The following individual activity is given to you to think about the different components of teachings in relation to the content and sub contents transportation.

a) Suggest suitable teaching methods used to be employed in teaching the content transportation to children.
b) Recommend appropriate assessment tools to be used in teaching the content transportation to children.
c) How do you provide feedback to your students in teaching the content transportation?

d) Mention some locally available resources that can be used as teaching resource for content of transportation!!

Lesson Content

The following Lesson contents of transportation are directly taken from grade one environmental Science syllabus.

- Importance of transportation
- Traditional systems of transportation
- Modern systems of transportation

Dear student teacher! From the above sub-contents of transportation, your instructor will show you a sample lesson and the remaining sub contents will be given to you to conduct microteaching.

Learning Outcomes;

Upon the completion of this lesson, you should be able to:-

- tell the importance of transportation
- give examples of traditional transport
- give examples of modern transport

Transportation is a system by which people and objects move from place to place. Transportation can be classified into traditional and modern systems of transportation. The traditional way of transportation is undertaken by the use of animals such as horses, mules, donkeys and cattle, where as the modern transportation system is carried out by the use of cars, air planes, boats, ships, bicycles and motor bicycles. Teaching about transportation for primary students can be done by asking students if they have ever moved from place to place and what was the means they used to move from one place to the other. Teacher should write the list of transportation students experienced or observed on the black board or chart and classify the means of transportation brain stormed by students and classify them in to traditional and modern means of transportation together with the students.

Transportation is a system by which people and objects move from place to place. Transportation can be classified into traditional and modern systems of transportation. The traditional way of transportation is undertaken by the use of animals such as horses, mules, donkeys and cattle, where as the modern transportation system is carried out by the use of cars, air planes, boats, ships, bicycles and motor bicycles.

Teaching about transportation for primary students can be done by asking students if they have ever moved from place to place and what was the means they used to move from one place to the other. Place charts or pictures that classify the means of transportation and brainstorm students and classify them in to traditional and modern means of transportation together with the students.

Practical activity: Microteaching practice (2 periods)

Dear students!

You have attended sample lesson presented under section three and followed microteaching activities presented by your classmates and comments given to them. Now your instructor will assign the MLC stated under section four for your microteaching. One MLC will be given for one student. So, you will plan, practice and conduct lesson presentations for 25 minutes by integrating assessment for learning.

Lesson Content:

- Importance of transportation
- Traditional systems of transportation
- Modern systems of transportation

Dear student teacher! From the above sub-contents of transportation, your instructor will show you a sample lesson and the remaining sub contents will be given to you to conduct microteaching.

Learning Outcomes;

Upon the completion of this lesson, you should be able to:-

- tell the importance of transportation
- give examples of traditional transport
- give examples of modern transport

Dear student-teachers well done!

You have completed your microteaching by planning, practicing and presenting assessment for learning integrated lesson. We hope you have received written and oral feedbacks for the improvements of your teaching skill. Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 5: Teaching about Types of Land Forms of our Wereda

Unit Introduction

This section deals with about teaching about wereda. It allows you to develop your teaching skill in your future carrier. Please, focus on the application of your theoretical pedagogical knowledge and develop your planning a lesson, selecting appropriate teaching methodologies, assessment methods and so on.

Learning Outcomes;

At the end of this section, you should be able to:-

- Realize the misconception of learners on the type of landforms
- Develop plan by selecting relevant methods, assessment tools and feedback forwarding mechanism and record keeping.
- Apply the skill of selecting and using different teaching methods, assessment tools, delivering and record keeping on different topics

Start up activity: Individual Activity

Dear student teachers, before we proceed with the body of the lesson, try to reflect your own idea as a start up activities on teaching about types of land Forms of our Wereda. Based on your prior knowledge of general methodology reflect on the following points.

- What misconceptions do you expect about types of land Forms of our Wereda.
- List the appropriate teaching strategies, assessment tools to teach about the type of landforms our wereda.
- Mention locally available material for making of teaching material for lesson content of type of landforms.

Lesson Content

The following lesson contents are directly taken from grade **two** environmental Science syllabus.

- landforms
- Features of land forms and its effect on our community

Learning Outcomes;

- Identify the landform in their Wereda.
- Describe the features of land form.

Sample Lesson-14

Dear trainee!

In the same way as done in the previous sections your instructor will present a sample lesson on the types of land form of our wereda to you. The other contents and learning competencies of this section content will be given to you to practice micro-teaching with support of either the instructor or your peer group. This sample lesson is as follows.

Lesson Content

The following lesson contents are directly taken from grade **two** environmental Science syllabus.

- landforms ***(sample lesson is presented)***
- Features of land forms and its effect on our community

Learning Outcomes;

- Identify the landform in their Wereda. ***(sample lesson is presented)***
- Describe the features of land form.

Pre- Lesson Assessment Practice (Individual Activity)

It is essential to motivate learners towards the new lesson by checking their prior knowledge of students.

- Ask the children individually to describe the meaning of landforms of their wereda
- Show picture of land forms and ask them whether it exists in their wereda

Teaching Strategies

Dear learner the following strategies are suggested to this sample lesson. It has to be clear to you as these are the only methods of teaching. But what is important is we have to use various teaching methods who enable children learn actively. Our teaching methods should enable us to achieve the learning competencies stated. Observation of different land forms in their woreda (Students should visit different areas) and reflection of students on their observation, presentation using a picture and field trip are selected teaching methods for teaching the content landform.

Activity One: Individual observation and presentation

Field observation will be arranged so that children can observe the different landform and they will be informed as they are going to orally present what they have observed in the field about the different landform.

The teacher will ask different questions while they are presenting orally to guide them to focus on the key points or learning competency.

During the reflection of each student the teacher will identify the possible misconception and correct them. Students should be given timely and constructive feedback.

Activity Two: Presentation

The teacher should show the pictures of landform types such as mountain, valley and plain to the students. In addition, the teacher should give the opportunity to reflect each of students turn by turn to identify and describe the landform type.

The teacher has to explain the difference nature of the landforms to the students and correct their misconceptions regarding the different nature of landforms of their wereda.

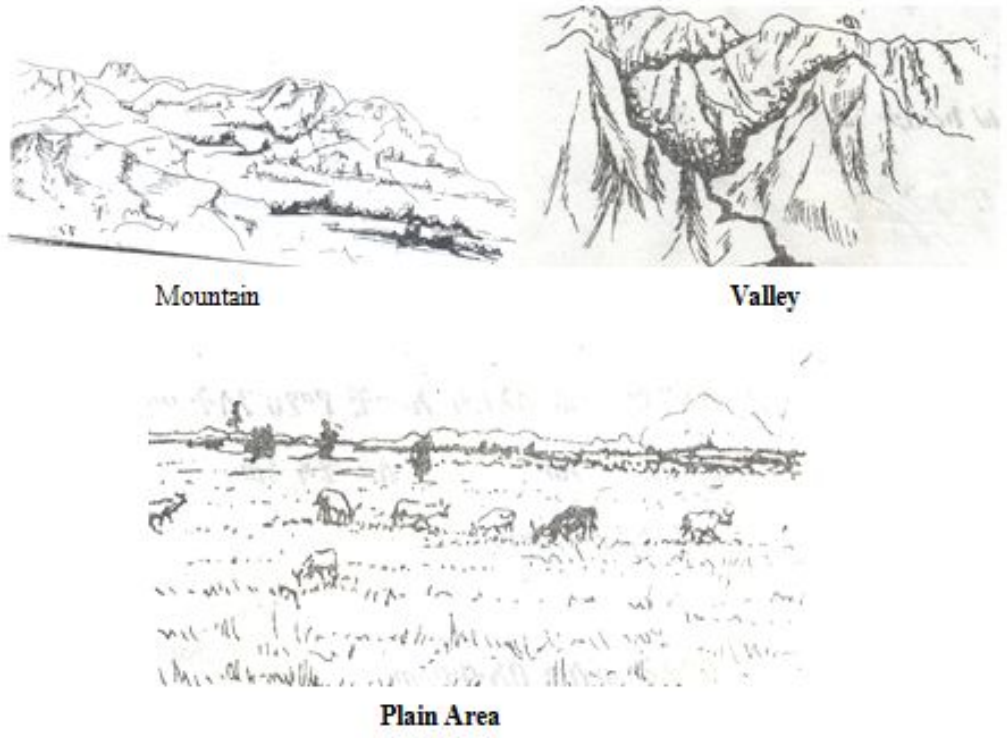


Figure 5: different landforms

Resources needed: pictures of different land form

Assessment strategies

The assessment strategies selected include;

- ✓ Reflection
- ✓ Peer assessment and

Assessment activity one: Reflection

1) Ask children to come in front of students and tell in detail what they have learnt about landform. When they overlook the point the teacher should invite other students to describe and should help children to get the meaning of landform.

Assessment activity two: Peer assessment

1) Assign students in pair and tell the competency based questions orally and instruct students to answer the question and correct their answers turn by turn. You should repeat the question and check each peer is conducting the peer assessment correctly.
2) Tell them when their peer made mistake they should correct the mistake.

Feedback provision and recording learners' progress

Teachers use a variety of methods to provide feedback to improve achievement in learning. Feedback causes thinking and provides guidance on how to improve. Effective feedback is designed to determine a learner's level of understanding and skill development in order to plan the next steps towards achieving the learning intentions or goals. Feedback in the form of comments, rather than grades, focuses on the task and includes what the student needs to do to improve. This helps students to move forward to the next stage of their learning.

Recording learners' progress

In recording students' learning progress we can use various formats. The following is one of the formats that can be used.

Statements of MLC

- ✓ Name their external body parts

S.No	Student's Name	Level of achievement				Constructive feedback
		Not yet meeting	Approaching/ developing	Meeting/ achieved	exceeding	
3.						
4.						
5.						

Dear learner!

We hope you have attended the sample lesson presented by your instructor by taking one minimum learning competency on the content external body parts. To confirm the skill you have gained conduct self assessment by comparing your previous teaching with the one you have conducted now. Focus on the components of teaching and learning.

Practical Activity: Microteaching Practice (1 Period)

Dear students!

Your instructor will assign one learning competency from the content landform indicated below. Then you will ***plan***, ***practice and conduct lesson presentations for 25 minutes*** by integrating assessment for learning as the sample lesson presented previously.

Lesson Content: Landform

The following lesson contents are directly taken from grade **two** environmental Science syllabus.

- landforms
- Features of land forms and its effect on our community

Learning Outcomes;

- Identify the landform in their Wereda.
- Describe the features of land form.

Dear trainee!

Prepare a lesson plan and get comment from your instructor on your plan. Especially, your instructor will check the integration of assessment for learning by checking the essential components. When your plan is approved you will conduct the lesson in the classroom.

Note: It is very crucial to get feedbacks on your presentation of the lesson and ask your instructor what you need to improve and how you can improve it. Take a short note on each comments and practice with your partner to improve them.

Students who didn't get learning competency from this section, your instructor will offer you from the next section (section 6) teaching about institutions in our wereda.

Student-teachers congratulations!

You have completed your microteaching by planning, practicing and presenting assessment for learning integrated lesson. You have received written and oral feedbacks for your future teaching improvement. Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Section 6: Teaching about Institutions in our Wereda

Introduction

Dear trainees!

This is the last section of unit four. This section will also create you an exposure to practice your skills on different teaching methods, assessment strategies, feedback forwarding mechanisms and recording keeping mode on students' progress for teaching the content and sub contents about institution in our wereda.

Learning Outcoes;

At the end of this section students should be able to:-

- Organize plan by selecting relevant methods, assessment tools and feedback forwarding mechanism and record keeping.
- Use various teaching and assessment methods that are appropriate for teaching the content institution in our Wereda.
- Implement various teaching methods on teaching about transportation.

Teaching about Religious Institutions

Teachers should ask students if they go to church or mosque. Students may tell rather their parents go to church or mosques and teacher should ask further what their parents do in the church or mosque. Students may reply could be that their parents go to church or mosque to pray. Thus, you help in summarizing that church and mosques are religious institutions in which people worship.

Teaching about Social institutions

Ask students if schools are provide services to the local people. Let students forward their responses and help them in summarizing that schools are social institutions in which people including the students themselves get educated and education is an important tool for a country's development. Ask students also what other institutions they know that provide services to the local people. Let students forward their responses and categorize these institutions as social, religious or developmental institutions.

Pre- Lesson Assessment: Individual Activity

Complete the following individual activity to enable think about the different components of teachings in relation to the content and sub contents institutions in our wereda.

4) What teaching methods are suitable in teaching the content institutions in our wereda?
5) Which assessment tools do you think is advisable to be used in teaching the content institutions in our wereda?
6) How do you provide feedback to your students in teaching the content institutions in our wereda?

Lesson Content

The following Lesson contents of transportation are directly taken from grade one environmental Science syllabus.

- Institutions
- Functions of institutions

Learning Outcomes;

Upon the completion of this lesson, you should be able to:-

- list the main institutions in their woreda
- give the functions of the main institutions of their woreda

Practical activity: Microteaching practice (2 periods)

Dear learner!

Under section five you have attended sample lesson presented by your instructor. Since, the fifth section doesn't contain sufficient numbers of MLC for you microteaching your instructor will assign one MLC for each student. By then, you will plan, practice and conduct lesson presentations for 25 minutes by integrating assessment for learning.

Lesson Content

The following Lesson contents of transportation are directly taken from grade one environmental Science syllabus.

- Institutions
- Functions of institutions

Learning Outcomes;

Upon the completion of this lesson, you should be able to:-

- list the main institutions in their woreda
- give the functions of the main institutions of their woreda

Well done!

You have completed your microteaching by planning, practicing and presenting assessment for learning integrated lesson. We hope you have received written and oral feedbacks for the improvements of your teaching skill. Record each feedback given or collect written feedbacks given and organize them in a portfolio which enables you to check the improvement or progresses made in your teaching skills.

Reflective Activity

Answer the following self-reflection activities for each microteaching you have conducted and put it in your portfolio.

1) How effective was your planning of learning? Example; the lesson plan, the structure of the session, making the session inclusive. What impact did this have on the learners / learning?

_____

_____

2) Consider your microteaching and write specifically what did you do in detail in your microteaching.

_____

_____

3) Think about your microteaching and specify what you wanted to achieve?

_____

_____

4) Consider your microteaching and write briefly what you thought was successful. (Reflect on your lesson planning, teaching methods, competency based assessment used, instructional materials, feedbacks and recording students' learning progress.

_____

_____

5) Think about your microteaching and write in brief on What you feel was not so successful and how you would correct it when teaching similar things (Reflect on your lesson planning, teaching methods, competency based assessment used, instructional materials, feedbacks and recording students' learning progress.

_____

_____

6) Were you able to effectively judge attainment and achievement through the assessment methods you chose? How?

_____

_____

_____

References

1. Crump, A (1991). Dictionary of Environment and Development: People, Places, Ideas and Organizations. London: Earthscan publications Ltd.
2. Miller, G.T. And Armstrong, P. (1982). Living in the Environment. California: Wadsworth Inc.
3. Amhara National Regional Government Education Bureau (NY). Environmental Science Textbook for Multigrade class Level two.
4. Kcrawczyk , M. (2009). Designing and Implementing Inquiry based science units for primary Education. WWW.Foundation-lamap.org/sites/defualt/files/.../Guide.IBSE-light.pdf (accessed on Aug 4, 20133)
5. Esach, H. (2006). Science Literacy in Primary Schools and Pre-Schools. The Netherlands: Springer.
6. Harris, D. (2009). Primary Science: Teaching Theory and Practice, 4th ed. Great Britain: Bell and Bain.
7. Carre, C. And Ovens, C. (1994). Science 7-11 developing Primary Teaching Skills. London and New York: Routledge.
8. Allen, B. (2010). Misconceptions in Primary Science. New York:Open University Press.
9. Amhara National Regional Government Education Bureau (NY). Environmental Science Textbook for Multi Grade Class Level 2.
10. MoE (2010). Preparation and Usage of Instructional Materials from Locally Available Resources. Addis Ababa: Unpublished.

Annex-I: Syllabus document for grade-1 Environmental Science subject

Unit 1: Ourselves *(57 periods)*

Unit Outcomes: Students will be able to:

- name and show external body parts, tell their function and care for them
- list the three basic human needs and explain their importance
- list some common diseases and demonstrate their prevention methods
- name the five sense organs, explain their functions and make relevant observations using them
- identify some sources of light, sound, color, taste and smell through simple activities
- demonstrate scientific enquiry skills along the unit: Observing, questioning, communicating and working cooperatively.

Competencies	***Contents***	***Suggested activities***
Students will be able to: • name their external body parts • show their external body parts	***1. Ourselves*** **1.1 Our external body parts** *(10 periods)* 1. External body parts	External parts should include: the head, hair, ears, eyes, nose, mouth, hands, fingers, chest, abdomen, waist, legs, knees, and feet. Let the Students identify the external body parts by using models and charts and their own body parts.
• tell the functions of their external body parts	2. Functions of external body parts	Students should describe the functions of the body parts. This could be made into a game in which a child describes the function of a body part and the rest of the class has to guess which body part is being described.
• care for the external body parts of their bodies	3. Care of the external parts of the body	Taking care of the body should include: •Washing hands, hair, face and feet •Taking regular baths or showers •Combing hair daily •Cleaning teeth daily •Keeping the nose and ears clean •Cutting nails regularly Use case-studies to explain the harm caused by not keeping body parts clean. Let Students discuss the case studies and give some of their own examples. Let them practice exercises in which they clean their bodies such as brushing their teeth using wooden twigs. Repeat this for other parts of their bodies.
• list the three basic human needs	**1.2 Our basic needs** *(8 periods)* 1. The three basic human needs	Explain to Students that food, clothing and shelter are the three basic needs of humans. Let Students give examples of different foods, different types of clothing and different forms of shelter. Get Students to discuss what would happen to them if any one of these human needs was withheld from them.
explain the importance of each of the three basic human needs	2. Importance of these needs	Explain to Students that humans need food to help them grow, to make them strong and to give them energy. Get Students to name some of the foods that they eat. Ask them to name their favorite food.

Competencies	***Contents***	***Suggested activities***
		Ask Students to state some of the reasons why we need clothing. Summarize by telling Students that clothes are needed for protection from the weather (cold, sunlight, rain), to cover the body and to improve personal appearance. Ask Students to name the raw materials which are used to make clothes. These should include cotton, wool, leather and nylon. In small groups Students should discuss which types of clothing are suitable for wearing in different seasons. Ask Students to state some of the reasons why we need shelter. Summarize by telling. Students that shelter is needed for protection from the weather (cold, sunlight, rain, wind) and from harmful wild animals. Ask Students to name the materials used to build shelters in their locality. This could include grass, wood, iron sheet, bricks, mud, cement and sand. Let Students conduct a survey of the school and some other local buildings to see what materials have been used in their construction.
• name some common diseases that might affect them	**1.3 Common diseases that affect us** *(11 periods)* 1. Common diseases 2. AIDS	Common diseases should be restricted to those which will be familiar to Students such as the common cold, ascariasis, malaria and dysentery. Make a list of the diseases that are familiar to Students. Ask Students if they or anyone in their family has every suffered from these diseases. Add the number for each disease so that Students can see which is the most common, and which is the least common, disease in their locality. Students may not be familiar with AIDS. Describe this as a condition that is fatal and has no cure.
• describe precautions that help to avoid these diseases	3. Prevention of diseases • Responsibility to others not to spread diseases such as colds and dysentery	Use the examples above to start a discussion about how Students can avoid catching diseases. For each disease challenge Students to think of a suitable precaution. • The common cold is spread in their air. How can we avoid a cold? We cannot stop breathing air but we can ensure the air is clean by having rooms properly ventilated. • Dysentery is spread in body waste. How can we avoid dysentery? We must wash our hands thoroughly after we have been to the toilet and not eat food offered by people with dirty hands. • Malaria is spread by insects. How can we avoid malaria? We can sleep under nets and not leave stagnant pools of water where mosquitoes breed. • AIDS is spread in blood. How can we avoid AIDS? We should avoid blood contact with other people and sharp objects contaminated with blood.

Competencies	***Contents***	***Suggested activities***
• name the five sense organs • explain the function of sense organs • identify common sources of light • identify at least seven colors • make relevant observations using the sense of sight	**1.4 The five sense organs** *(28 periods)* 1. Names of sense organs 2. The general function of sense organs 3. The eyes • Seeing light sources • Identify color	Explain what sense organs are and state their names. Get Students to point at, name and explain the function of each of the sense organs Let students name some sources of light from their own experience. Show student some different sources of light by using pictures and real objects such as a candle, a flash light (torch), lamp, burning wood, electric light, sun and moon. Students should name these sources of light. Show Students different colored objects such as cards, flowers, leaves, clothing and other objects and materials. Students should name the color each time. Demonstrate how to prepare colors from plants. Students should work in small groups to prepare colors from leaves and plants
• identify common sources of sound • make relevant observations using the sense of hearing	4. The ears • Identifying common sounds	Allow Students to listen to as many different sounds as possible from different sources. These could include domestic animals, wild animals, machines, cars, airplanes, musical instruments and people. Students should identify different sounds. Point out to Students that people make different sounds when they are happy, sad, angry, excited, stressed etc. Let Students practice imitating animal sounds and the different sounds people make to show different moods.
• describe the tastes of common substances • make relevant observations using the sense of taste	5. The tongue • The taste of common substances	Explain to Students that the tongue is the sense organ we use to taste food substances. Let them discuss the different tastes of different substances including sweet, bitter, salty and sour. Point out that taste allows us to identify different substances. Students should give examples of foods that have these tastes. Use role play to tell Students the dangers of tasting substances they do not know. Emphasize that this might poison them. Get Students to use role play to demonstrate the possible result of eating something poisonous.
• describe the smells of some common substances as pleasant or unpleasant • make relevant observations using the sense of smell	6. Function of the nose • The smell of common substances	Explain to Students that the nose is the organ of smell. Ask Students how different substances can be identified by their smell. Get them to give examples of substances which have characteristic smells, some pleasant and some unpleasant. Use role play to tell Students the dangers of smelling substances they do not know. Emphasize that this might make them cough or poison them. Get Students to use role play to demonstrate the possible result of smelling something unpleasant or poisonous

Assessment

The teacher should assess each student's work continuously over the whole unit and compare it with the following description, based on the Competencies, to determine whether the student has achieved the minimum required level.

Students at minimum requirement level

A student working **at the minimum requirement level** will be able to: name and show the external parts of their bodies and sense organs and describe their functions and how they keep them clean; list and give a simple explanation of the basic needs of people; list the raw materials used to make clothing and shelters; name the types of clothing suitable for different seasons; name several common diseases and know how to avoid some of them; identify different sources of light, colors and sounds; prepare different colors using leaves and flowers; be aware of the dangers of tasting and smelling unknown substances; identify a small number of common substances by tasting, smelling and touching.

Students above minimum requirement level

Students working **above the minimum requirement level** should be praised and their achievements recognized. They should be encouraged to continue working hard and not become complacent.

Students below minimum requirement level

Students working **below the minimum requirement level** will require extra help if they are to catch up with the rest of the class. They should be given extra attention in class and additional lesson time during breaks or at the end of the day.

Unit 2: Our family *(48 periods)*

***Unit Outcomes*:** Students will be able to:

- list their immediate family members and mention their occupations
- cite farming as a source of food they eat, name crops or crop products at their home and care for crops
- show materials that clothes and shelters are made up of and identify different types of clothing and shelters
- name some household materials, tell their uses and the materials they are made up of and care for them
- demonstrate scientific enquiry skills along the unit: Observing, questioning, communicating, working cooperatively and classifying.

Competencies	***Contents***	***Suggested activities***
Students will be able to: • list their family members	***2. Our family*** **2.1 Family members** *(11 periods)* 1. List of family members • Respect for elders and extended family	Family members should be restricted to grandparents, parents, brothers, sisters, aunts and uncles. Allow each child to tell others in the class about their family. Use role play so that Students can play different members of a family.
• state the occupations of their family members • demonstrate helpfulness, kindness and responsibility to other family members	2. What do our family members do for a living? 3. Keeping good relationships with other family members	Occupations could be grouped into sectors such as farming, trade, military, skilled workers, professionals, office workers, manual laborers etc. Make a list of sectors and count the number of family members in each sector for the class as a whole. Students should say which the most common means of employment in their locality is. Students could imitate some of the actions needed for the different jobs. Students could be asked to tell the rest of the class what job they would like to do when they grew up and why they would like to do it. Role play the different situations of relating to other family members
• identify farming as a source of food they eat • name crops and crop products at their home	**2.2 Our family needs food, shelter and clothing** *(17 periods)* 1. Food • Sources of food • Common crops • Crop products	Farming should be identified as the source of food we eat. Ask Students to name the crops that are grown and eaten in their locality. Make a list. Encourage Students to give more detail such as what time of the year if the crop harvested. This information could be used to draw a calendar showing the crops growing over the year. Adapt this situation to a pastoral environment. Challenge Students to name crops that are not grown for food. For example trees may be grown for wood, bamboo for weaving etc.
• identify different	2. Clothing	Ask students to name different types of clothing and make a list. This should

Competencies	***Contents***	***Suggested activities***
types of clothing • name materials used to make clothes	• Types of clothing • Materials used to make clothing	include coats, jackets, trousers, dresses, blanket, veils- kuta and gabi, shirt. Students could make a list of clothing that is worn only in the summer and clothing that is worn only in the winter. Ask Students to name the material from which different types of clothing is made. From this make a list of materials used to make clothing. This should include cotton, wool, leather and nylon. Challenge Students to explain why certain materials are used to make particular types of clothing e.g. why are shoes and boots often made of leather? Why are coats often made of wool?
• identify different types of shelter • name building materials	3. Shelter • Types of shelter Building materials	Types of shelter should include huts, flats and bungalows Building materials should include mud, straw, stone, hollow block, wood, corrugated iron, corrugated aluminum, brick. Take Students for a walk around the school compound and surrounding area. Get them to identify all of the different building materials that they see. If possible, bring small samples of each back to the classroom and make a display. Ask the Students why particular materials are used for particular purposes; why are walls built from mud but roofs are made from straw?
• name items of furniture • give examples of electrical equipment • name utensils	**2.3 Household materials** *(20 periods)* 1. Household items • Furniture • Electrical equipment • Utensils	Ask Students to name some of the things in their homes. Ask them if they can see a way of putting them into different groups. Direct their suggestions towards items of furniture, electrical equipment and utensils. Summarize by identifying common items of furniture, common electrical equipment and common utensils.
• describe the use of some furniture • describe the use of some electrical equipment • describe the use of some utensils • identify household dangers	2. Uses of household items • Furniture • Electrical equipment • Utensils • Safety at home; Danger of electricity, water, stove, iron, knives, etc.	Ask Students to identify ways in which we use furniture. They should be able to link actions to different items. These should include: • sitting and lying down (chairs and beds) • storing (shelves and cupboards) • working (desk and table) Electrical equipment could be looked at in a similar way. Ask Students to classify the uses for example: • preparing food (cooker, kettle, toaster) • entertainment (television, radio) • light (room lights, table lamps)

Competencies	***Contents***	***Suggested activities***
• name common materials used to make household items • describe how to use and care for household items • demonstrate care for household items • describe how to avoid household dangers	3. Materials used to make household item 4. Care when using household items and cleaning them. • Keeping safe (keeping cleaning chemicals like bleach out of reach	• jobs (iron, stove) Utensils are quite diverse by nature. Their uses could be restricted to: • cooking and eating (knives, forks, spoons, pans, dishes) • jobs (scissors, tools) Students discuss dangers at home and make a list of dangers Provide Students with some household items. They should examine these carefully, and also items from the classroom, to determine from what each item is made. Materials should be named in general terms like wood, plastic and metal. Students should think about how best to use items and care for them. • Furniture should not be climbed over and should be wiped, brushed or polished depending on what it is made from • Electrical items should not be used with wet hands because of the danger of electric shock. They should be cleaned after use and stored so that people do not trip over electric leads • Utensils should be washed and stored after use. Materials like glass and ceramics are brittle and will break if dropped so they much be handled with care. • Students can make a series of two drawings of household accidents of which one shows the accident and the second shows how to prevent it. • Students could demonstrate the care for different items in the classroom. As a homework task they could care for items in their home and report back to the class what they have done.

Assessment

The teacher should assess each student's work continuously over the whole unit and compare it with the following description, based on the Competencies, to determine whether the student has achieved the minimum required level.

Students at minimum requirement level

A student working **at the minimum requirement level** will be able to: list their family members and state their occupations; identify farming as a source of food they eat and name crops and crop products at their home; identify different types of clothing name materials they are made up of;

identify different types of shelter and name materials buildings are made up of; name items of furniture and utensils and electrical equipment and describe their uses; name common materials used to make household items and describe how to use and care for them.

Students above minimum requirement level

Students working **above the minimum requirement level** should be praised and their achievements recognized. They should be encouraged to continue working hard and not become complacent.

Students below minimum requirement level

Students working **below the minimum requirement level** will require extra help if they are to catch up with the rest of the class. They should be given extra attention in class and additional lesson time during breaks or at the end of the day.

Unit 3: Our school *(48 periods)*

***Unit Outcomes*:** Students will be able to:

- explore the school compound and explain the activities of the school
- demonstrate respect for rules and regulations of the school, home and neighborhood
- demonstrate good personal relationships at school, home and neighborhood
- list common road accidents and explain their prevention methods
- construct kites and wind turbines using paper
- demonstrate scientific enquiry skills along the unit: Observing, questioning, communicating, making models and working cooperatively.

Competencies	***Contents***	***Suggested activities***
Students will be able to: • describe their school compound	***3. Our school*** **3.1 Our school compound** *(12 periods)* 1. Layout and content of the school compound • Explanation of how to	Students should be taken around the school compound and sketch the different buildings and other features they see. The emphasis should be placed on the relative positions of the features and not on the scale. Sketches should be used to draw a neat plan of the school compound. A large version could be drawn on a poster showing the locations of important places. Children draw a flat plan of their own classroom. Children sing song: "This is the way we wash our hands ...clean our teeth, comb our hair, etc."
• explain the activities of their school • explain who they play with, what they play at, and how they make friends	2. Activities that go on at school 3. Getting on with other children at play	Use this lesson to introduce to the idea that the activities in school amount to more just lessons. Challenge Students to say what other activities take place. If necessary prompt them with suggestions such as sports teams, clubs, community activities etc. Make a list of these activities. Ask Students if they can suggest other activities they would like to see at the school. How might they make these happen? Talk about sharing and taking turns. Children play a game which enquires them to collaborate with others and take turns.
• demonstrate respect for school rules	**3.2 We respect rules and regulations** *(12 periods)* 1. School rules	Ask Students why a school must have a set of rules. Don't tell them what the school rules are. The class should discuss possible rules and the need for them. Suggest that they think about such things as: cleanliness, punctuality, caring for school property, performing school tasks on time and respecting teachers. When the class has derived its own 'school rules' compare them with the actual school rules. Point out the similarities and discuss any differences or omissions.
• demonstrate respect for rules at home and neighborhood	2. Rules at home and neighborhood • Respect for others at home, school and neighborhood	Extend the idea of rules to the home. Ask Students to tell the class of any rules in their home. These should include respect for parents and elders, obeying parents, getting ready for school in the morning, doing homework in the evening, doing their household chores. The Students can draw up a set of rules for their homes.

Competencies	***Contents***	***Suggested activities***
• demonstrate good relationships at school • express willingness to conform to good personal relationships at home and neighborhood	**3.3 We have good personal relationship** *(6 periods)* 1. Relationships at school, home and in the neighborhood	Finally ask Students to think about rules around their neighborhood. Ask them to give examples and explain why they are needed. Students should work in groups using role play to demonstrate each of the following: greeting, politeness, frankness, sociability, cooperation, affection and helpfulness. After each group has performed the class should discuss the importance of behaving in this way.
• describe some causes of road accidents • explain how road accidents may be prevented • practice crossing the road safely and assisting others to cross	**3.4 Road safety** *(12 periods)* 1. Common road accidents 2. Prevention of common road accidents • Road safety code • Helping others (smaller children, disabled people	Students should discuss the causes of road accidents. These might include crossing roads without looking each way, poor vehicle driving, straying animals and flooding. If any child has been involved in an accident they should be invited to tell the class what happened. Students should discuss methods of preventing accidents. These may include: • Watchfulness and vigilance when near roads • Avoiding risks crossing roads • Crossing bridges and passing steep and slippery slopes carefully • Refraining from playing on roads and road sides • Observing traffic rules including zebra crossings and traffic lights Students talk about their own route to school and their own experience. They practice the road safety code in the playground: Stop at the kerb, look both ways; walk straight across if the road is clear.
• construct kites and wind turbines using paper	**3.5 Activities we can do in our school** *(6 peds)* 1. Constructing figures using paper • Kite • Wind turbine	Students should first sketch their kite / wind turbine. Once they decide on the design it should be drawn out on paper. It will be far easier to color and decorate at this stage than later. When the decoration is complete the patterns should be cut out and fixed together using glue, cello-tape and other fixing as appropriate.

Assessment

The teacher should assess each student's work continuously over the whole unit and compare it with the following description, based on the Competencies, to determine whether the student has achieved the minimum required level.

Students at minimum requirement level

A student working **at the minimum requirement level** will be able to: describe their school compound and the activities of their school; demonstrate respect for rules at school, home and neighborhood; demonstrate good relationships at school, home and neighborhood; describe some causes of road accidents and how they could be prevented; construct kites and wind turbines using paper.

Students above minimum requirement level

Students working **above the minimum requirement level** should be praised and their achievements recognized. They should be encouraged to continue working hard and not become complacent.

Students below minimum requirement level

Students working **below the minimum requirement level** will require extra help if they are to catch up with the rest of the class. They should be given extra attention in class and additional lesson time during breaks or at the end of the day.

Unit 4: Our locality – kebele *(57 periods)*

Unit Outcomes: Students will be able to:

- indicate the relative locations of their school, home and kebele
- show the properties and tell the importance of air, water and soil
- construct common shapes and figures using soil (mud)
- group plants into trees and small plants, tell their uses and demonstrate care for them
- group animals into domestic and wild, tell their uses and demonstrate care for them
- group types of work into private and governmental, tell the importance of work and demonstrate respect and love for work at their own level
- tell the importance of transportation and give examples of traditional and modern transport
- demonstrate scientific enquiry skills along the unit: Observing, questioning, communicating, working cooperatively, and classifying.

Competencies	***Contents***	***Suggested activities***
Students will be able to:	***4. Our locality – kebele***	
• identify left, right, front, and back directions	**4.1 Location of our Kebele** *(9 periods)* 1. Telling directions	Students should describe the direction of the things around them using left, right, front and back. They can play a game in pairs where one child directs another from one place to another using these four directions only. Students could revisit the work they carried out on the layout of the school compound to describe the direction of one feature from another.
• indicate the locations of their schools, home and neighborhood	2. Locations to and from the home, school, and kebele	This work on location should be extended to outside the school classroom and compound. Students should describe the direction of their home from the school and each child should say the directions he or she has to travel from home to school. Students should determine the directions of important places in their neighborhood from their school. This could be in the form of a game where the location of a place is given by the teacher and the place has to be identified by the student.
• show the presence of air and tell why it is important	**4.2 Non living things around us** *(13 periods)* 1. Air • Presence • Importance	Students can carry out simple experiments to show the presence of air. These include: • Blowing bubbles of air through water • Placing a piece of paper over a stick and then pulling the stick up so they see that air pushes on the sides of the paper bending it down Allow students to conduct some more activities of their own to demonstrate the presence of air, The importance of air should be restricted to saying that all living things, plants and animals, need to breathe.
• show the presence of	2. Water	Students can observe water in many locations around them.

Competencies	***Contents***	***Suggested activities***
water in ponds, wells, streams and rivers • tell why water is important • tell why it is important as a medium in which to • grow plants • fashion simple shapes and figures using clay	• Where water is found • Importance 3. Soil • Importance in agriculture • Importance in art	The importance of water should be restricted to saying that all living things, plants and animals, need to absorb or drink water in order to live. Students can observe soil in many locations around them. The use of soil as a growing medium can be demonstrated by observing crops growing in fields, or plants growing in pots of soil. Ask Students to suggest why plants need soil to grow. Explain that the soil provides the plant with a firm anchor so it does not fall over, and that the plant absorbs water from the soil. If a plant is available, show Students the root. If clay is present in the locality it can be used to make simple shapes such as circles, squares, triangles and letters. If it is not available other soils should be used.
• group plants into trees, shrubs and small plants • tell some uses of plants • tell about the care for plants	**4.3 Living things around us** *(9 periods)* 1. Plants • Grouping • Uses of plants • Caring for plants	Take Students for a walk around the school compound or the locality around the school. Ask them to look at the different plants that grow there. Classification of plants should be restricted to trees, shrubs and small plants. Each plant they see should be placed in one of these three groups. Back in the classroom ask Students what we use plants for. The most obvious answer is for food but there are other reasons why we grow plants. The use of plants for decoration, fencing and to supply construction materials and firewood should also be considered. Ask Students why each of the following helps the plant to grow and flourish: • Watering, weeding, fertilizing, preventing damage by animals
• group animals into domestic and wild • tell some uses of animals • tell about the care for animals	2. Animals • Grouping animals • Uses of animals • Caring for animals • No cruelty to animals or other living creatures	Classification of animals should be restricted to domestic and wild. Ask Students to name examples of each. Pictures can be taken from old magazines to make posters for each. The uses of animals should be restricted to food, hides for leather, transport and as pets. Ask Students: • To name examples of different meats such as chicken, beef, mutton etc. and how we cook them • What we use leather for • Which animals are used to transport people and/or materials • Which animals people most often keep as pets Students who keep pets should tell the class about them. Emphasize kindness to pets and to other animals. Carry out a survey to find which animals are the most popular pets

Competencies	***Contents***	***Suggested activities***
		of the class members. Ask Students why each of the following are important when keeping domestic animals: • Feeding, Watering, Housing, No cruelty Point out that a wild animal must provide all of these things for itself and so that this is possible we must respect the environment of wild animals.
• tell the importance of work	**4.4 Common activities of our local people** *(13 periods)* 1. The importance of work	The importance of work should be discussed in terms of providing for food, clothing and shelter. Ask Students to say what would happen if their parents didn't earn money; how would their lives change. Students should discuss the provision of useful materials and services. They should give examples of each and explain why they are important.
• group types of work into self-employed, working for someone and working for the government	2. Grouping types of work	• Different types of work should be restricted to: • working for yourself • working for someone else • working for the government. Ask Students to think of examples of each type of work. Carry out a survey of the class to see how many parents fall into each category.
• demonstrate pride in their work and in simple tasks at home	3. Pride in work • Pride in simple domestic tasks which help other family members	Students should appreciate that a person can take pride in any work that they do. Ask Students what the implications are if each of the following people does their work badly: • a farmer, a bus driver, a baker, a student Students discuss which jobs they do at home to help the family community.
• tell the importance of transportation	**4.5 Transportation in our locality** *(13 periods)* 1. Importance	Ask Students to discuss the importance of transport. The discussion should include the movement of: • foods, raw materials, manufactured goods, people Ask Students to try and imagine what it would be like if there were no proper roads.
• give examples of traditional transport	2. Traditional transportation	Traditional transport should include: • walking, horse, donkey, camel Students should be shown pictures of these animals and be encouraged to observe them if found in their locality. Students tell stories about the favorite journey they have made by traditional

Competencies	***Contents***	***Suggested activities***
• give examples of modern transport	3. Modern transportation	methods. This could be a walk to a favorite place with their family, or a trip to an extended family party. Modern methods of transport should include: • cars, lorries, buses, trains, aircraft, ships Ask Students what is the main function of each of these. Which are used mainly for transporting goods and which for transporting people?

Assessment

The teacher should assess each student's work continuously over the whole unit and compare it with the following description, based on the Competencies, to determine whether the student has achieved the minimum required level.

Students at minimum requirement level

A student working **at the minimum requirement level** will be able to: identify left, right, front, and back directions and use this to locate their home and school; show the presence of air and water and tell why they are important; group plants and animals, tell their uses and how to protect them; group types of work and tell their importance; describe the importance of transportation and give examples of modern and traditional transport.

Student above minimum requirement level

Students working **above the minimum requirement level** should be praised and their achievements recognized. They should be encouraged to continue working hard and not become complacent.

Students below minimum requirement level

Students working **below the minimum requirement level** will require extra help if they are to catch up with the rest of the class. They should be given extra attention in class and additional lesson time during breaks or at the end of the day.

Annex-II: Syllabus document for grade-2 Environmental Science subject

Unit 1: Ourselves *(51 periods)*

***Unit Outcomes*:** Students will be able to:

- state the importance of food, name commonly eaten foods in their locality, identify foods provided by animals and plants and exhibit proper manners of eating
- define health and explain the importance of being healthy by comparing a sick person with a healthy person
- describe some symptoms of sickness and practice how to tell others when they feel these symptoms
- explain the importance of good personal hygiene and describe the consequences of poor hygiene; practice good hygiene
- demonstrate scientific enquiry skills along this unit: Observing, questioning, classifying, communicating, and working cooperatively.

Competencies	***Contents***	***Suggested activities***
Students will be able to: • explain the importance of food	***1. Ourselves*** **1.1 The food we eat** *(17 periods)* 1. Importance of food	Let students gather information on the importance of food from their parents and other individuals and report their findings to the class. The importance of food should be limited to growth, health and energy. Explain to students that malnourished children are small for their age, they catch diseases more easily than well-fed children and they are lethargic at their work and play.
• name foods commonly eaten in their locality	2. Commonly eaten foods	Ask students to name some common foods which are eaten locally. Make a list. Ask each student which is their favorite food from the list and write the number of students alongside each food. Rewrite the list so that the most popular food is at the top and the least popular is at the bottom.
• classify foods as coming from animals and from plants • give examples of foods from animals and from plants	3. Sources of food • Animals • Plants	Ask students to look at the list of commonly eaten foods and say where each food comes from. Use this to introduce the idea that some foods come from animals while others come from plants. Students should recall names of some different meats they studied in Grade 1. They may need reminding that dairy products including milk, butter, yoghourt and cheese also come from animals. Ask students if any of their parents make butter, yoghourt or cheese. If they do ask the student to describe how this is done to the rest of the class. Further classify foods from plants as in the form of cereals, vegetables and fruits. Students should make lists of cereals, vegetables and fruits. They could draw and color examples of cereals, vegetables and fruits. The lists and drawings could be used to make three posters, one for cereals, one for vegetables and one for fruits.
• demonstrate proper table manners • demonstrate courtesy to others		Table manners should include: • washing hands before eating • sitting down where the food is served • offering food to others first and thinking of the needs of others

Competencies	***Contents***	***Suggested activities***
		• chewing food properly before swallowing • not bolting food down quickly • not overeating Discuss the importance of good table manners with the class as a whole. Divide students into small groups. Each group should sit around as if at a table and prepare a role play to demonstrate some aspects of table manners. Each group could perform their role play for the rest of the class.
• define health as physical and social wellbeing • explain the importance of being healthy	**1.2 We are healthy!** *(17periods)* 1. What is health? 2. Importance of good health. • It is normal to be happy	Health should be defined as a state of physical and social wellbeing Healthy people are generally happy and feel well in themselves. They are strong and active, and are able to participate fully in daily life activities. Talk about what makes them happy or unhappy. Children demonstrate through role play what makes them happy or unhappy. Discuss bullying. Also discuss disability.
• compare the features of a sick person with a healthy person • explain the importance of helping sick people	3. Comparison of healthy and sick people. • Concern and caring for sick people	Comparison between healthy and sickly people should focus on general issues rather than the problems associated with a specific illness. A sick person feels generally unwell, unhappy, and may want to sleep much more than a healthy person. Ask students if they have had someone in their family who has been sick. Ask them to describe how the person's behavior changed when they became ill and when they became well again.
• state some symptoms of sickness • appreciate the importance of telling others when they experience the symptoms of sickness	4. Symptoms of sickness 5. What should we do when we feel these symptoms***?***	The focus should be on general symptoms rather than a specific illness. For example, sickness may be associated with fever, shivering, headaches, general aches and pains, loss of appetite, vomiting and diarrhea. Invite students who have been sick to describe their symptoms to the rest of the class. Emphasis should be placed on the student communicating with a teacher or minder when they are feeling unwell. They should appreciate how foolish it is not to tell others when they feel unwell. Students should work in groups. Each group should elect a person to be a doctor. The other members of the group should take it in turn to pretend to feel unwell and describe their symptoms to the doctor. Discuss what to do in an emergency: Role play.
• explain the importance of good hygiene	**1.3 We keep our personal hygiene** *(17 periods)* 1. Why do we keep our hygiene? • What can happen to other people if we don't keep clean?	The term 'hygiene' should be explained in terms of cleanliness which greatly reduces the chances of illness so we remain healthy. Ask students to explain why good hygiene is particularly important in places where food is prepared.
• name some diseases caused by poor hygiene	2. Diseases caused due to poor hygiene	The focus should be on diseases, such as scabies, ascaris and trachoma. Describe the symptoms of these diseases and how they may be caused.

Competencies	***Contents***	***Suggested activities***
• state that AIDS can be passed on by blood contact	3. AIDS as a disease passed by blood. • If somebody has an accident, tell an adult immediately	Describe AIDS as a condition that makes the body weak. Explain that our bodies are able to fight diseases but when a person has AIDS their body becomes weak and it cannot fight disease. Discuss examples of situations in which students may come into contact with blood such as playground accidents and touching sharp objects contaminated with blood such as needles and blades. Emphasize that AIDS is passed on in blood so contact should be avoided. Also offer a solution, for example a chart showing how to deal with playground accidents involving blood safely.
• demonstrate proper personal hygiene	4. Practicing personal hygiene • Showing responsibility for the health of others	• A variety of activities can be discussed including: • Cleaning the body by washing and cleaning teeth • Wearing clean clothes • Maintaining a clean environment at home, in the classroom and in the school compound • Using latrines • Separate dwelling places for humans and animals • Placing garbage in dustbin Students could improve the appearance of the school compound by removing any garbage they see. Students could draw and color posters encouraging different aspects of good hygiene. These could be placed around the school to encourage others. Ask students to tell the advantages of living in a clean environment.

Assessment

The teacher should assess each student's work continuously over the whole unit and compare it with the following description, based on the Competencies, to determine whether the student has achieved the minimum required level.

Students at minimum requirement level

A student working **at the minimum requirement level** will be able to: explain the importance of food and name foods commonly eaten in their locality; classify and give examples of foods from animals and from plants; define health and explain the importance of being healthy by comparing the features of a sick person with a healthy person; state some symptoms of sickness and the importance of telling others when they experience the given extra attention in class and additional lesson time during breaks or at the end of the day. symptoms; explain the importance of good hygiene and give examples of some diseases caused by poor hygiene; state that AIDS can be passed on by blood contact.

Students above minimum requirement level

Students working **above the minimum requirement level** should be praised and their achievements recognized. They should be encouraged to continue working hard and not become complacent.

Students below minimum requirement level

Students working **below the minimum requirement level** will require extra help if they are to catch up with the rest of the class. They should be

Unit 2: Our community *(53 periods)*

***Unit Outcomes*:** Students will be able to:

- classify members of their community based on age and categorize themselves accordingly
- state some of the rights of the child, give examples of violation of these rights and suggest how these rights should be protected
- practice planning their daily activities exhibiting self management, demonstrate a willingness to participate in some community activities comparable with their age
- explain the importance of energy to their community and list down sources of energy
- practice drawing sketches and joining materials and make decorations and models from paper and clay respectively demonstrate scientific enquiry skills along this unit: Observing, recording, questioning, classifying, measuring, communicating, making models and working cooperatively.

Competencies	***Contents***	***Suggested activities***
Students will be able to: • classify members of their community based on age • categorize themselves as children within the community	***2. Our community*** **2.1 Members of our community** *(15 periods)* 1. Members of the community 2. To which group of the community do we belong? • What makes you feel that you belong in your community?	The community should be classified into groups based on age such as children, adolescents, adults, and old people. Student could classify their family in these terms so they tell how many people are in each group. Combine the data for each student to give an age profile for the families of the class members. Students should be aware of their role as children within a community. Ask students to tell some of the advantages and some of the disadvantages of being a child. Children draw a spider diagram with them in the middle and lines going out to all the people whom they know. The age when a person passes from one group to the next is not clearly defined. Ask students to discuss at what age: • a child becomes an adolescent • an adolescent becomes an adult • an adult becomes an old person
• state some rights of the child • give examples of how the rights of the child may be violated • suggest ways of protecting the rights of the child	3. What rights do we have? • Rights of the child • Violation of child rights • Protection of child rights • Practical action to take and who to talk to if there is a problem	Let students discuss child rights in terms of what children need for survival, protection and development. The following rights should be emphasized: • The right to education • The right to be protected from harmful work • The right to get food, clothing and housing Use case studies to demonstrate violation of rights and allow students to discuss the protection of child rights. Introduce discussion of how children can be abused at home or in the community. Get them to discuss what to do if they have a problem and whom to go to.
• practice planning their daily activities • practice planning their	**2.2 Living in the community** *(14 periods)* **2.2 Living in the**	Students should identify parts of the day when they carry out different activities such as sleeping, meal times, study time, play time, homework time and jobs time. Students should identify parts of the day when they carry out different activities such as sleeping,

Competencies	***Contents***	***Suggested activities***
daily activities • demonstrate self management skill for their own level	**community** *(14 periods)* 1. Planning daily activities • Drawing a day or week planner 2. Self management skill	meal times, study time, play time, homework time and jobs time. Each student should think how to organize their day in such a way as to provide adequate time for all of the activities they must carry out. This could be by drawing up a simple timetable. At the top of a piece of paper write 'my day'. Write down the hours in columns. Fill in what you do at these times. For example, when you get up, when you have breakfast, when you go to school, when you play with your friends.
• show willingness to participate in community activities required by their age level	3. Participating in community activities • Working in clubs (AIDS club, etc.) • Environment club, Girls' club,	The idea of individual activities should be extended to group activities within the community which also must be organized. Ask students to identify things that go on each week or month within the community. Examples could include cleaning the locality and planting trees. Students together could draw up a timetable for community activities. Discuss school clubs and how you might start a small club in school.
• explain the importance of energy to their community	**2.3 Our community needs energy** *(9 periods)* 1. The need for energy	Students should think why we need energy. Start by thinking as an individual at home. Energy provides a means of cooking the food and keeping the home warm. Wet clothes soon dry out because of heat from the sun. Students should then think about the devices and vehicles they use. Many devices receive energy in the form of electricity. Cars, buses and lorries receive energy from fuels like petrol and diesel.
• name sources of energy	2. Sources of energy	Students should name different sources of energy. Make a list. Students should classify sources of energy into: • domestic fuels e.g. wood, charcoal • transport fuels e.g. petrol, diesel • natural energy sources e.g. sunlight, wind, flowing water Explain to students that electricity is not a source of energy but a very convenient form of energy.
• draw rough sketches of models • use glue, tape and stitches for joining materials to make simple decorations from paper • make simple models from clay or plasticine or paper	**2.4 Making objects from clay or plasticine and paper** *(15 periods)* 1. Sketching 2. Decorations 3. Models	This part of the unit can be dealt with as two separate art-based projects. In the first project students could: • sketch a decoration • draw their decoration on paper • cut out the parts of their decoration • join the parts of their decoration together • In the second project the students could: • sketch a shape for a model • make their model using clay or plasticine or paper. If clay is not available mud could be used.

Assessment

The teacher should assess each student's work continuously over the whole unit and compare it with the following description, based on the Competencies, to determine whether the student has achieved the minimum required level.

Students at minimum requirement level

A student working **at the minimum requirement level** will be able to: classify members of their community based on age and categorize themselves as children; state some rights of the child and give examples of how the rights of the child may be violated and protected; plan their daily activities and demonstrate self management skill; explain the importance of energy and name sources of energy; draw rough sketches, use glue, tape and stitches for joining materials and make simple models.

Students above minimum requirement level

Students working **above the minimum requirement level** should be praised and their achievements recognized. They should be encouraged to continue working hard and not become complacent.

Students below minimum requirement level

Students working **below the minimum requirement level** will require extra help if they are to catch up with the rest of the class. They should be given extra attention in class and additional lesson time during breaks or at the end of the day.

Unit 3: Our natural environment *(58 periods)*

Unit Outcomes: Students will be able to:

- explore some natural phenomena as cycles of nature and others as occasional happenings
- identify units of measurement and classify them as traditional and modern
- classify materials as natural and synthetic and also classify them according to their texture and weight
- list down the types of natural resources and explain their general uses and protection methods
- show parts of a plant, collect specimens of each part and give their functions
- indicate what is needed by crops to grow and list down the materials and equipment needed for growing crops
- classify animals according to their reproduction, locomotion, feeding habit, habitat and body cover
- list down items that are made from animal products and the materials and equipment used in caring for farm animals
- demonstrate scientific enquiry skills along this unit: Observing, questioning, classifying, measuring, recording, communicating, making models and working cooperatively.

Competencies	***Contents***	***Suggested activities***
Students will be able to: • explore seasons, day and night, and life processes as cycles of nature • explore rainbow and flood as occasional happenings in nature	***3. Our natural environment*** **3.1 Natural phenomena** *(17 periods)* 1. Observing natural phenomena • Day and night • Seasons • Rainbow • Drought • Flood 2. Life stages (birth-growth-death)	Students should discuss the differences between day and night. These might include • Day – light, warmer, noisy • Night – dark, colder, quiet Students could discuss the differences between the mainly dry and mainly wet seasons. This could include temperature, rainfall, different crops etc. Explain to students that rainbows often form after rain when sunlight passes through raindrops. Students could draw and color a rainbow. The color sequence is red, orange, yellow, green, blue, purple. Ask students to say what causes a drought and a flood. Students should make a list of the problems that result from a drought and from a flood. Students could observe stages in the life of an animal such as a butterfly: egg → caterpillar → butterfly → death or a quick growing plant: seed → plant → flowering → death
• identify units of measurement of length, mass and time • classify units of measurement as traditional and modern	3. Measurement • Units of measurement of length, mass, and time • Traditional and modern measurement	Students could measure their heights using a meter rule or measuring tape. The number of students at each height could be presented on a chart. They could see which height is the most common in their class. Students could measure their masses using a bathroom scale. The number of students at each mass could be used to make a bar chart. They could see which mass is the most common in their class. Students could measure the number of seconds needed to carry out various jobs or walk between points.

Competencies	***Contents***	***Suggested activities***
		Students could try and guess how long a minute by counting to themselves. The teacher tells them when to start and each student puts up their hand when they think exactly one minute has passed. Tell students that we measure: • length in meters and centimeters • mass in kilogram and grams • time in hours, minutes and seconds Explain to students that there are also some traditional units including span, arm size, feresula, quna, gasha etc.
• classify materials as natural and synthetic • classify materials according to their weight and texture	4. Classifying materials	Materials can be described as 'natural' or 'synthetic' (man made). Explain what these terms mean. Ask students to name some natural materials and make a list. This may include, wood, stone, straw, wool, cotton. Ask students to name some synthetic materials and make a list. This may include glass, rubber, and plastic. Give students some different objects and materials. Ask them to describe the feel of them using the words hard, soft, rough, smooth, heavy and light. Objects could be placed in a box and students have to guess what they are just by their feel without looking at them.
• list down the natural resources of their environment • explain the general uses of natural resources	**3.2 Natural resources** *(13 periods)* 1. Types of natural resources 2. Uses of natural resources	Students should know the meaning of the term natural from the previous topic. Ask students to make a list of types of natural resources. This should include water, air, soil, plants, animals, forests, minerals and salt. Students should be encouraged to identify natural resources that are used in their localities. These could include: • Soils in which we grow food crops • Materials for making clothing • Materials for constructing shelters • Materials like minerals that can be sold to earn money for the economy • Resources that are interesting or beautiful and attract tourists
• explain the general methods of protection of natural resources • mention local community projects to protect the environment	3. Protection of natural resources • Nature of damage • Protection • Home, class or school garden to make a mini-environment with food and	Ask students to state how our natural resources are being damaged. Examples could include: • Air pollution • Water pollution • Deforestation • Soil erosion Students should suggest how each of these forms of damage could be reduced so natural resources can be protected.

Competencies	*Contents*	*Suggested activities*
	flowers to attract good insects and animals	Discuss how a school garden or class garden or their plot at home could help against soil erosion and could attract good insects and animals.
• name and show parts of a plant • tell functions of parts of a plant • collect and sort parts of a plant	**3.3 Plants around us** *(15 periods)* 1. Parts of a plant and their functions • Stem, leaf, flower, root • Collecting specimens of parts of a plant and sorting and grouping them	Students should observe a plant and identify the root, stem, flower and leaves. They should draw a labeled diagram of their plant. Students could collect plants in the area around the school compound and classify them into groups on the basis of different criteria such as the size, nature of leaves etc. They should draw some of the collected plants and conduct some simple leaf printing activities.
• indicate what plants need to grow • indicate the materials and equipment needed for growing crops	2. Growing crops • What do plants need to grow? • Materials and equipment for growing crops	Students could carry out an experiment using seedlings in pots. One seedling is given water, air and sunlight, a second is not given water, a third is not given fresh air by wrapping in a polythene bag and a fourth is placed in a cupboard where it does not receive sunlight. Students should draw the seedlings after one week. Students should have an opportunity to examine the tools needed for growing crops including a hand hoe and a watering can. They can demonstrate how each tool should be used. The school should provide a plot of land for agricultural activities throughout the lesson. Grow simple crop and flowers in school or at home and measure them and describe their progress. A competition for the tallest maize or other plant is very effective at this age.
• give a simple classification of animals based on their reproduction, locomotion, feeding habit, habitat and body cover	**3.4 Animals around us** *(13 periods)* 1. Classifying animals	Students should explore different ways of classifying animals based on their reproduction, locomotion, feeding habit and body cover. For example animals may be classified as • Egg laying or giving birth to live offspring • Flying, crawling or walking • Plant eaters or flesh eaters • Terrestrial or aquatic • Feathered, hairy or scaled In each case students should draw and name examples.
• identify items made from animal products	2. Items made from animal products	Students already know that we get food from animals. Challenge them to think as well about other things we also get from animals. These should include: • Dairy products - butter, cheese and yogurt • Leather – to make shoes, belts and bags • Wool – to make clothing and blanket Let students explore further animal products used in their locality.
• list down materials and equipment used in caring for animals • show the functions of	3. Materials and equipment used in caring for farm animals • Respect for living creatures is important (Farm animals	Students should discuss how to care for farm animals. From this they should make a list of the equipment they would need. This could include: • Brushes for cleaning them • Water trough or bucket for water

Competencies	***Contents***	***Suggested activities***
some of the materials and equipment used in caring for animals	are to them) very productive if we are good	• Feed trough for food • Grass or concentrate feed for feeding them Students should demonstrate how this equipment is used. Children should discuss why it is important to be kind to farm animals. The objective is for them to understand that happy, well cared for, animals work harder and grow bigger.

Assessment

The teacher should assess each student's work continuously over the whole unit and compare it with the following description, based on the Competencies, to determine whether the student has achieved the minimum required level.

Students at minimum requirement level

A student working **at the minimum requirement level** will be able to: identify seasons, day and night, and life processes as cycles of nature and mention rainbow and flood as occasional happenings; identify units of measurement of length, mass and time an classify them as traditional and modern; classify materials as natural and synthetic and according to their weight and texture; list down natural resources, explain their uses and methods of protecting them; name and show parts of a plant, tell functions of each parts of a plant and collect and sort parts of a plant; indicate the materials and equipment needed for growing crops; give a simple classification of animals; identify items made from animal products; list down materials and equipment used in caring for animals and show their functions.

Students above minimum requirement level

Students working **above the minimum requirement level** should be praised and their achievements recognized. They should be encouraged to continue working hard and not become complacent.

Students below minimum requirement level

Students working **below the minimum requirement level** will require extra help if they are to catch up with the rest of the class. They should be given extra attention in class and additional lesson time during breaks or at the end of the day.

Unit 4: Our woreda or sub-city *(49 periods)*

Unit Outcomes: Students will be able to:

- locate their woreda and positions of important places in their woreda in relation to the four directions
- identify landforms and features
- list the main institutions in their woreda and give their functions
- identify the major economic activities in their woreda and give examples of technological products used in their locality
- describe the importance of work to the development of their woreda and demonstrate commitment to work comparable to their age level
- demonstrate scientific enquiry skills along this unit: Observing, recording, classifying, questioning, measuring, communicating, making models and working cooperatively.

Competencies	***Contents***	***Suggested activities***
Students will be able to: • indicate the four directions • locate their woreda in relation to the four directions	***4. Our woreda or sub-city*** **4.1 Location of our woreda** *(13 periods)* 1. The four directions (east, west, north and south) 2. Location of our woreda in relation to other woredas based on the four directions.	Students should describe the direction of the things around them using north, south, east and west. They can play a game in pairs where one child directs another from one place to another using these four directions only. This work on direction should be extended to outside the school classroom and compound. Students should describe the direction of their home from the school and each child should say the directions he or she has to travel from home to school. Students should determine the directions of important places in their neighborhood from their school. This could be in the form of a game where the location of a place is given by the teacher and the place has to be identified by the student. Use spider diagrams with the child in the middle at school or home and lines radiating in the right direction.
• identify important historical sites of their woreda	3. Important places in our woreda (historical sites***)*** • Stories about important places in our woreda	Students should name any important places in their woreda. A sketch map of the woreda could be drawn and the locations of important places shown. The work on direction could be extended by asking students to say in which direction each important place is from their school. Students could visit an important place and make drawings which could be used to make a display in the classroom. They could research why the place was important and write about it. Ask children to talk to elders about the past in their woreda and to ask them to tell them old stories about what happened. Children tell traditional stories in class.
• identify the landforms in their woreda • describe the features of the landforms	**4.2 Types of landforms of our woreda** *(10 periods)* 1. Landforms 2. Features of landforms • How landforms affect	Students should identify different landforms in the woreda. These should include: • High ground areas • Low ground areas • Plain ground areas Students should visit different areas and describe the features of each such as forests, water bodies and eroded land.

Competencies	***Contents***	***Suggested activities***
	our community	Students could make a plascticine or clay model of the woreda showing landforms, as individuals, groups, or a whole class activity. Let them discuss on how the landform affects the climate which in turn affects the living habits (clothing, housing, etc.) of their community.
• list the main institutions in their woreda • give the functions of the main institutions of their woreda	**4.3 Institutions in our woreda** (*9 periods)* 1. Institutions 2. Functions of institutions • Who does what in the woreda	Students should find the names of all of the institutions in their woreda and write a list. This should include: • Police station • Court house • Other government offices • Non governmental organization offices • Private institutions Students should be divided into groups. Each group should investigate the function of the institution and prepare a short oral report which they will present to the rest of the class. List and draw the activity or activities which their family is involved in.
• list the major economic activities of their woreda • describe the importance of the major economic activities	**4.4 Economic activities of the woreda** *(17 periods)* 1. Economic activities	Students should say what economic activities take place in their woreda. These can be classified into groups such as: • Agriculture • Trade • Transport • Industry • Handicraft Students should say why each of these is important. Students could survey the number of people involved in each of these groups of activities. Their results could be displayed on a chart. They could say which group of activities is most important in their woreda.
• give examples of some important technological products in use	2. Some important technological products and their functions	Students should identify some important technological products used in their woreda. These could include: • Radio • Television • Stove • Generator • Refrigerator • Electric iron • Telephone (Mobile phone) Students could cut out pictures of technological products from old magazines, catalogues, newspapers, lottery tickets, calendars etc. and use them to make a pastiche.

Competencies	***Contents***	***Suggested activities***
• explain why work is important to the maintenance of their woreda • demonstrate a commitment to work at their age level	3. Importance of work for woreda development 4. The need and respect for all types of work	Let students explore some other technological products found in their locality and present their findings to the class. Let the students discuss what the telephone can be used for and practice communication skills on the phone through role plays of making a phone call. Talk about who they would like to talk to once mobile phones are more easily available. Students should appreciate that the work of each and every person in a woreda is important. Each worker contributes something to the fabric of the woreda. A doctor might be a very important person but the street cleaner is also important. Both help to keep people healthy in their own way. Students should discuss what would happen if different groups of people in the woreda suddenly decided to stop working. These could include: • police • health workers • teachers Discuss the job they would like to have. Then write down what they would do in the job and how it is useful to their family and community.

Assessment

The teacher should assess each student's work continuously over the whole unit and compare it with the following description, based on the Competencies, to determine whether the student has achieved the minimum required level.

Students at minimum requirement level

A student working **at the minimum requirement level** will be able to: indicate the four directions and locate their woreda in relation to them; identify important historical sites of their woreda; identify the landforms in their woreda and describe their features; list the main institutions in their woreda and give their functions; list the major economic activities of their woreda and describe their importance; give examples of some important technological products; explain why work is important and demonstrate a commitment to work.

Students above minimum requirement level

Students working **above the minimum requirement level** should be praised and their achievements recognized. They should be encouraged to continue working hard and not become complacent.

Students below minimum requirement level

Students working **below the minimum requirement level** will require extra help if they are to catch up with the rest of the class. They should be given extra attention in class and additional lesson time during breaks or at the end of the day.