

**A WORKING DOCUMENT ON
ENVIRONMENTAL EDUCATION AND
EDUCATION AND SUSTAINABILITY IN
LIFE ORIENTATION**

INTRODUCTION

This document seeks to assist the Life Orientation teacher to deal with issues of environmental education and education for sustainable development in Life Orientation. It will strengthen the content, understanding and teaching environmental concepts in the learning area as it is embedded in Learning Outcome (LO 1) Health Promotion.

Environmental is an integral part of the National Curriculum Statement. All the Learning Areas try to create an awareness of the relationship between social justice, human rights, a healthy environment and inclusivity. All these issues are related to environmental education and education for sustainable development.

Environmental Education has become a global concern because of global warming and climate change and everybody is concerned about whether the earth will be able to support life. It is therefore very important that we as teachers take it upon ourselves to save the world through teaching the young generation on how to change their lifestyle in order to care for the environment and make it their business to save it through getting involved in meaningful projects. This we hope will have a ripple effect into the community.

INTRODUCING THE LIFE ORIENTATION LEARNING AREA

Definition

The concept of life orientation captures the essence of what this Learning Area aims to achieve. It guides and prepares learners for life and its possibilities. Specifically Life Orientation as a Learning Area equips learners for meaningful and successful living in a rapidly changing and transforming society. Life Orientation is central to the holistic development of learners. The focus of the learning area is the development of the self-in-society. Its vision of individual growth is part of an effort to create a democratic society, a productive economy and an improved quality of life.

The Life Orientation Learning Area develops skills, knowledge and values that empower learners to make informed decisions and take appropriate actions regarding:

- Health promotion
- Social development
- Personal development
- Physical development and movement; and
- Orientation to the world of work (Grade 7-9)

These five focus areas of the Life Orientation Learning Area Statement all address the human and environmental rights outlined in the South African Constitution. It will also enable learners to make informed, morally responsible and accountable decisions about their health and the environment. Learners will be encouraged to acquire and practice life skills that will assist them to respond to challenges and to play an active and responsible role in the economy and society.

UNIQUE FEATURES AND SCOPE

- Focusing on the holistic development of learners the Life Orientation makes a unique contribution to the General Education and Training Band. It:
- Enables learners to make informed decisions about personal, community and environmental health promotion;

- Enables learners to form positive social relationships and to know and exercise their constitutional rights and responsibilities;
- Empowers learners to achieve and extend their personal potential to contribute positively to society and to cope with and respond to challenges in their world;
- Promotes physical development as an integral part of social, cognitive and emotional development from early childhood through the General and Training Band;
- Develops a positive orientation to study and work, and the ability to make informed decisions regarding further study and careers.

All the above translate into the Learning Outcomes of Life Orientation viz.

LO1 Health Promotion that addresses issues relating to nutrition, diseases including HIV/AIDS and STDs, safety, violence, abuse and environmental health.

LO 2 Social Development addresses issues relating to human rights, social relationships and diverse cultures and religions.

LO 3 Personal Development focuses on life skills development, emotional development, self concept formation and self empowerment

LO 4 Physical Development and movement focus on perceptual motor development, games and sport, physical growth and development, and recreation and play

ENVIRONMENTAL EDUCATION (EE) & EDUCATION FOR SUSTAINABLE DEVELOPMENT (ESD)

Environmental Education and Education for Sustainable Development are interrelated. The earth is a living world made up of many environments that we experience as surroundings in which we live. Communities of human beings and other living things interact to shape our surrounding in these environments. Education for Sustainable Education has three pillars i.e. the environment, society and the economy. These are interrelated. The society has an influence on the environment in the way they treat the environment in their day to day living, how they use resources. This has an impact on the economy and the economy also impacts on the society when one considers issues of poverty and unemployment. Unemployment can increase crime and

this impact negatively on the economy Life Orientation is looking at the holistic development of the learner within a society that is faced with issues of poverty, crime, unemployment and HIV/ AIDS. It looks at how the learner respects the environment on how they use resources and how to this will contribute towards improving the economy. Integrated in this is the question of rights and democracy. The fact that learners have a right to a clean environment, to clean water and sanitation, to basic health care, etc. The diagram below will illustrate this

Learning Outcome 1 of Life Orientation reads: The learner will be able to make informed decisions regarding personal, community and environmental health. The assessment standards of this outcome progress across the phases to cover a number of issues that have already been alluded to. This document will look at how to integrate other learning outcomes and assessment standards of Life Orientation. It will also look at how to work with other learning areas in promoting Education for Sustainable Development.

TEACHING AND LEARNING METHODS THAT PROMOTE ENVIRONMENTAL EDUCATION AND EDUCATION FOR SUSTAINABLE DEVELOPMENT

The teaching and learning methodologies that we are to explore are not the only ones but teachers can adapt and contextualize as it suits them.

- Fact based which is more factual. It is essential because it calls for facts e.g. what is the status of the environment? It is a fact that everyone is concerned about the degradation and depletion of the resources on our planet.
- Normative approach is knowledge that is based on norms and it is not subject to constructing knowledge.
- Pluralistic approach considers both facts and norms e.g. we may agree on facts that there is a problem with the environment but disagree on how to solve it. The role of the teacher is very important in this approach. The approach promotes critical thinking and learner participation. It is democracy in practice where learners are part of deciding what to learn and how to do it. The teacher has to facilitate this process hence it is important to note the role of the teacher. Learners must be involved because it has something to do with how to

change their lifestyle in trying to address a problem. It is only them who would decide what will work best e.g. the problem with HIV&AIDS. Learners know a lot about how it is transmitted, the causes and the symptoms but they are still promiscuous. A good example of this approach would be to engage them in a discussion on 'What can we do to control the spread of this disease.' To a certain extent they would be able to enumerate a lot of possibilities and the teacher has to facilitate this process so as to avoid L to give trivial responses. This is a good way of demonstrating democracy and respect for views. Learners will in return own the project as their own and work hard towards completing the task.

The document will also look at working with group activities that will ensure maximum participation by all learners in a group without coercing them into doing it.

Writing to learn encourages and promotes literacy. This will be very useful in our context where there is a big challenge with literacy. Writing to learn enhances learners' reflective skills and promotes a democratic classroom climate.

There are two kinds of writing viz.

Expressive writing where the learner expresses an idea

Communicative writing the learner translates the idea into action.

Both these methods are significant for education for change. They facilitate the learners' ability to think and reflect in a democratic classroom. There are steps involved in free writing and they are developmental.

Starters where learners are involved in free writing that is unfocussed.

Learners are writing freely.

Journal refers to where learners build on the free writing to keep a journal on what he/she has learned

The learning log focuses on personal learning.

The project note book ends up like a documentary.

To demonstrate or illustrate all the above let us look at an example of a typical lesson that will entail most of the issues that have been referred to above.

Remember this is an exemplar

LIFE ORIENTATION LESSON PLAN

GRADE: 4

NO.OF LESSONS :

CONTENT IN CONTEXT: LIVING IN A HEALTHY ENVIRONMENT

Selected LOs & ASs	Learning Activities	Details of Assessment	Skills Knowledge Values	Barriers to Learning
<p>LO1: HEALTH PROMOTION AS1: Investigates menus from various cultures and suggests plans for healthy meals</p>	<p>Activity 1 The learner discovers the meaning of the following concepts through the use of a dictionary or teacher puts up various lists e.g. grocery list, a recipe and a menu. Learners choose which one is a menu and explain why. Learners using magazines cut pictures of food and that different cultures eat. Activity 2: Learners have to find out about menus of their own culture (indigenous food) and their nutritional value from their parents and grand parents. They will give a verbal</p>	<p>Teacher designs a questionnaire with guiding questions.</p> <p>Jigsaw</p>	<p><u>Knowledge</u> Healthy lifestyle - Cultural Menus Own culture & Other cultures: Staple food, indigenous food Healthy Meals: Food Pyramid</p> <p>Personal hygiene: Body, hair, nails, teeth etc. Clothing Healthy environment What constitutes</p>	

<p>AS2: Explores and reports on links between a healthy environment and personal health.</p> <p>AS3: Explains children's health rights and responsibilities and suggests ways in which to apply these in a familiar situation.</p> <p>LO 2: SOCIAL DEVELOPMENT</p> <p>AS 1: Discusses children's rights and responsibilities</p>	<p>presentation in class.</p> <p>Activity 3: Learners are divided into cultural groups and each group is to investigate a typical cultural meal (indigenous foods) and also suggest plans for a healthy meal.</p> <p>Activity 4: Learners are requested to prepare dishes of the different cultural groups with the assistance of the parents. As they present dishes other groups evaluate the ingredients and suggest ways to improve. This could be a cultural day for the Grade 4 learners where they showcase different cultures lifestyles and also including how these cultural groups dress.</p> <p>Activity 5: The learners take a walk around the school to look at the environment of their</p>	<p>Written report on any at least 3 cultures assessed by means of a rubric</p> <p>Observation</p>	<p>healthy environment: Home, school & community based on physical e.g. pollution, relationship e.g. abuse, safety e.g. crime free.</p> <p><u>Skills</u> Research Recording and reporting</p> <p><u>Values</u> Respect Appreciation Preservation Responsibility</p>	
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<p>as stipulated in the SA Constitution.</p> <p>LO 4: Identifies dangers and responsible safety measures in and around water.</p>	<p>school. When they return the teacher draws a line marking it 1-6. The learners take a stand by standing next to any number that indicates the state of the school environment. Based on their decisions from the above activity learners look for links between a healthy environment and personal health e.g. swamps could be a health hazard.</p> <p>Activity 6: Learners visit an unhealthy site and explore the impact on personal health of the community that lives there e.g. unclean water and the prevalence of cholera. The learners engage in a project to improve their school environment. It could be a project of a clean up campaign with the assistance of the local municipality or greening the school working with the Department of</p>			
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	<p>Agriculture and the Department of Water Affairs and Forestry. The project will depend on the context of the school. As they engage in the project they discuss children's health rights and their responsibility and apply these in their projects.</p>			
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EXAMPLERS OF ASSESSMENT TOOLS

QUESTIONNAIRE ON INVESTIGATION OF DIFFERENT CULTURES' MENUS

1. State the culture you are investigating -----
2. Does the food contain the following nutrients?

NUTRIENT	YES	NO
Carbohydrates		
Proteins		
Vitamins		
Fats		
Minerals		

3. What utensils are used to eat the meal? -----
4. What are the implications of the above to personal health? -----

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RUBRIC ON ASSESSMENT OF ACTIVITY 4

CRITERIA	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Learners have identified 3 cultures	Identified only one cultural group	Identified 2 cultural groups	Identified 3 cultural groups	Could identify more than 3 cultural groups
Learners are able to report on a healthy meal for each culture	Reported on only one cultural group	Reported on 2 cultural groups	Reported on 3 cultural groups	Reported on more than three cultural groups
Learners are able to report on the nutritional value of the menu	Reported on the nutrients contained in the menus of only one cultural groups mentioned	Reported on the nutrients contained in the menus of 2 cultural groups mentioned	Reported on the nutrients contained in the menus of 3 cultural groups mentioned	Reported on the nutrients contained in the menus of all cultural groups mentioned
Learners have suggested and reported on plans for healthy meals	Suggested and reported on plans for healthy meal for only one cultural group	Suggested and reported on plans for healthy meal for 2 cultural groups	Suggested and reported on plans for healthy meal for 3 cultural groups	Suggested and reported on plans for healthy meal for all cultural groups

GRADE 5 LESSON PLAN				
NO.OF LESSONS:		CONTENT IN CONTEXT: LIVING IN A HEALTHY ENVIRONMENT		
SELECTED LOs & ASs	LEARNING ACTIVITIES	DETAILS OF ASSESSMENT	KNOWLEDGE SKILLS AND VALUES	BARRIERS TO LEARNING
<p>LO1: HEALTH PROMOTION</p> <p>AS1: Explores and reports on ways to protect the quality of food and water in various contexts</p>	<p>Activity 1 Teacher brings different food stuffs e.g. fruit, vegetables and meat. Learners in groups have to suggest ways of protecting the quality of the food different contexts over a period of time. They have to con</p> <p>Based on the previous lesson learners work on a project of purifying water.</p> <p>Activity 3 The teacher organizes a trip to a local water sanitation plant. They will need to find out if their water board offers guided tours of their water processing plant. If they do ask them to focus on sanitation and how and why water is cleaned before it reaches our taps. This will help learners understand how and why water is treated before we can use it in our homes and at school.</p> <p>Activity 4 Using a rural setting where water is</p>	<p>Checklist (attached)</p>	<p><u>Knowledge</u></p> <p>Food preservation Water purification Locally occurring diseases (symptoms, causes and prevention strategies)</p> <p><u>Skills</u></p> <p>Reporting (orally, in writing) Research Interpretation of data Designing</p> <p><u>Values</u></p> <p>Appreciation Respect</p>	

<p>AS2: Investigates a local environmental health problem using different data sources, and plans a strategy to address the problem</p> <p>AS3: Recognises the symptoms and causes of locally occurring diseases and discusses prevention strategies</p> <p>LO4: Demonstrates knowledge of safety measures in and around water</p>	<p>collected from a river learners have to go and find out how they would ensure that the water is safe to drink, wash and cook with.</p> <p>Activity 5 The teacher uses an extract from the "Daily Dispatch" where babies died of cholera because of contaminated water. Learners visit the local clinic to find out about the symptoms and causes and other locally occurring diseases. They also need to find out from the nurses the prevention strategies.</p> <p>Learners design a poster that will show case the symptoms, causes and prevention strategies of locally occurring diseases.</p>	<p>Rubric (attached)</p>		
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CHECKLIST FOR ACTIVITY 2

CRITERIA	YES	NO
The learner has identified different food		
The learner has stated the method of		

preservation		
The learner has indicated the advantages of preserving		
The learner has stated the method of purifying water		

RUBRIC FOR ACTIVITY 5

CRITERIA	LEVEL 1	LEVEL 2	LEVEL 3	LEVEL 4
Identified locally occurring diseases(as caption in the poster)	Learner has not identified the disease	Learner has identified the disease but it is not occurring locally	Learner has identified a locally occurring disease	Learner has identified a locally occurring disease and given statistics of prevalence.
Listed causes and symptoms of the mentioned disease	Learner has listed only the causes and not the symptoms	Learner has listed a few causes and symptoms of the disease mentioned	Learner has listed some causes and symptoms of the disease mentioned	Learner has mentioned all causes and symptoms of the disease mentioned
Mentioned prevention	Learner has not	Learner has mentioned a	Learner has mentioned	Learner has mentioned all

strategies	mentioned any prevention strategies	few prevention strategies	some prevention strategies	prevention strategies
Layout and creativity	Learner has shown no creativity as there is no logic	Learner has shown some colour and logic	Learner has shown good logic and good use of colour creativity by	Learner has shown excellent logic and use of colour

GRADE 6 LESSON PLAN				
No. of Lessons:		Content in Context: LIVING IN A HEALTHY ENVIRONMENT		
Selected LOs & Ass	Learning Activities	Details of Assessment	Knowledge Skills Values	Barriers to Learning
LO1: HEALTH PROMOTION AS2: Participates in a problem-solving activity to address an environmental health issue to formulate environmentally sound choices and/ or actions	Activity 1 Learners take a walk around the school with the intention of identifying an environmental health issue. On reporting back a number of issues have been identified. The teacher helps the learners to prioritise which issue to	Observation	Knowledge Environmental health issues e.g. littering polluted water etc. environmentally sound choices and actions e.g. planting trees and flowers in the park	

	<p>address e.g available resources, time frames,etc. The class decides to work on littering around the school.</p> <p>Activity 2 STEPS TO BE TAKEN 1. Learners in groups use the checklist on littering to establish what method is the preferred by the school community to stop littering. 2. Learners conduct a litter audit. 3.Learners have to work on delegation of duties in preparation of the "Stop Littering Day" These duties are outlined on p???</p> <p>Activity 3 Learners engage in the actual cleaning of the identified area. Activity4 Learners are back in class after the clean up campaign and reflect and plan way forward on how to sustain what they have started. POSSIBILTIES TO</p>			
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	<p>EXPLORE</p> <p>Transforming the area into a park</p> <p>Sporting area</p> <p>Starting a botanical garden</p> <p>Fencing the area</p> <p>(Inter departmental links will be encouraged</p> <p>For the above activities.)</p> <p>Activity 6 Teacher work with the learners to set up committees to draw up a rooster or programe on follow up activities. This rooster will include time frames,activities and responsible persons.</p>			
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SUGGESTED ACTIVITIES THAT CAN BE USED AS EXTENDED PROJECTS FOR LEARNERS USING THE OUTCOMES AND ASSESSMENT STANDARDS IN THIS LESSON PLAN.

NOTE: These projects will run over a period of time and can be finalized at the end of the year. They can also be distributed among the grade in the phase (Grade 4-6). It is also important that the delegation or choice of projects be done in a democratic manner so that learners are engaged in a project that they feel strongly about for maximum participation.

WATER PROJECT

BUILD YOUR OWN POND

Introduce a water feature to the entrance of your school or in the playground area. Provide a safe habitat for small insects, frogs and fish.

STEPS

1. Dig a hole and remove all stones and sticks
2. Cover the bottom with old carpet ,rags or a thick layer of newspaper
3. Lay a very large sheet of thick plastic in the hole
4. Place large stones around the edge of the pond to secure and hide the plastic
5. Place a 10cm layer of soil (use soil you have just dug up) over the bottom and fill with water. Add a bucket of water which is taken from another pond. The organisms and seeds found in the water will help establish the pond faster.
6. Place indigenous water plants (that grow naturally in your area) into the pond. A few large stones and a dead tree branch can add interest to the pond and also provide shelter for water organisms.

HINTS

- Do not place the pond too close to trees as falling leaves can create problems
- Do not fill the pond to the edge as it will overflow when it rains
- Put in pond- snails as these feed on the algae and therefore keep the pond clean

Note that this pond can be used by the Natural Science teacher to teach

LITTERING

The learners might have identified littering as one area that needs improvement in their school environment (refer to lesson plan). These are activities the learners can engage in.

YOUR NAME(OPTIONAL):
GRADE:
Please tick what you think can be done to stop littering in our schoolyard

	YES	NO
1. Have more bins		
2. Get punishment if found littering		
3. Cleaning programme for the whole school		
4. Conducting clean up campaigns		
5. Educator to teach about litter and its effects		

A CLEAN UP CAMPAIGN

WORK TOWARDS THESE OBJECTIVES:

- To form linkages with the community and promote a caring government
- To promote safe and a healthy environment
- To assess the level of service delivery
- To educate residence and learners about the role they can play in keeping the local environment clean

REMEMBER - a clean up is a starting point but only if the litter-free area stays that way. In the local environment, the clean up activity should be followed by other activities like fencing it, creating a sport area and even creating a park. This is done to improve the beauty of the area; otherwise the area will be littered again.

CONDUCT A LITTER AUDIT!

Decide what your clean up will include

- Simple collection of small to medium items of litter

- Collection and separation of recyclable material
- Types of waste found in that area

DECIDE ON THE FOLLOWING

- How long will the clean up take
- Will it be a once off or a series of actions
- How many people will you need
- Consider the likely weather of the day
- Set a date and an alternative date in case of bad weather
- Arrange for measurement of litter cleaned up and record for any future comparison
- Draw a map of the area
- Visit the area
- Any special equipment required e.g. nets for water, litter bags, gloves, gumboots, spades, notices and markers to indicate boundaries, refreshments and first aid box
- Divide the area into sections
- Identify clean up routes identify starting points
- Will you need any transportation facilities and extra man power

WHO CAN WE WORK WITH

- Department of Agriculture for equipment like spades, fork spades and rakes
- Department of Water Affairs and Forestry to plant trees after clean up so as to sustain the cleaned environment
- Department of transport to assist with transportation of litter
- Local municipality for litter bags
- Department of Health for First Aid kit
- NGOs like Food and Trees to provide trees

