### **Initial Primary Teacher Education**

# **Human ecology**

Module 2



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### Prepared and published by

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First edition 2017

### **Foreword**

Education is the lifeblood of the nation. It is a prerequisite for individual, community and national development. Education prepares learners to play their roles effectively to promote and sustain a country's socio-economic development. Parents or guardians desire that their children develop into adults with sound minds and healthy bodies through the acquisition of appropriate knowledge, skills and desirable attitudes to enable them to live productive and happy lives.

Education should, therefore, help learners to develop high standards of conduct, attitudes, judgment and a sense of responsibility. Student teachers have to be well prepared in order to take this responsibility of teaching children effectively.

The provision of quality education is based on many factors and a good quality of teachers is one of them. Teachers play a central role because they are the key source of knowledge, responsible for facilitating the learning process and act as role models for learners.

The function of initial teacher education in Malawi is to prepare student teachers in their aspiration of becoming teachers of high quality. This is achieved by helping the student teachers to acquire the right knowledge, skills and competences to enable them to effectively teach children. In view of this, the Initial Primary Teacher Education curriculum has been reviewed to ensure that student teachers who graduate from this programme are well trained and prepared for their profession.

The process and implementation of this review has been guided by the Teacher Education Philosophy which states as follows:

'To produce a reflective, autonomous, lifelong learning teacher, able to display moral values and embrace learners' diversity.'

It is therefore hoped that Teacher Training Colleges will find this curriculum effective in helping the student teachers to build a solid foundation in their teaching profession.

Executive Director

Malawi Institute of Education

### **Acknowledgements**

The Ministry of Education, Science and Technology (MoEST) and the Malawi Institute of Education (MIE) would like to thank all people who participated in various activities, stages and levels in the development of this module.

Special thanks go to the Director of the Directorate of Inspection and Advisory Services (DIAS), Mr. Raphael Agabu and his staff, the Executive Director of Malawi Institute of Education, Dr William Susuwele-Banda and his staff, Director for Curriculum Development (DCD), Ms Miryam Esther Katundulu, Coordinator of the Initial Primary Teacher Education (IPTE) review process, Mr. Edward G Mtonga and his team (Ms Catrin Anderer, Ms Loyce Chisale and Mr Anthony Malunga) for coordinating the process of developing the module.

The MoEST and the MIE would also like to thank, Rita Mkhomaanthu, Miryam Katundulu, Evelyn Lemani, Grace Kuchelekana, Benedicto Chikoti Phiri, Harriet Chanachi Phiri and Nelson Chikwanda for reviewing the module.

The Ministry of Education, Science and Technology acknowledges the technical and financial support generously provided by German Technical Cooperation (GIZ) and United Nations Children's Fund (UNICEF).

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### Introduction

The purpose of primary teacher education is to produce and continually develop competent and responsive teachers who effectively deliver quality education to all learners under prevailing conditions and demands in primary schools and promote their desire for life-long learning. IPTE endeavors to educate teachers in sufficient numbers, continually develop their professionalism so that they are able to effectively and efficiently deliver quality and relevant education to primary school learners.

### National goals for primary teacher education

The national goals of primary teacher education in Malawi are to produce teachers who are:

- academically well grounded and professionally competent
- flexible and capable of adapting to the changing needs and environment of the Malawian society
- capable of adhering to and maintaining the ethics of the teaching profession imaginative in adapting, creating and utilising locally available resources suitable for the needs of theirlearners

### **Teacher education philosophy**

The following has been the guiding principle during the design and development of the IPTE curriculum.

To produce a reflective, autonomous, lifelong learning teacher, able to display moral values and embrace learners diversity'.

The philosophy is expected to be pursued during the implementation of the curriculum and when supporting teachers after their qualification.

### IPTE programme structure

The duration of the teacher education is two years. The general outlook of the two years is as follows:

Year 1			Year 2		
Term 1	Term 2	Term 3	Term 1	Term 2	Term 3
In college,	In college,	Out in	Out on	In college,	In college,
learning	learning	teaching	teaching	with special	with special
subject	subject	practice	practice	emphasis on	emphasis on
content with	content with	schools,	schools,	reflection,	subject
a special	special focus	practising	practising	inclusion	content,
focus on	on methods	teaching	teaching	and further	policies and
methods for	for upper	mainly in the	mainly in the	practice on	frameworks
lower classes	classes	lower classes	upper classes	teaching	
				methods	

### **Unique features**

The features of the reviewed curriculum are as follows:

- The curriculum design is based on reflective and practice principles.
- Early grade teaching methodologies are distinct.
- The delivery of the subject content follows the modular approach.
- Student teachers will be allowed to practise teaching both in the lower classes (Standards 1 to 4) as well as in the upper classes (Standards 5-8).
- Cross cutting issues such as Assessment for Learning, Information Communication Technology, Inclusive Education and Critical Thinking are integrated.

### **IPTE** subject matrix

The new curriculum has adopted the reflective practitioner model of teacher education which connects practice and theory and integrates content and pedagogy in teaching and learning. In this structure, student-teachers will be in college for two terms of year 1 and be in primary schools for teaching practice in the third term of first year and first term of the second year. Student teachers will be back to colleges in terms 2 and 3 of year 2 to continue learning subject content, reflecting on their experiences of teaching practice and then wind up their studies.

This curriculum is designed in a modular structure and contains eleven subjects. These are Chichewa, English, mathematics, education foundation studies, agriculture, social studies, life skills, science and technology, expressive arts, religious studies and human ecology. In this modular design, a set of topics forms a module in a subject. A module consists of 40 hours contact time.

### Summary of topics for the term and time allocation

Term 2							
Core element	Topic	Allocated time in hours					
People and the							
environment	Teaching of home management	1					
	Teaching of the kitchen	1					
Food, nutrition							
and health	Teaching of malnutrition	2					
	Teaching of HIV and nutrition	2					
	Teaching of dietary related non communicable						
	diseases	1					
	Teaching of food processing	2					
	Teaching of food preservation	2					
	Teaching of dietary diversification	1					
	Teaching of water, sanitation and hygiene	1					
	Teaching of fruit and vegetable garden	1					
Family resource	Teaching of entrepreneurship and financial						
management	management	2					
Clothing and textiles	Teaching of designing and garment construction	3					
textiles	Teaching of laundry	1					
	Total number of hours	20					

### **TOPIC 1** Teaching of home management

Time 1 hour Term 2

#### Introduction

Good home management involves proper organisation of various chores around the home. Some of the household chores can contribute positively towards the environment. It is important for you and primary school learners to appreciate home management and how it affects the environment. This will help you and primary school learners acquire relevant knowledge, skills and attitudes which will assist both of you to demonstrate a health promoting behaviour amongst yourselves and your respective communities.

#### Success criteria

By the end of this topic, you must be able to:

- explain how to care for different rooms in the home.
- describe how to care for the surroundings of the home.
- analyse the impact of waste disposal on the environment.
- demonstrate different strategies on the teaching of the topic.
- assess student teacher's performance on the topic.

### **Background information**

Home management is the process of keeping the house and the surrounding clean. This is important to promote good health and well-being of the family. Home management involves cleaning different rooms of the house, the surroundings and proper waste disposal. Household activities such as poor waste disposal, use of chemicals, poor drainage system and use of non-recycled products can pollute the environment. When cleaning different rooms in the home and surroundings there is need to use cleaning materials and equipment. Some of these materials can be chemicals. Figure 1.1 shows different cleaning materials and equipment.



Fig. 1.1: Cleaning equipment and materials

Waste disposal or management are all activities done in the home to manage waste. In order to minimise waste there is need to reduce, reuse and recycle (3Rs). Figure 1.2 shows solid waste management.



Fig. 1.2 : Solid waste management

It is important for you and primary school learners to acquire knowledge, skills and attitudes in caring for the home, its surroundings and proper waste disposal. The knowledge, skills and attitudes acquired can assist to promote good health and well-being of the individuals, families and communities.

There are some opportunities which may help you teach this topic. These are:

 student teachers have prerequisite knowledge on the topic through different interventions in the school and communities on sanitation and health.

- some content on the topic is already introduced to primary school learners in other subject areas such as science and technology, life skills and agriculture.
- availability of facilities in colleges for teaching the topic such as the human ecology flat.

The following challenges need to be addressed when teaching this topic:

- lack of experts in human ecology in teacher training colleges.
- lack of resources for teaching the topic.

# Task 1 Caring for different rooms in the home

Different rooms require special care to create a conducive environment in the home. This activity will help you acquire knowledge, skills and attitudes for caring different rooms in the home.

#### Activity

- 1 Brainstorm how to care for the home.
- 2 Discuss different rooms in the home that can be cared for.
- 3 Investigate materials and equipment used for caring for different rooms and the home and its surroundings.
- 4 Carry out a demonstration on how to care for different rooms in the home.

- 5 Practise caring for different rooms in the home.
- 6 Consolidate the activity.

### Tips

- Use appropriate teaching, learning and assessment resources.
- Consider the use of video clips or pictures of different rooms in the home as well as cleaning materials and equipment.
- Consider using the human ecology flat at the college.

#### Task 2

### Describing how to care for the surroundings of the home

A clean and healthy environment is necessary for every home. In this activity, you will appreciate different ways of caring for the surroundings of the home.

### Activity

- 1 Investigate different ways of caring for the surroundings of the home.
- 2 Discuss different ways of caring for the surroundings of the home.
- 3 Report your findings to the class for further discussion.
- 4 Consolidate the findings.
- 5 Demonstrate on how to plant flowers around the school or home.
- 6 Practise planting flowers around the school or home.
- 7 Consolidates the activity.

### Tips

- Relevant teaching and learning resources for the suggested activity should be prepared in advance.
- Modify the task to cater for the learners with special learning needs.
- This activity can be done outside the teaching time of the lesson.

### Task 3

### Analysing the impact of waste disposal on the environment

It is important to properly manage the way we dispose waste in our surroundings. This activity will assist you acquire skills, knowledge and attitudes in waste management.

### Activity

- 1 Conduct an excursion to explore ways of waste disposal in the surroundings.
- 2 Discuss the impact of waste disposal in the environment.
- 3 Report your findings to the class for discussion.
- 4 Discuss proper waste management in the home and surroundings.
- 5 Consolidate the findings using appropriate approaches.
- 6 Discuss the impact of poor waste disposal in the environment.

### Tips

- Consider prior organization of the field trip.
- Use video clips to show learners proper waste management.
- Modify the task to cater for student teachers and learners with special learning needs.

### Task 4

# Demonstrating strategies for teaching home management

There are various methods and resources used in teaching the topic. You must choose appropriate methods and resources for this topic.

### Activity

- 1 Ask student teachers to discuss effective teaching and learning strategies for the topic.
- 2 Ask student teachers to discuss assessment methodology and resources.
- 3 Prepare a lesson plan on the topic.
- 4 Micro-teach a lesson on the topic.

#### Task 5

## Assessing student teachers' performance on the topic

It is important to assess student teachers' performance on the topic. This will help them improve on areas that they did not do well.

### Activity

- 1 Analyse various ways of assessing student teachers' performance on the lesson taught.
- 2 Let student teachers reflect on their assessment experiences on the lesson taught.
- 3 Tell student teachers to give a debriefing and feedback session to peers on the lesson presented.
- 4 Evaluate the student teachers' lesson presentations, reflection and peer assessment.

### Tips for activities 4 and 5

- Prepare relevant teaching and learning resources for the activities.
- Consider the use of online sources where necessary.
- Remember to choose teaching and learning strategies that will be inclusive to benefit student with different learning needs.

### Summary

This topic has looked at:

- care for different rooms in the home.
- care for the surrounding.
- impact of waste disposal in the environment.
- different strategies in the teaching of the topic.

• assessment of learners' understanding of the principles of home management.

Glossary

**Disposal** the action or the

process of throwing away something.

**Reflection and Assessment** 

1 Describe household practices that affect the environment.

2 Explain different ways of proper waste disposal.

3 Discuss different strategies that can be used in the teaching of the topic.

**Pollute** 

the presences of substance that has harmful effects

Waste

unwanted

### **TOPIC 2** Teaching of the kitchen

Time 1 hour

Term

### Introduction

The kitchen is the heart of the home. This is where food is prepared and cooked. It can also be used for storing food and kitchen utensils. When designing the kitchen, care should be taken so that it is efficient, saves labour and time. It is important for you and primary school learners to have an understanding of the kitchen because this will help both of you acquire relevant knowledge, skills and attitudes on the importance of the kitchen and how to care for it. It will also enable you to teach this topic effectively in primary schools.

### Success criteria

By the end of this topic, you must be able to:

- identify different types of kitchens.
- describe how to improve the traditional kitchen.
- describe kitchen hygiene.
- demonstrate different strategies for teaching the topic.
- assess student teachers' performance on the topic.

### **Background information**

There are different types of kitchens which can be found in both the urban and rural areas. These are the modern kitchen and the traditional kitchen.

### A traditional kitchen

A traditional kitchen is the most common type of kitchen in Malawi. This type of kitchen in most cases is poorly arranged, not well ventilated and lacks storage facilities. The equipment used is not labour and time saving. There are two types of traditional kitchens in Malawi. These are the open air and the enclosed kitchen. Open air kitchen is usually located outside the house. It is commonly used in dry season. An enclosed kitchen consists of hut located outside the main house. It is constructed of poles reinforced with mud. The roof is made of poles and thatched with grass. The main source of ventilation is the door. The three stone fire place is the one commonly used as a cooking centre. Figure 2.1 shows a traditional kitchen.

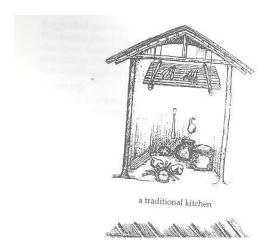


Fig 2.1: A traditional kitchen

### Arrangement of a traditional kitchen

The traditional kitchen has kitchen centres located far away from each other. These centres are:

### Storage centre

The storage centre is mainly found outside the main house or the kitchen structure. Food stuffs and kitchen equipment are usually kept in baskets, pots or hung on the walls.

### Preparation centre

This is where food is prepared.
Usually it is done anywhere and it is not fixed

### Cooking centre

This is made up of a three stone fireplace or charcoal burner. In an open air kitchen, this is located in a cool place such as a *khonde* or in a shade

### Washing up centre

This is usually found outside the kitchen structure in order to keep the kitchen dry all the time. It is made up of drying rack and a soak pit underneath it. Figure 2.2 shows an improved traditional kitchen

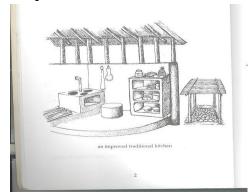


Fig 2.2 Improved traditional kitchen

### A Modern kitchen

A modern kitchen is part of the main house. It is well designed so that it allows activities to be carried out with ease. A modern kitchen is well planned, well ventilated and has good lighting. It has work surfaces, good storage facilities and kitchen centres. It is labour and time saving. Figure 2.3 shows a modern kitchen.



Fig 2.3: A modern kitchen

### Kitchen hygiene

Kitchen hygiene deals with cleanliness of the kitchen, personal hygiene and food hygiene. It is important that food is prepared in hygienic conditions to avoid contamination. There are guidelines for kitchen hygiene, personal hygiene and food hygiene.

There are some opportunities that may help you teach this topic. These are:

- student teachers have prior knowledge of the topic.
- availability of facilities in colleges for teaching the topic in the human ecology flat.

### Challenges for the topic:

One of the challenges is inadequate functioning equipment in the human ecology flat

### Task 1

# Identifying different types of kitchens

There are different types of kitchens in the home. This activity will expose you to types of kitchens that are commonly found in Malawi.

### **Activity 1**

- 1 Brainstorm different types of kitchens.
- 2 Discuss the characteristics of traditional and modern kitchens.
- 3 Report your findings to the class for discussion.
- 4 Consolidate the activity.

### Task 2

### Describing how to improve a traditional kitchen

It has been noted that the traditional kitchens lack modern facilities. This activity will help you to have knowledge, skills and attitude in how to improve the traditional kitchen so that it is efficient and user friendly.

### Activity

- 1 Identify the shortfalls in a traditional kitchen.
- 2 Discuss the shortfalls in a traditional kitchen.
- 3 Discuss ways of improving a traditional kitchen.

- 4 Present your work in plenary for discussion.
- 5 Consolidate the activity.

### Task 3

### Describing kitchen hygiene

Kitchen hygiene involves kitchen, food as well as personal hygiene. This activity will help you understand kitchen, food and personal hygiene so that food is prepared in a clean environment.

### **Activity**

- 1 Brainstorm aspects of kitchen, food and personal hygiene.
- 2 Discuss guidelines for kitchen, food and personal hygiene.
- 3 Discuss ways of caring for the kitchen.
- 4 Report your findings to the class for discussion.
- 5 Demonstrate how to care for the kitchen.
- 6 Practise how to care for the kitchen.
- 7 Consolidate the activity.

### Tips for the activities

- Use appropriate teaching, learning and assessment methodologies and resources.
- Adapt the activities for students with special educational needs.
- Involve both males and females in the activities.
- Create extra time outside the lesson time to accomplish certain tasks.

### Task 4

### Demonstrating different strategies on the teaching of the topic

There are various strategies and resources used in teaching the topic. You must choose appropriate methods for teaching the topic.

### Activity

- 1 Discuss effective teaching and learning methods for the topic.
- 2 Discuss assessment methodologies and resources for the topic.
- 3 Prepare a lesson plan for the topic.
- 4 Micro-teach the lesson on the topic.
- 5 Conduct a feedback session.

### Task 5

### Assessing student teachers' performance on the topic

It is important to assess student teachers' performance on the topic. This will help them improve on their areas of need.

### Activity

- 1 Analyse various ways of assessing student teachers' performance on the lesson.
- 2 Reflect on their assessment.

3 Give feedback to peers on the lesson presented and suggest ways on how to improve it.

### Summary

This topic has looked at:

- different types of kitchens.
- how to improve a traditional kitchen.
- kitchen hygiene.
- different strategies on the teaching of the topic.
- assessment of student teachers' performance on the topic.

#### Reflection and assessment

- 1 Discuss different types of kitchens used in the home.
- 2 Explain reasons for improving the traditional kitchen.
- 3 Describe guidelines for kitchen food and personal hygiene.

### Glossary

Modern current,

progressive

Traditional normal,

conventional

### TOPIC 3

### **Teaching of malnutrition**

Time 2 hours

Term 2

### Introduction

Malnutrition is the insufficient, excessive or imbalanced consumption of nutrients. Different disorders may develop, depending on which nutrients are lacking or consumed in excess. It is important for you and primary school learners to acquire appropriate knowledge, skills and attitudes which will assist you to appreciate how malnutrition affects productivity of people in their communities and the economic growth of a country. It will also enable you to teach this topic effectively in primary schools.

#### Success criteria

By the end of the topic, you must be able to:

- explain the different forms of malnutrition.
- explore ways of assessing nutritional status of individuals and communities.
- analyse ways of preventing and managing malnutrition.
- demonstrate different strategies on the teaching of the topic.
- assess student teachers performance on the teaching of the topic.

### **Background information**

Malnutrition is poor nourishment resulting from improper diet or from some defect in metabolism that prevents the body from using its food properly.

### Forms of malnutrition

There are two major forms of malnutrition. These are under nutrition and over nutrition

#### **Under nutrition**

Under nutrition is the outcome of consumption of insufficient quantities of food caused primarily by poverty or poor care practices. Under nutrition results in poor growth, weight loss, poor health and even death. It includes protein energy deficiencies that result in a person being too light for one's age (underweight), or too short for one's age (stunted) or too light for one's height (wasted). Under nutrition may also occur when the body lacks vitamins and minerals.

### **Protein- Energy Malnutrition (PEM):**

Protein-Energy Malnutrition describes different clinical conditions ranging from mild to serious conditions such as, poor physical growth in children, nutritional marasmus (characterized by severe wasting) and kwashiorkor (characterized by the presence of oedema). There are three types of PEM. These are:

#### Marasmus

Marasmus is the result of a child having a very low intake of energy giving nutrients. It affects children during the first two years of life but it can also occur at any age. Marasmus is a severe form of PEM caused by shortage of carbohydrates and proteins in the body. This can also be caused by chronic or frequent illness due to infections such as diarrhoea, respiratory infections, HIV and AIDS. Marasmus is identifiable by severe loss of body weight or wasting. Figure 3.1 shows a child with marasmus



Fig.3.1: A child with marasmus

### Kwashiorkor

Kwashiorkor is more complicated. It is commonest in children aged one to three years, but it can occur in younger and older children. Kwashiorkor is caused by the lack of sufficient protein and carbohydrate in foods. Figure 3.2 shows a child with kwashiorkor



Fig. 3.2: A child with kwashiorkor

#### Marasmic kwashiorkor

Marasmic kwashiorkor combines symptoms of marasmus and kwashiorkor.

### Micro nutrient disorders

This is a deficiency that results from the inadequate intake of nutrients required by the body in minute quantities for the normal function of the body. The main micro nutrient deficiencies of public health concern are:

- Iron Deficiency Anaemia (IDA)
- Vitamin A Deficiency (VAD)
- Iodine Deficiency Disorder (IDD)
- Zinc deficiency.

These deficiencies may cause permanent damage to health and even death. Other types of micro nutrient deficiencies include vitamin C (scurvy), niacin (pellagra) and thiamine (beriberi).

### Over nutrition

Over nutrition is a form of malnutrition in which a person consistently consumes more nutrients than the quantity required by the body over a period of time. The amount of nutrients exceeds the amount required for normal growth, development and metabolism. The most common condition of extreme over nutrition is obesity. Obesity refers to excessive weight gain due to eating more food than the body needs accompanied by less physical activity. Obese people accumulate a lot of fat in their body leading to pressure in the body and other internal organs. They tend to have a lot of fat deposits in their blood vessels that clog them. Figure 3.3 shows obese people.



Fig 3.3: Obese people

## Health problems associated with obesity

There are several healthy problems that are associated with obesity. These include:

- high blood pressure, stroke and other heart diseases.
- the onset of diabetes in adults is five times more common in obese people.
- there are psychological problems associated with obesity due to inability to undertake many social activities and stigma.

### How to assess the nutritional status of individuals and communities

In order to establish the levels and prevalence of malnutrition, it is important to carry out a nutrition assessment of individuals and communities to establish their nutritional status. Any nutrition assessment be at individual or community level should show the relationship between food and nutrients eaten, their use in the body and general health of the people.

### Reasons for assessing the nutritional status of individuals or communities

There are several reasons for carrying out nutrition assessment. These are to:

- map out the magnitude and distribution of malnutrition.
- discover and analyse factors that cause malnutrition.
- identify groups of people who are at risk of malnutrition.
- suggest appropriate corrective measures for dealing with malnutrition.

- provide factual evidence of the extent of malnutrition in the community.
- evaluate the effectiveness of a nutrition program.

#### Methods of nutrition assessment

There are several methods of carrying out nutrition assessment. These include:

### Anthropometric assessments

Anthropometry is the measurement of the body's physical dimensions that are used to gain an understanding of an individual's nutritional status. The body measurements of weight, height and age are converted into nutritional indicators. To generate the indicators, any of the two variables measured are related. The indicators are:

### Weight for Height/Length (W/H)

Low weight for height is characterized by wasting and loss of muscle fat. It is an indicator of thinness and identifies acute malnutrition.

### Height for Age (H/A)

It is a measure of stunting or chronic malnutrition. A child's height is compared to the median height (length) of the reference population of the same age and sex to give height for age indicator. Children failing to gain the right height for their age in relation to the median of the reference population are classified as too short for their age or stunted.

### Weight for Age (W/A)

This indicator conveys the weight of a child in relation to the child's age.

weight for age is a useful indicator for monitoring growth and development of children.

### Mid Upper Arm Circumference (MUAC)

This is a rapid and effective measure used to establish existence of acute malnutrition in a population. In this method, the circumference of the mid upper arm of an individual is assessed against the reference group.

#### Oedema

It is the abnormal accumulation of large amounts of body fluid in the intercellular tissues. It is a key clinical feature of severe protein energy malnutrition. For the other methods of nutrition assessment, refer to a sourcebook on nutrition education

# The role of nutrition education in prevention and management of malnutrition

The role of nutrition education in prevention and management of malnutrition is very critical. It helps to promote:

- positive nutrition practices.
- practical measures to grow/prepare appropriate foods strengthen food security and food hygiene.
- awareness of the importance of recognizing signs of malnutrition and the need for immediate action.
- early treatment of infection.
- continued eating during infection.

#### Prevention of under nutrition

 Scaling up high impact cost effective nutrition interventions to communities.

- Integrate high-impact, nutritionspecific, and nutrition-sensitive interventions in core sector policies, strategies, implementation plans and budgets.
- Private sector investment in the production, processing, and marketing of high-quality nutritious foods including complementary foods.
- Scale-up a harmonised national school health and nutrition program.

There are opportunities in the teaching of the topic. These are:

- the topic will attract your interest because it deals with real life situations in communities.
- the topic will help you to acquire research and investigative skills.
- student teachers have prerequisite knowledge on the topic.
- availability of resources for teaching the topic.

However, there are some challenges in teaching the topic. These are:

- The topic needs experts to articulate issues concerning malnutrition.
- The topic needs to be handled with sensitivity and empathy.

# Task 1 Explaining different forms of malnutrition

There are different forms of malnutrition. This activity will help you explore the different forms of malnutrition.

### Activity

- 1 Investigate different forms of malnutrition from different sources such as journals, books and internet.
- 2 Do a free write using the findings of the investigation on the causes, signs and symptoms of malnutrition
- 3 Report your findings to the class for discussion
- 4 Consolidate the activity

### Task 2 Exploring ways of assessing nutritional status of individuals and communities

There are various ways to establish the levels and prevalence of malnutrition among individuals and communities. This activity will help you to understand these ways.

### Activity

- 1 Using paired brainstorming, come up with different ways of assessing nutritional status of individuals and communities.
- 2 Discuss the ways of assessing the nutritional status of individuals and families.
- 3 Report your findings to the class for discussion.
- 4 Consolidate the activity.

# Task 3 Analysing ways of preventing and managing malnutrition

Malnutrition should be prevented and managed to reduce morbidity and mortality rates in the communities. This activity will assist you to examine ways of preventing and managing malnutrition.

### Activity

- 1 Discuss ways of preventing and managing malnutrition using mixfreeze-pair.
- Visit a health facility to study cases of malnutrition and how they are managed.
- 3 Report you findings to the class for discussion.
- 4 Consolidate the activity

### Tips for activities 1, 2 and 3

- Beef up the information on this topic from the sourcebook on nutrition education and other relevant sources.
- Support the student teachers to develop a" mind map" on the effects of malnutrition.

#### Task 4

### Demonstrating different strategies on the teaching of malnutrition

Different strategies and resources can be used for teaching this topic. Student teachers should choose appropriate methods suitable for the topic.

### Activity

- 1 Discuss different teaching learning and assessment resources which can be used on the topic.
- 2 Prepare a lesson plan on the topic.
- 3 Micro teach a lesson on the topic.
- 4 Carry out a feedback session on the topic.
- 5 Discuss how the lesson could be improved if it was taught again.

#### Task 5

### Assessing student teachers' performance on the topic

Assessing student teachers performance is important because it will help them improve on skills and knowledge acquired.

### Activity 5

- 1 Analyse various ways of assessing student teacher's performance on the lesson taught.
- 2 Evaluate the student teacher's lesson presentation.
- 3 Give feedback to student teachers on the lessons presented after the peer feedback session.

### Summary

This topic has looked at:

- different forms and causes of malnutrition.
- ways of assessing nutritional status of individuals and communities.
- ways of preventing and managing malnutrition.

### Reflection and assessment

- 1 Examine different forms of malnutrition
- 2 Investigate ways of assessing nutritional status of individuals and communities
- 3 Explore ways on how malnutrition is prevented and managed in your community

Glossary

Prevalence

Indicator

occurrence

pointer

### TOPIC 4 Teaching of HIV and nutrition

Time 2 hours

Term 2

#### Introduction

HIV infection is having a negative impact on human health, food security, nutrition and socio-economic progress of sub-Saharan countries including Malawi. It is important for you and primary school learners to gain appropriate knowledge, skills and attitudes which can help you understand the relationship between HIV and nutrition. This can also help you to apply the knowledge on nutritional care and support for people living with HIV.

### Success criteria

By the end of the topic, you must be able to:

- explain the relationship between HIV and nutrition.
- describe opportunistic infections related to HIV infection.
- examine nutrition care and support for people living with HIV.
- demonstrate different strategies on the teaching of the topic.
- assess student teachers performance on the teaching of the topic.

### **Background information**

There is a relationship between HIV and nutrition. HIV affects the consumption and absorption of nutrients. When HIV infects a person it goes through phases before it develops into AIDS. These phases are:

### Acute phase (initial phase)

When HIV attacks a person; it multiplies rapidly destroying immune cells in the body. This results in increased metabolism as the body works hard to replace the lost immune cells which require energy. This acute phase lasts 1 to 6 weeks.

### Asymptomatic phase

This is a period when an infected person does not show signs. This period varies and may last many years depending on the health and nutritional status of the infected person before infection.

### Symptomatic phase

This is the onset of opportunistic infections such as fever, night sweats, TB, oral thrush and diarrhoea. These infections increase nutritional needs and continue to weaken the immune system speeding up the progression of HIV to AIDS.

### Late symptomatic phase

This is the phase when the person develops AIDS. This phase is marked by weight loss and muscle wasting, high viral load, decrease in CD4 count, Kaposi's sarcoma and other serious infections.

### Opportunistic infections related to HIV infection

People living with HIV and AIDS are likely to suffer from several opportunistic infections. Some of these are:

### Loss of appetite or anorexia

Loss of appetite or anorexia leads to general weight loss and is common when individuals are depressed or are living in socially and emotionally unfavourable environment.

#### Diarrhoea

There are several causes for diarrhoea. Some of them are drinking unclean and unsafe water, infections, parasites and effects of some medical treatments.

#### **Fever**

People with fever may have chills, sweat more, have muscle and joint aches or be fatigued.

### Nausea/ frequent vomiting

Nausea and frequent vomiting can leads to reduced appetite and poor utilization of the food consumed.

#### **Thrush**

Thrush is a fungal infection common in HIV infected people who have damaged immune systems.

### Anaemia

Anaemia results from an inadequate number or quality of red blood cells in the body. This is most often due to a lack of iron in the diet and to infections such as malaria and hookworms

#### **Tuberculosis (TB)**

In poor nations, TB is the most common opportunistic infection associated with HIV and a leading cause of death among people with AIDs.

### Nutritional care and support for people living with HIV

Nutritional care and support for people living with HIV is part of the management of HIV infection. It helps people with HIV get the energy and nutrients to meet their nutritional requirements as well as support absorption and function of antiretroviral treatment (ART) in the body. Nutritional care and support leads to good nutrition and helps to improve the quality of life for people living with HIV by:

- maintaining body weight and strength.
- replacing lost vitamins and minerals.
- improving the function of the immune system and the body's ability to fight infections.
- extending the period from infection to the development of AIDS.
- improving response to treatment thereby reducing the time and money spent on health care.
- keeping people living with HIV active, thus giving them time to take good care of themselves and their families.
- keeping people living with HIV productive so that they are able to work, grow food and contribute to the income of their families.

### Nutritional guidelines for people living with HIV infection

People living with HIV infection should have a healthy and balanced diet just like any other person. This can be achieved by using the following nutritional guidelines:

### Enjoy a variety of foods

Eating a variety of foods can supply all the nutrients our bodies need to function properly.

### Eat staples with every meal

Staple foods are cheap and supply the body with energy and some protein.

### Eat legumes if possible every day

Legumes provide protein needed to build and repair the body and to build strong muscles.

### Eat animal and milk products regularly

They supply the body with good quality protein, vitamins, minerals and extra energy.

### Use fats and oils as well as sugar and sugary foods

Fats, oils and sugar are good sources of energy and help one gain body weight.

### Eat vegetables and fruits every day

Vegetables and fruits supply the body with vitamins and minerals that keep the body functioning and the immune system strong.

### Task 1

## Explaining the relationship between HIV and nutrition

There is a strong relationship between HIV and nutrition. This activity will make you appreciate this relationship. **Activity** 

1 Discuss the relationship between HIV and nutrition.

- 2 Carry out an investigation of the relationship between HIV infection and nutrition.
- 3 Report your findings to the class for discussion.
- 4 Consolidate the activity.

#### Task 2

### Describing opportunistic infections related to HIV infection

There are various opportunistic infections related to HIV infection. This activity will facilitate your understanding of these infections.

### Activity

- 1 Brainstorm common opportunistic infections related to HIV infection.
- 2 Discuss common opportunistic infections related to HIV infections using jig saw.
- 3 Present your findings to the class for discussion.
- 4 Consolidate the activity

#### Task 3

### Examining nutritional care and support of people living with HIV

There is need for nutritional care and support for people living HIV. This activity will help you to explore guidelines for nutritional care and support for people living with HIV.

### Activity

1 Identify guidelines for nutritional care and support for people living with HIV.

- 2 Discuss the guidelines for nutritional care and support for people living with HIV.
- 3 Present your work to the class for discussion.
- 4 Consolidate the activity using power point presentation.

#### Task 4

### Demonstrating different strategies on the teaching of HIV and nutrition

Various methods and resources are used when teaching the topic. You must select effective methods and resources for the topic.

### **Activity**

- 1 Suggest different teaching strategies for teaching the topic.
- 2 Discuss different teaching and learning resources which can be used on the topic.
- 3 Prepare a lesson plan on the topic.
- 4 Micro teach a lesson on the topic.
- 5 Conduct a feedback session.

### Task 5

### Assessing student teachers' performance

It is important to assess student teachers performance on the topic. This will help them improve on their areas of need.

### Activity

- 1 Analyse various ways of assessing student teachers' performance on the topic.
- 2 Reflect on your assessment experiences on the topic.
- 3 Give feedback to peers on the lesson presented.

### **Summary**

This topic has looked at:

- the relationship between HIV and nutrition.
- opportunistic infections as a result of HIV infection.
- guidelines in the nutritional care and support for people living with HIV.
- strategies on how to teach and assess student teachers on the topic.

### Reflection and assessment

- 1 Explore the relationship between HIV and nutrition.
- 2 Investigate opportunistic infections related to HIV infections common in their community.
- 3 Describe guidelines to be followed for nutrition care and support for people living with HIV.

### Glossary

**Anorexia** self starvation

**Anaemia** lack of blood

# TOPIC 5

## Teaching of diet related non-communicable diseases

Time 1 hour
Term 2

### Introduction

Many developing countries including Malawi are affected by diet related non-communicable diseases (NCDs). These diseases are associated with poor diet and poor lifestyles. It is important that you and primary school learners to acquire relevant knowledge, skills and attitudes that will help prevent and manage diet related non-communicable diseases. This knowledge and skills will also help you teach the topic in primary school effectively.

#### Success criteria

By the end of the topic, you must be able to:

- describe types of diet related noncommunicable diseases.
- explore ways of preventing and managing diet related noncommunicable diseases.
- demonstrate the different strategies on the teaching of the topic.
- assess student teachers' performance on the teaching of the topic.

### **Background information**

Diet related non-communicable diseases (NCDs) were previously known as diseases of the rich and urban dwellers because they were common among affluent people.
Currently, the prevalence of diet related non-communicable diseases is also common among low income communities. Many people in Malawi are now suffering from diet related non-communicable diseases and some are dying as a result of these diseases.
NCDs are one of the leading causes of death in the world.

The major common types of diet related non-communicable diseases include hypertension linked to heart attack and stroke, cancers, chronic respiratory diseases such as chronic obstructive pulmonary diseases, asthma, diabetes and malnutrition. Diet related non-communicable diseases are diseases associated with poor life styles such as smoking, excessive drinking of alcohol and poor diet. They could also be hereditary. World Health Organisation (WHO) has listed diet related noncommunicable diseases as the leading cause of death in the world.

### Diet related non-communicable diseases (NCDs)

There are several types of diet related non-communicable diseases. These are:

### High blood pressure (HBP)

High blood pressure is blood pressure that is higher than normal. A person with high blood pressure has greater risk of heart disease or stroke.

#### Diabetes mellitus

Diabetes mellitus is a chronic metabolic disorder in which blood glucose levels are raised due to deficiency or reduced effectiveness of insulin.

#### Cancer

Cancer is abnormal multiplication of cells. There are many types of cancers, with different characteristics and they occur in different locations in the body such as breast, lungs, liver, ovaries, stomach, bladder and the skin.

#### Gout

Gout is a metabolic hereditary disorder which leads to inflammation of the joints. Gout can affect other joints such as knee, ankle, wrist, foot and small joint of the hands.

#### **Arthritis**

Arthritis is a chronic painful inflammation of the joints caused by many conditions including infections, metabolic disturbances and injury.

### Causes of diet related noncommunicable diseases

There are several causes of diet related non-communicable diseases. These include:

### a. Genetic makeup

Naturally some people are likely to gain more weight than others on comparable energy intake. The genetic make-up may also influence the way the body utilizes energy in different processes.

### b. Food choices

A person is likely to become overweight when he or she eats too

much starchy foods and fatty foods.

### c. Cooking methods

Methods of cooking that require lots of fat may also increase the risk of becoming overweight.

### d. Lack of physical activity

Physical activities such as walking, jogging, running, cycling and manual work make the body use more energy and keep it strong and muscles toned. When a person is not physically active he or she is more likely to become stunted.

e. Malnutrition in early stages of life
If a person was malnourished in
early childhood, he or she is more
likely to become overweight.

### Prevention and management of diet related non-communicable diseases

Diet related non-communicable diseases can be prevented and managed. Prevention measures include:

- a. Eat meals with plenty of fruits and vegetables. These contain lots of fibre and water which reduces food energy intake, provides satiety and delayed hunger.
- b. Eat snacks that are low in energy such as fruits, vegetables, legumes and whole grains.
- c. Take regular and vigorous exercises such as walking fast (hurriedly) or uphill, digging, jogging, pounding, playing games such as skipping a rope, roundus, phada, jingle, chipako, football, netball, swimming, squash, volley ball and tennis.
- d. Avoid high energy fatty and sugary foods such as fizzy drinks, chips, crisps, sweets and cakes.

e. Avoid excessive consumption of alcohol and smoking.

# Nutritional management of diet related non-communicable diseases These include:

- a. Reduce the amount of food taken per meal to minimize energy intake.
- b. Reduce fat intake.
- c. Increase the intake of fruits and vegetables.
- d. Increase physical activity
- e. Avoid excessive consumption of alcohol

There are opportunities in the teaching of NCDs, one of which is that the topic will attract the interest of student teachers and primary school learners. However, the teaching of diet related non-communicable diseases has tts challenges. One of the challenges is knowledge transfer since some diseases are complex and difficult to explain

#### Task 1

### Describing types of diet related non-communicable diseases

There are different types of diet related non-communicable diseases that affect people. This activity will expose you to various forms of diet related noncommunicable diseases.

### Activity

- 1 Brainstorm types of diet related non-communicable diseases.
- 2 Discuss types of diet related noncommunicable diseases.

- 3 Report your findings to the class for discussion.
- 4 Consolidate the activity.

#### Task 2

### Exploring ways of preventing and managing diet related noncommunicable diseases

In this activity you will explore ways of preventing and managing diet related non-communicable diseases that affect people.

### **Activity**

- 1 Brainstorm ways of preventing and managing diet related non-communicable diseases.
- 2 Discuss ways of preventing and managing diet related noncommunicable diseases.
- 3 Present your findings to the class for discussion.
- 4 Consolidate the activity.
- 5 Develop advocacy messages on types, causes, prevention and management of diet related noncommunicable diseases.
- 6 Present the messages during an open day at the college.

#### Task 3

# Demonstrating different strategies on the teaching of diet related non-communicable diseases

Various methods and resources are used when teaching the topic. You must select effective methods and resources for the topic.

### Activity

- 1 Discuss effective teaching, learning and assessment methods for the topic.
- 2 Discuss effective teaching, learning and assessment resources for the topic.
- 3 Prepare a lesson plan on the topic.
- 4 Micro-teach a lesson on the topic.
- 5 Conduct a feedback session.

#### Task 4

## Assessing student teachers' performance on the topic

It is important to assess student teachers' performance on the topic. This will help them improve on their areas of need.

### Activity

- 1 Analyse various ways of assessing student teachers' performance on the topic.
- 2 Reflect on your assessment experiences on the topic.
- 3 Give feedback to peers on the lesson presented.

### Summary

This topic has looked at:

- types of diet related noncommunicable diseases.
- ways of preventing and managing diet related non-communicable diseases.
- strategies on how to teach and assess learners on the topic.

#### Reflection and assessment

- 1 Analyse types of diet related noncommunicable diseases.
- 2 Discus ways of preventing and managing diet related noncommunicable diseases.
- 3 Hold an open day to advocate for prevention and management of diet related non-communicable diseases.

### Glossary

**Affluent** rich, well-to-do

### TOPIC 6

### **Teaching of food processing**

Time 2 hours

Term 2

### Introduction

Food processing involves changing raw materials into new food products for consumption or improved storage. This makes food safe, allows dietary diversity and provides an opportunity for people to have a wide variety of food to choose from. It is important for you and primary school learners to gain appropriate knowledge, skills and attitudes about food processing so that you can use appropriate food processing methods. This will also help you teach the topic effectively in primary school

### **Success Criteria**

By the end of this topic, you must be able to:

- explain the reasons for processing foods.
- analyse methods of food processing.
- process food using different methods.
- demonstrate different strategies on teaching of the topic.
- assess student teachers' performance on teaching of the topic.

#### **Background information**

Food processing is changing of raw materials by physical or chemical means into food for human and animal consumption. Food is processed for a number of reasons. These are:

- To make it safe to eat.
- To improve its nutritive value.

- To improve the foods appearance in terms of colour flavour and texture.
- Helps in developing new food products.
- It adds value to different food products.
- It extends the shelf life of food hence essential for food preservation.
- It provides food for special groups of people such as infants and the sick.

### Methods of food processing

There are two main methods of food processing. These are:

### Primary processing

Primary processing of food include shelling grains, descaling or gutting milling, pounding and peeling.

### Secondary processing

This is changing basic processed foods into other food products. Examples include:

- Margarine from oil.
- Bread, cakes and scones from flour, fat and sugar.
- Sauces from vegetables, meat and fish
- Jam and chutney from fruit and sugar.

### **Technologies for food processing**

There are two main technologies for food processing. These are:

### Indigenous technologies

These are local technologies used in the home. The technologies are safe and easy to use. These technologies help to maintain nutrients in the food. Examples include mats, drying rack, *nkhuti*, mortar and pestle. However, these technologies need a lot of time and energy and may cause food contamination because of the materials they are made of. Figure 6.1 shows an example of indigenous technology.



Fig 6.1: A mortar and a pestle

### Modern technologies

These are used to process food faster than indigenous technologies. However, most of these technologies are expensive and may require skill and expertise to operate them. Examples may include a blender, mixer and food processor. Figure 6.2 shows an example of a modern technology for food processing.



Fig 6.2: A food processor

There are some opportunities for teaching the topic. These include:

- student teachers have prior knowledge on the topic.
- availability of teaching, learning and assessment resources for teaching the topic.
- use of resource persons on the topic.

The major challenge for teaching the topic is the lack of expertise on the topic

### Task 1 Explaining reasons for processing food

Food processing is essential for improving the quality of foods. This activity will equip you with skills, knowledge and attitudes for processing food.

### Activity

- 1 Do a quick write on the reasons for food processing you already know.
- 2 Report your findings to the class for discussion.
- 3 Consolidate the activity.

#### Task 2

# Analysing methods of food processing

There are different methods of processing foods. This activity will help you understand methods of food processing to maintain the nutritive value of foods.

### Activity

- 1 Using jig-saw, analyse methods of food processing
- 2 Report your findings to the class for discussion
- 3 Consolidate the activity using power point or relevant approaches

### Tips for activities

 Student teachers to do a book or on-line research on methods of food processing

#### Task 3

# Practicing different methods of food processing

There are different methods of processing food discussed in this topic. This activity will help you process food using the different methods.

#### **Activity**

- 1 Discuss procedures for processing food.
- 2 Demonstrate different procedures for processing food.
- 3 Practise processing food.
- 4 Consolidate the activity.

### Tips

- You may consider practising using drying method, salting or smocking methods as these methods will not cost much.
- Encourage learners to support other learners with special needs while doing the practicals.

#### Task 4

# Demonstrating different strategies on the teaching of food processing

There are various methods and resources used in teaching the topic. Student teachers must choose appropriate methods and resources for the topic.

### Activity

- 1 Discuss effective teaching, learning and assessment methods for the topic.
- 2 Discuss effective teaching, learning and assessment resources.
- 3 Prepare a lesson plan on the topic.
- 4 Micro teach a lesson on the topic.
- 5 Conduct a feedback session

#### Task 5

# Assessing student teachers' performance on the topic

It is important to assess student teachers' performance on the topic. This will help them improve in areas they did not do well.

#### **Activity**

1 Analyse various ways of assessing student teachers' performance on the topic.

- 2 Reflect on your assessment experiences on the topic.
- 3 Give feedback to peers on the lesson presented.

### **Summary**

This topic has looked at:

- reasons for food processing.
- methods of food processing.
- processing foods using different methods.
- strategies on how to teach and assess learners on the topic.

#### Reflection and assessment

- 1 Discuss reasons for food processing.
- 2 Explore methods of food processing.
- 3 Process local foods commonly found in your community.

## Glossary

**Texture** feel, consistency

**Flavour** taste, aroma

# **Teaching of food preservation**

Time 2 hours

Term 2

#### Introduction

There are a number of reasons why food is preserved. This is either to destroy the causes of decay by using high temperatures or to create conditions in which they cannot grow and multiply. It is important for you and primary school learners to develop an understanding of food preservation. This will help you acquire the right knowledge, skills and attitudes on methods of food preservation that retain nutrients in the food.

#### Success criteria

By the end of this topic, you must be able to:

- explain the reasons for preserving food.
- analyse different methods of food preservation.
- preserve food using different methods.
- demonstrate different strategies on the teaching of the topic.
- assess student teachers' performance on the topic.

#### **Background Information**

Problems of food spoilage and waste are common in our communities. As such, it is important to preserve food in order to:

- maintain its quality and prolong the shelf life of perishable foods.
- prevent wastage and provide variety in the diet.

 make new food products such as chutney, juices, jam, atchar, and pickles

### Methods of food preservation

There are different methods of preserving food. The methods use different principles of preservation. These include:

- removal of moisture
- heat application
- use of chemicals
- reduction of temperature.

The underlying principles of food preservation demonstrate the different methods of food preservation. These are:

- a. removal of moisture or dehydration
  - sun drying
  - oven drying
  - freeze drying
- b. application of heat
  - boiling
  - blanching
  - sterilisation
- c. use of chemicals and preservatives
  - salting
  - addition of sugar
  - addition of acids
- d. reduction of temperature
  - refrigeration
  - cold storage
  - freezing

To gain deeper understanding of food preservation, it is important that you put into practice different methods of food preservation. Refer to the sourcebook on nutrition education for teacher training colleges and primary schools for further information on this.

There are some opportunities for teaching the topic. Some of them are:

- student teachers have prior knowledge on the topic.
- resources for teaching the topic are easily accessible.

However, the major challenge for teaching the topic is lack of expertise in the teacher training colleges.

#### Task 1

# Explaining reasons for preserving food

Food preservation is essential for prolonging the shelf life of food. This activity will equip you with skills, knowledge and attitudes for preserving food.

#### Activity

- 1 Brainstorm reasons for preserving food.
- 2 Discuss reasons for preserving food
- 3 Present your findings to the class for discussion.
- 4 Consolidate the activity.

#### Task 2

# Analysing different methods of food preservation

There are various methods for preserving food. This activity will expose you to various methods of food preservation.

#### Activity

- 1 Using think-pair-share discuss different methods of food preservation.
- 2 Conduct research on different methods of food preservation.
- 3 Report your findings to the class discussion.

4 Consolidate the activity.

#### Task 3

# Preserving food using different methods

Principles of food preservation can be demonstrated using different methods of food preservation. This activity will help you practice preserving food.

#### Activity

- 1 Discuss procedures for preserving food using different methods.
- 2 Demonstrate procedures for food preservation.
- 3 Practice preserving foods.
- 4 Consolidate the activity.

#### Task 4

# Demonstrating strategies for the teaching of the topic

There are various methods and resources used in teaching the topic. Student teachers must choose appropriate methods and resources for the topic.

#### Activity

- Discuss different teaching and learning strategies for teaching the topic.
- 2 Prepare a lesson plan on the topic.
- 3 Micro-teach the lessons on the topic.
- 4 Conduct a feedback session to consolidate the activity.
- 5 Consolidate the activity.

#### Task 5

# Assessing student teachers' performance on the topic

It is important to assess student teachers' performance on the topic. This will help them improve in their areas of need.

### Activity

- 1 Analyse various ways of assessing student teachers' performance on the lesson taught.
- 2 Reflect on your assessment experiences on the lesson taught.
- 3 Give feedback to peers on the lesson presented

### **Summary**

This topic has looked at:

- reasons for preserving food
- different methods of preserving food
- practising preserving food

 strategies on how to teach and assess learners on the topic

### Reflection and assessment

- 1 Discuss reasons for food preservation.
- 2 Investigate methods of food preservation.

Glossary

**Preserve** protect, conserve

**Blanch** cook food for a

short time to make enzymes inactive

# Topic 8

# **Teaching of dietary diversification**

Time 2 hours

Term 2

#### Introduction

Dietary diversification enhances the availability, access and utilisation of foods for healthy and productive life. The six food groups provide a diverse diet which provides the body with all the required nutrients. It is important for both you and primary school learners to acquire knowledge, skills and attitudes in dietary diversification. This will help both of you appreciate the importance of eating a diversified diet and promote the nutritional status of families and communities.

#### Success criteria

By the end of the topic, you must be able to:

- explain the importance of dietary diversification in the home.
- explore ways of promoting dietary diversification in the home.
- plan meals to demonstrate dietary diversification.
- demonstrate different strategies on the teaching of the topic.
- assess student teachers' understanding of key concepts of the topic.

#### **Background information**

Dietary diversification describes how variety of foods in the diet meets nutrient requirements. Dietary diversification is a reflection of the adequate intake of essential nutrients either at the household level or at the individual level. This helps the body to fulfill its normal functions such as metabolism during childhood, adolescence, pregnancy, lactation recovery from sickness and also repairing of worn out tissues.

A diversified diet is important because it ensures that individuals or communities are able to:

- Get all the nutrients they need because a variety of foods provide different nutrients in different amounts.
- Have options of choice of food from a wide variety in case of scarcity due to supply and production constraints.
- Be reliant and buffered against climate variability in case of failure of one crop.

In order for a household to achieve dietary diversification, it must have access to adequate amounts and a variety of nutritious foods. This can be achieved through:

- increased production of variety of foods in farms.
- mixed farming or having back yard gardens.
- livestock and poultry keeping.

- promotion of underutilized but nutritious traditional foods.
- promotion of improved preservation and storage of fruits and vegetables.
- promotion of fishery and forestry products for household consumption.

Proper meal planning is required to demonstrate dietary diversification. This can be achieved by the use of the Malawi six food groups chart used for planning diversified diet.

The knowledge, attitudes and skills you and primary school learners acquire on this topic will help you promote nutritional status and prevent nutritional related diseases in individuals and communities.

There are some opportunities for teaching the topic. These include:

- student teachers have prior knowledge for the topic.
- availability of resources for teaching the topic.

However, the following challenges must be addressed when teaching the topic:

- dietary diversity is mostly taken to refer to variety of foods consumed and not crop diversity.
- understanding the link between farm diversity and dietary diversity may be difficult for some students.

#### Task 1

# Explaining the importance of dietary diversification in the home

Dietary diversification ensures that the diet provides a variety of nutrients needed in the diet. This activity will enable you explore various reasons why dietary diversity is important.

### **Activity**

- 1 Brainstorm the importance of dietary diversification using walkaround, talk-around.
- 2 Discuss the importance of dietary diversification using pens in the middle.
- 3 Report the findings to the class.
- 4 Consolidate the activity.

# Task 2 Exploring ways of promoting dietary diversification in the home

There are several ways to promote dietary diversification. As such, people are being encouraged to diversify crops they are growing and foods they eat. This activity will enable you to explore ways of promoting dietary diversification in the home.

### Activity

- 1 Brainstorm ways of promoting dietary diversification in the home.
- 2 Discuss ways of promoting dietary diversification in the home.
- 3 Report your findings to the class for discussion.
- 4 Consolidate the activity.

#### Task 3

# Planning meals to demonstrate dietary diversification

Proper meal planning to demonstrate dietary diversification is important. The activity that follows will help you to plan nutritious balanced meals to demonstrate dietary diversification.

### Activity

- 1 Brainstorm dietary requirements for various groups.
- 2 Discuss dietary requirements for various groups.
- 3 Report your findings to the class for discussion.
- 4 Demonstrate planning meals for various groups to demonstrate dietary diversification.
- 5 Practise planning meals for various groups to demonstrate dietary diversification.
- 6 Consolidate the activity.

#### Task 4

# Demonstrating different strategies on the teaching of the topic

Various methods of teaching may be used in the teaching and learning of dietary diversification. Student teachers are encouraged to choose strategies that are learner-centered and encourage active learning.

### Activity

1 Suggest effective teaching, learning and assessment strategies for teaching the topic.

- 2 Suggesting teaching, learning and assessment resources that can be used on the topic.
- 3 Prepare a lesson plan on the topic.
- 4 Micro-teach a lesson on the topic.
- 5 Provide feedback to individual students on the lesson taught.

#### Task 5

# Assessing student teachers' performance on the topic

It is important to assess student teachers on the topic to reflect and evaluate the knowledge and skills gained.

### Activity 5

- 1 Analyse various ways of assessing student teachers' performance on the topic.
- 2 Evaluate student teachers' lessons.
- 3 Give feedback to individual students' teachers on the lessons taught.
- 4 Develop action points to be taken in order to improve on lesson delivery.

#### Tips

- Prepare a lesson plan in advance.
- You will need the Malawi six food group chart.
- Remember the nutritional requirement of different people within the household.
- Activities must include learners with speal educational needs.

### **Summary**

This topic has looked at:

- importance of dietary diversification in the home.
- ways of promoting dietary diversification in the home.
- planning meals to demonstrate dietary diversification.
- strategies on how to teach and assess learners on the topic.

#### Reflection and assessment

- 1 Suggest ways of promoting dietary diversification in the home
- 2 Discuss dietary requirements for various groups

## Glossary

Diet different types of food

eaten over a period of set

time

Diverse variety

# Teaching of water, sanitation and hygiene

Time 1 hour Term 2

#### Introduction

Water is essential for any living organism to sustain its life. Access to safe drinking water, good sanitation and proper hygienic practices are required for a healthy living. It is important for student teachers and primary school learners to have the right knowledge, skills and attitudes about water, sanitation and hygiene to enhance the health life of families and communities.

#### Success criteria

By the end of this topic, you must be able to:

- describe the relationship among water, sanitation and hygiene.
- explain ways of making water safe.
- use different strategies on the teaching of the topic.
- assess student teachers' performance on .

#### **Background information**

Access to an improved drinking water source can be fully appreciated when there is good sanitation and hygienic practices. Poor waste management affects access to clean and safe water. The benefits of access to improved drinking water sources can be fully realised when there is improved

sanitation and good hygiene. Ware, sanitation and hygiene (WASH) have a wider social economic importance in our communities. These aspects are related to each other in the sense that safe and clean water is vital for good sanitation and proper hygiene.

There are several ways of making water safe. These include:

- boiling
- use of chlorine
- use of iodine solution
- use of water filter
- ultra-violet light

It is also important to practice good hygienic and sanitation practices such as washing hands before eating and proper use of latrines.

There are some opportunities in the teaching of the topic. These are:

- the concept will be easily taught because people interact with water everyday.
- student teachers have prior knowledge on the topic.

However, the following challenges need to be addressed when teaching the topic:

- the topic may be taken for granted because people deal with water everyday.
- misconceptions on clean and safe

water.

#### Task 1

# Describing the relationship among water, sanitation and hygiene

Water sanitation and hygiene are related. The activity that follows will help you appreciate the relationship among the three.

### Activity

- 1 Discuss the meanings of the terms 'sanitation' and 'hygiene' using think-pair-share
- 2 Discuss guidelines for sanitation and hygiene in the home
- 3 Report your findings to the class for discussion
- 4 Consolidate the activity

### Task 2

# Explaining ways of making water safe

It is appropriate for student teachers and primary school learners to realise that clean water is not always safe water. The activity that follows will describe different ways of making water safe.

### Activity

- 1 Brainstorm the difference between 'safe' and 'clean' water
- 2 Discuss the difference between safe and clean water.
- 3 Discuss ways of making drinking water safe.
- 4 Demonstrates ways of making drinking water safe

- 5 Practise ways of making drinking water safe.
- 6 Consolidate the activity.

#### Task 3

## Demonstrate different strategies for the teaching and assessing of the topic

Various strategies and resources are used for teaching. Student teachers should choose appropriate methods for the topics.

### **Activity**

- 1 Discuss effective teaching, learning and assessment methods for the topic.
- 2 Discuss effective teaching, learning and assessment resources for the topic.
- 3 Prepare a lesson plan on the topic.
- 4 Micro-teach the lesson on the topic.
- 5 Carry out a feedback session on the topic.

#### Tip

 Use appropriate teaching, learning and assessment strategies and resources.

#### Task 4

# Assessing student teachers' performance on the topic

Student teachers' performance on the topic needs to be assessed in order for them to improve on their lesson presentation.

### Activity

- 1 Analyse various ways of assessing student teachers' performance on the topic.
- 2 Reflect on your assessment experiences on the topic.
- 3 Give feedback to peers on the lesson taught.

## **Summary**

This topic has looked at:

- relationship among water, sanitation and hygiene
- ways of making water safe
- strategies on how to teach and assess learners on the topic

#### Reflection and assessment

- 1 Discuss the relationship among water, sanitation and hygiene.
- 2 Suggest ways of making water safe.

### Glossary

Sanitation the process maintaining

cleanliness and dealing

with sewage.

Hygiene the things that you do to

keep yourself and surrounding clean.

# Teaching of fruit and vegetable garden

Time 1 hour

Term 2

#### Introduction

School gardens offer hands on experience to student teachers and primary school learners to develop practical skills on gardening. When these skills are applied in the home it will ensure that families have constant supply of fruits and vegetables in their diet and have some for sale to generate income. It is important for you and primary school learners to acquire knowledge, skills and attitudes on this topic. This will improve the nutritional as well as economic status of families and communities.

#### Success criteria

By the end of this topic, you must be able to:

- analyse nutritional value of fruits and vegetables grown in the school and home.
- establish fruit and vegetable garden in the school and home.
- demonstrate different strategies on the teaching of fruit and vegetable garden.
- assess student teachers' performance on the teaching of fruit and vegetable garden.

#### **Background information**

Establishing a fruit and vegetable garden in the school and home is of

great importance because fruits and vegetables provide vitamins, minerals and dietary fibers in the body.

### Importance of fruits and vegetables

Fruits and vegetables are very important because:

- they enhance the body capacity to fight diseases.
- they are good source of fibre which prevents constipation, gall stone and cancer of the colon.
- some fruits and vegetables have some medicinal values.
- they generate income for families and communities.

To establish a fruit and vegetable garden, there is need to follow good field management practices. Refer to sourcebook on school gardens for teacher training colleges and primary schools for more information.

Opportunities for teaching the topic are:

- students have prior knowledge on the topic.
- availability of resources for teaching the topic.

However, the topic has challenges which must be addressed when teaching the topic. One of such challenges is space and security in most colleges and primary schools.

#### Task 1

# Analysing nutritional value of fruits and vegetables that can be grown in the school and home

There are many varieties of fruits and vegetables that can be grown in the school and home. The activity that follows will help you to appreciate the fruits and vegetables grown in the home.

### Activity

- 1 Brainstorm different fruits and vegetables that are grown in the school and home.
- 2 Discuss the nutritional value of fruits and vegetables grown in the school and home.
- 3 Report your findings to the class for discussion.
- 4 Consolidate the activity.

#### Task 2

# Establishing a fruit and vegetable gardens in the school and home

It is important to apply knowledge and skills of field management practices when establishing fruit and vegetable gardens. This activity will help you understand procedures for establishing fruits and vegetables in the school and home.

### Activity

- 1 Brainstorm field management practices for growing fruits and vegetables
- 2 Carry out a research on field management practices for growing fruits and vegetables.

- Present your findings to the class for discussion
- 4 Consolidate the activity
- 5 Establish a fruit and vegetable garden in the school

#### Task 3

# Demonstrating different strategies on the teaching of the topic

Various methods of teaching may be used in the teaching and learning of fruits and vegetable gardens. Student teachers are encouraged to choose strategies that are learner centered and encourage active learning.

#### Activity

- Suggest effective teaching, learning and assessment strategies for teaching the topic.
- 2 Suggest teaching and learning and assessment resources that can be used on the topic.
- 3 Prepare a lesson plan on the topic.
- 4 Micro-teach a lesson on the topic.

#### Task 4

# Assessing student teachers' performance on the topic

Assessing student teachers' performance is important because it will help them to improve on the skills and knowledge acquired.

#### Activity

- 1 Analyse various ways of assessing student teachers' performance on the topic.
- 2 Evaluate student teachers' lessons.

3 Give feedback to individual student teachers on the lesson taught.

Tips for activities

- Prepare a lesson plan in advance.
- Use appropriate teaching, learning and assessment resources and methodologies.
- Divide a large class into smaller groups for easy supervision and observation.
- Use time outside the lesson to cover time consuming activities

• strategies on how to teach and assess learners on the topic

#### Reflection and assessment

- 1 Discuss the nutritional value of fruits and vegetables.
- 2 Discuss field management practices applied for growing fruits and vegetables.

# Glossary

School garden

an area of land within the school grounds or nearby.

#### Summary

This topic has looked at:

- nutritional value of fruits and vegetables grown at home.
- establishing a fruit and vegetable garden in the school.

# Teaching of entrepreneurship in the home

Time 1 hour

Term 2

#### Introduction

Successful entrepreneurship involves acquisition of relevant knowledge, skills and attitudes on how to run a business and managing your finances. It is important for you and primary school learners to understand entrepreneurship in relation to financial management. This will help you to properly manage your small scale businesses and financial resources thereby contributing effectively to the economy of the country.

#### Success criteria

By the end of this topic, you must be able to:

- analyse skills that relate to entrepreneurship in a small scale business.
- develop a simple business plan for a small scale business enterprise.
- use different strategies on the teaching of the topic.
- assess student teachers performance on the topic.

#### **Background information**

Entrepreneurship is the process of designing, launching, and running a new business. It involves the process of identifying opportunities and the development of new ventures. It has always been associated with small scale business management. Both small and large scale businesses require entrepreneurship skills such as skills are literacy, numeracy, budgeting, negotiation, communication and merchandising.

Financial literacy is the set of skills and knowledge that allows individuals to make informed and effective decisions on financial resources. It includes the knowledge of making appropriate decision about personal finances such as savings, investments and insurance.

When a family wants to set up a business, it is important to know the steps for doing so. One of the steps is writing of a business plan. A business plan is an essential document that shows the road map for business success. There are various steps to be followed when developing a business plan. These are:

- creating an executive summary.
- creating a vision.
- carrying out a market analysis.
- finding out the best organization and management structure.
- coming up with the business product or service line.
- coming up with a market strategy.

 identifying ways of financing the business.

There are some opportunities in teaching the topic. These are:

- student teachers and primary school learners have prior knowledge on the topic.
- availability of resources for teaching the topic.

However, there are also challenges to be addressed when teaching the topic. For example entrepreneurship is a new concept which will need resource persons for it to be delivered effectively.

#### Task 1

# Analysing skills that relate to entrepreneurship in a small scale business

Entrepreneurship skills are important when setting up a small scale business. This activity will help you understand entrepreneurship skills that are essential in a small scale business.

### Activity

- 1 Barinstorm meaning of terms
  - small scale business
  - entrepreneuship
  - financial literacy
- 2 Discuss meaning of the terms
  - small scale busibess
  - entrepreneuship
  - financial literacy
- 3 Consolidate the activity

- 4 Carry out research on the skills that relate to entrepreneuship in a small scale business
  - 5 Present your findings to the class for discussion
  - 6 Consolidate the activity

#### Task 2

# Developing a simple business plan for a small scale business

The key to a successful business begins with proper planning. This activity will equip you with the necessary knowledge and skills for developing a business plan.

### Activity

- 1 Discuss factors to consider when planning a small scale business.
- 2 Demonstrate how to design a simple business plan.
- 3 Practise designing a simple business plan.
- 4 Discuss various ways of getting financial resources for a small scale business.

#### Tips

- Learners should be informed in advance on what to research on.
- Consiof online sources where possible.

#### Task 3

# Demonstrating different strategies on the teaching of the topic

There are various methods and resources in teaching the topic.
Student teachers must choose

appropriate methods and resources for the topic.

Activity

- 1 Discuss effective teaching, learning and assessment strategies on the topic.
- 2 Discuss effective teaching, learning and assessment resources on the topic.
- 3 Prepare a lesson plan on the topic.
- 4 Micro-teach a lesson on the topic.
- 5 Give feedback on the lesson taught.

#### Task 4

# Assessing student teachers performance on the topic

It is important to assess student teachers performance on the topic. This will help them improve areas they did not do well.

### Activity

- 1 Analyse various ways of assessing student teachers' performance on the lesson taught.
- 2 Reflect and evaluate their experiences on the lesson taught.
- 3 Give feedback to individual student teachers on the lesson taught.

4 Suggest action points to be taken to improve on the lesson taught.

### **Summary**

This topic looked at:

- skills that relate to entrepreneurship in small scale business.
- developing a simple business plan for a small scale business.
- strategies on how to teach and assess learners on the topic.

#### Reflection and assessment

- 1 Discuss skills that relate to entrepreneurship in a small scale business.
- 2 Reflect on the important steps for developing a business plan.

### Glossary

Merchandise goods, products,

stock

Negotiate bargain, discuss

**Venture** enterprise, project,

undertaking

# Teaching of design and garment construction

Time 3 hours

Term 2

#### Introduction

Designing is vital in garment construction. When constructing garments, principles and elements of design must be taken into consideration. It is essential that you and primary school learners acquire relevant knowledge, skills and attitudes on principles and elements of design in relation to garment construction. This will help you to construct different types of garments efficiently. This knowledge and skills will also help you teach the topic in primary school effectively.

#### Success criteria

By the end of this topic, you must be able to:

- analyse principles and elements of design in garment construction.
- develop paper patterns.
- construct simple garments and articles such as a skirt or a pair of shorts.
- use different strategies on teaching of the topic.
- assess student teachers' performance on the teaching of the topic.

#### **Background information**

Design is a visual and tangible representation of ideas. When you create and design, you communicate your feelings, values, attitudes and your

life style. The process of designing is the choosing and mixing of various components to create an object such as a garment. Garment construction is the process of making clothes for different purposes. Garment construction is one way of illustrating and showing design.

# Elements and principles of design Elements of design

Elements of design are components used in creating an object or garment. There are six elements of design. These are:

#### Line

It is used to outline contours, connect shapes and divide space between shapes. Different lines have different effects on a design. These lines can be straight, curved, vertical, horizontal, waved wide and narrow.

#### Shape and form

Shape and form refers to the contour or outline of the design.

#### Space

It is the background against which you will see shapes or forms on a design.

#### **Texture**

It is a tangible and visual element of design. Its characteristics include its smoothness, roughness, fluffy and ribbed. Factors that influence texture of a fabric design include fibre content,

12.1 shows the colour wheel

yarn structure, how the fabric was made and finishing.

#### **Pattern**

It is the arrangement of lines, shapes and space in a design. The shapes may be stripes, dots, flowers or animal prints. Patterns have interesting effects on the appearance of a design. Apart from this, patterns emphasise particular features on a design. For example a border pattern on a dress calls attention to your legs and a print collar on a solid colour shirt will make people notice your face.

#### Colour

It is a visual element of design. Colour influences people's moods and attitudes. Colour creates optical illusion that makes objects look larger or smaller than they really are. Colour is an important element in garment construction because it provides realism to the design. There are different types of colours. Primary colours are a basis from which other colours are formed. Secondary colours are colours which are produced by mixing two primary colours in equal amounts. Knowledge of colours and their effects can help one construct



garme
nts
and
article
s of
high
qualit
y.
Figure

### Principles of design

These are rules, guidelines or techniques that regulate the use of elements to create new designs. These include:

### **Proportion**

This is described as the relationship or ratio of one part to another in a design or the whole object. When working with proportion in a design ensure that you use shapes in odd numbers mixed with shapes in even numbers. Another aspect of the principle of proportion is scale. This is the relationship of sizes of one part to another and to the whole regardless to the shapes.

### **Emphasis**

It is the principle of design that causes an object or an area to stand out or become a focal point. When introducing emphasis on a design, you need to think of suitability, simplicity and aesthetics.

#### Balance

It is a feeling of evenly distributed weight. Balance can be obtained by grouping shapes and colours around a centre in a centre in such a way that there are equal attractions on the side of the central axis. There are different types of balance and these are: formal/symmetrical, informal/asymmetrical and radial balance.

### Unity

Unity produces an impression of oneness through the selection and arrangement of various elements of design. The principle of unity has five aspects which are line and shape, size, texture, idea and colour.

### Rhythm

In design rhythm relates to movement. It is an easy connected path along which the eye may travel in any arrangement of different elements of design such as line, shape, pattern and colour. You can create rhythm by repeating lines and shapes, gradation of lines, transition of lines, opposition and radiation.

#### **Developing paper patterns**

When constructing garments, there is need to develop paper patterns before cutting out fabrics.

# Laying and cutting out pattern pieces from fabric

When constructing garments, the laying and cutting out processes are important as they determine both the fit or size and the final outlook of the garment to be constructed. You should therefore attain the right knowledge and skills of laying and cutting out pattern pieces from fabric as a first step in producing well-constructed garments.

#### Paper patterns

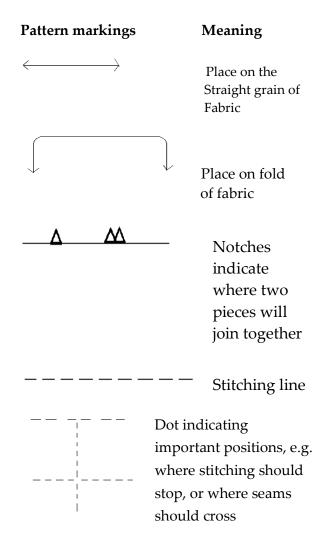
Paper patterns are pieces of paper cut out to the shape of parts of a garment to be made. They can be altered to suit the size of the wearer.

### **Patterns markings**

These are markings with particular information and instructions on:

- the number of pieces to be cut
- the pieces to be joined together
- how to place pattern pieces on the fabric
- where to stitch

The illustrations that follow show pattern markings and their meanings.



Based on this information you should be able to construct simple garments and articles as stipulated in the syllabus. There are some opportunities in the teaching of design and garment construction.

- The knowledge of stitches and seams will help student teachers understand design and garment construction
- Elements and principles of design will deepen student teachers understanding of the concept design and garment construction.

However the following challenges need to be addressed when teaching design and garment construction:

- design and garment construction is a broad topic and needs more time for practice. student teachers need more hours to master the skills.
- students teachers and primary school learners with special needs may have less access to other activities as it will need special equipment which is currently a challenge.

#### Task 1

# Analysing principles and elements of design in garment construction

It is important to have adequate knowledge and skills on the principles and elements of design in order to construct garments efficiently. This activity will help you to analyse the principles and elements of design in relation to garment construction.

### Activity

- 1 Using mix-freeze-pair brainstorm the meanings of the terms:
  - principles of design,
  - elements of design
  - colour wheel
- 2 Discuss the principles and elements of design.

- 3 Discuss the colour wheel in relation to garment construction.
- 4 Report your findings to the class for discussion
- 5 Consolidate the activity.

#### Task 2

### **Developing paper patterns**

There are different procedures to be followed when developing paper patterns, cutting out and transferring pattern makings from the paper pattern on to the fabrics. This activity will assist you gain knowledge and skills in developing paper patterns and constructing garments.

#### Activity

- 1 Discuss pattern markings on paper patterns.
- 2 Display paper patterns with pattern markings
- 3 Demonstrate how to cut paper patterns and transfer pattern markings.
- 4 Practise developing paper patterns
- 5 Present your work using gallery walk.
- 6 Consolidates the activity

#### Task 3

### Constructing simple garment articles

Garment construction will require hands on experience to come up with well constructed garments. This activity will enable you master the steps in garment construction.

#### Activity

- 1 Brainstorm garments and articles to be produced as course work.
- 2 Demonstrate cutting and sewing different garments using paper patterns.
- 3 Practise cutting and sewing different garments using paper patterns.
- 4 Evaluate the garments produced.

#### Task 4

## Demonstrating different strategies on the teaching of design and garment construction

There are many strategies and resources that are used to teach the topic. In this activity, you will discuss strategies and resources that are effective in the teaching of the topic.

### Activity

- 1 Suggest effective teaching, learning and assessment methods for the topic.
- 2 Suggest different teaching, learning and assessment resources that can be used on the topic.
- 3 Prepare a lesson plan on the topic.
- 4 Micro-teach a lesson on the topic.
- 5 Carry out a feedback session on the topic.

#### Task 5

# Assessing student teachers' performance on the topic

Assessing student teachers' performance on the lessons they have taught will help to provide them with constructive feedback to improve lesson delivery. This activity will help you reflect and evaluate your lessons.

#### Activity

- 1 Analyse various ways of assessing student teachers' performance on the lesson taught.
- 2 Reflect and evaluate their experiences on the lesson taught.
- 3 Give feedback to individual student teachers on the lesson taught.
- 4 Suggest action points to be taken to improve on the lesson taught.

### Tips for for the activities

- Prepare a lesson plan in advance
- The activities must include learners with special educational needs.
- Divide large classes into smaller groups for easy supervision and observation.
- Use time outside the lesson to carter for time consuming activities.

#### **Summary**

This topic has looked at:

- principles and elements of design in garment construction.
- developing paper patterns.
- constructing simple garments and articles
- strategies on how to teach and assess learners on the topic.

#### Refection and assessment

- 1 examine principles and elements of design in garment construction.
- 2 develop paper patterns and markings.

3 Suggest teaching. Learning and assessment methods for teaching this topic

**Principle** standard

Pattern sample, outline,

model

Glossary

**Design** plan, sketch, outline

**Element** part, aspect

# **Teaching of laundry**

Time 2 hours

Term 2

#### Introduction

Laundry processes are often done in a laundry room or utility room.

Sometimes it can be done outside the house. It is important for student teachers and primary school learners to have right knowledge, skills and attitudes on laundry in order to enhance good grooming.

#### Success criteria

By the end of this topic, you must be able to:

- describe laundry materials and equipment.
- launder different types of clothes.
- use different strategies on the topic.
- assess student teachers on the topic.

#### **Background information**

Laundry is the washing of clothing and linen. It involves the processes of sorting, mending, soaking, stain removal, washing, ironing, aeration and storage. There are different types of laundry materials and equipment. The most essential materials used in laundry are water and soap also known as detergent. Other materials include fabric softener, fabric whitener, and starch. Laundry equipment range from simple to sophisticated

equipment. Some of the equipment includes iron, ironing board, buckets or basins, washing baskets, pegs, hangers, clothes drier, drying lines, brushes and washing machine.

Some of the opportunities for teaching the topic are:

- student teachers have prior knowledge on the topic.
- availability of resources for teaching the topic.

The following challenges must be addressed when teaching the topic:

- student teachers and primary school learners with special educational needs may have less access to other activities.
- some chemicals that can be used during laundry need to be handled with care.

#### Task 1

# Describing laundry materials and equipment

There are different types of laundry equipment and materials. This activity will assist you to gain knowledge and skills in the use laundry materials and equipment.

#### Activity

- 1 Identify laundry materials and equipment used in laundry
- 2 Discuss different laundry materials

- and equipment
- 3 Report your findings to the class for discussion.
- 4 Consolidate the activity.

#### Task 2

### Laundering different types of clothes

Care must be taken when laundering different types of clothes. This activity will help you handle different fabrics properly during laundry.

#### Activity

- Brainstorm ways of laundering different types of clothes
- 2 Investigate effects of laundry materials on different fabrics.
- **3** Report your findings to the class for discussion.
- 4 Demonstrate laundering simple garments and articles.
- 5 Practise laundering different types of clothes.
- **6** Consolidate the activity.

#### Task 3

# Demonstrating different strategies on the teaching of the topic

There are various methods used in the teaching and learning of the topic. Student teachers are encouraged to use strategies that are learner centered and encourage active learning.

#### Activity

- 1 Suggest effective teaching, learning and assessment strategies for teaching the topic.
- 2 Suggest teaching, learning and assessment resources to be used

- on the topic.
- 3 Prepare a lesson plan on the topic.
- 4 Micro-teach a lesson on the topic.
- 5 Conduct feedback session for the lesson taught.

#### Task 4

# Assessing student teachers' performance on the topic

It is important to assess student teachers' performance on the topic. This will give them feedback and help to improve on how best they can teach the topic.

### Activity

- 1 Analyse various ways of assessing student teachers' performance on the topic.
- 2 Evaluate student teachers lessons.
- 3 Give feedback to individual students on the lessons taught.

#### Tips for the activities

- Prepare lesson plan in advance
- Demonstrate procedures before assigning tasks
- Use appropriate teaching, learning and assessment resources a

### Summary

This topic has looked at:

- describing laundry materials and equipment.
- laundering different types of clothes.
- strategies on how to teach and assess learners in the topic.

#### Assessment and reflection

1 Discuss laundry materials and equipment.

2 Describe ways of laundering different types of clothes.

Glossary

Launder clean, wash

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