



GPT 726: Subject

Methods: Agriculture

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Programme Post Graduate Diploma in Education
:

MODULE ZERO

3.18: PGT: 726: Subject Methods: Agriculture

Credit : 3

Contact hours: 45

Prerequisite: All first semester courses

Welcome Message

Welcome to **PGT 726: Subject Methods: Agriculture**, a transformative postgraduate Diploma in Education (PGDE) course tailored to enhance your teaching expertise in agriculture subject. This course emphasizes developing advanced competencies in teaching methods of agriculture, preparation for teaching, sourcing of appropriate teaching resources, scheming, lesson planning, and effective instructional delivery. By engaging in practical, reflective practice and collaborative activities, you will refine your planning, pedagogical techniques and master strategies to promote active learner engagement. Designed to bridge theory and practice, this course empowers you to become an innovative and impactful educator. We are excited to support your journey towards professional growth and excellence in teaching!

COURSE PURPOSE

To enable learners to understand and acquaint themselves with the teaching of Agriculture in Secondary schools in Kenya.

EXPECTED LEARNING OUTCOMES

By the end of this course, the learner should be able to:

1. Describe fundamental agricultural concepts
2. Examine appropriate teaching methods to engage students in agricultural education
3. Develop critical thinking and problem-solving strategies to address agricultural challenges and innovate in teaching practices.

4. Apply practical skills in teaching plant cultivation, animal husbandry, soil analysis, agricultural machinery and technology

COURSE CONTENT

History of Agriculture as a subject in Kenya; the origin of Agriculture teaching in Kenya; subject designs in schools, teaching and justification of teaching; Understanding Agriculture syllabus/ Subject designs in secondary schools; Facilities and resources for teaching Agriculture, Open Educational Resources, electronic materials and print. Instructional methods: technology integration; Planning for teaching: Agriculture objectives: cognitive and affective objectives; Schemes of work/Training plan; Lesson plans/Session plan. Conducting Training: Lesson presentation skills and micro-teaching; Gender and inclusive pedagogy in Agricultural education; Agriculture assessment. Pertinent and contemporary issues in the teaching of Agriculture, innovations in Agriculture (e.g vertical farming, precision agriculture, organic farming methods, hydroponics vs. soil-based growth) food security in urban areas, climate change, Gender and inclusion; Health and health education; Youth in agriculture, rural urbanization, youth programmes in agriculture.

Teaching and Learning Methods

Learner engagement will be done 99% asynchronous and learners support will be synchronous.

Instructional Materials and /Equipment

Textbooks and academic journals; case studies, online learning platforms and databases; Equipment: Computers and internet access; video conferencing Tools.

Course Assessment

Type	Weighting (%)
Continuous Assessment Test and Tasks	50%
Examination	50%
Total	100%

LIST MODULES

MODULE 1: NATURE AND SCOPE OF AGRICULTURE

MODULE 2: THE ORIGIN OF THE TEACHING OF AGRICULTURE IN KENYAS' CURRICULUM

MODULE 3: RESPONSIBILITIES OF AN TEACHER OF AGRICULTURE

MODULE 4: FACILITIES AND RESOURCES FOR TEACHING AGRICULTURE

MODULE 5: METHODS OF TEACHING AGRICULTURE	
MODULE 6: TRANSFORMATIVE PEDAGOGY IN AGRICULTURE	
MODULE 7: PLANNING FOR TEACHING	
MODULE 8: CONDUCTING A MICRO-LESSON	
MODULE 9: GENDER AND INCLUSIVE PEDAGOGY IN AGRICULTURAL TRAINING	
MODULE 10: PERTINENT AND CONTEMPORARY ISSUES IN AGRICULTURAL EDUCATION	

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MODULE 1: NATURE AND SCOPE OF AGRICULTURE

INSTRUCTIONAL HOURS: 4

1.1 MODULE OVERVIEW

In this module, you will examine the history of agricultural education in Kenya exploring agriculture's diverse branches, their interconnections, and significance. It emphasizes teaching methods for branches of agriculture, developing sustainable farming practices, and evaluating agriculture's contribution to the Gross Domestic Product (GDP). You will gain knowledge, skills, and evaluative capabilities to understand agriculture's role in a sustainable future. This prepares a trainer in realizing the breadth and scope of agriculture as they begin the journey of teaching.

1.2 EXPECTED LEARNING OUTCOMES

At the end of this module, you will be able to:

ELO 1. Explain different branches of agriculture.

ELO2. Examine the importance of teaching the branches of agriculture.

ELO3. Develop actionable plans for sustainable farming.

ELO4. Evaluate agriculture's contributions to GDP



LEARNING ACTIVITIES/TASK LIST



1. Watch a YouTube Video Branches of Agriculture
2. Quiz on branches of agriculture
3. Reading material on importance of branches of agriculture
4. Quiz on importance of branches of agriculture
5. Watch a YouTube Video 2 on sustainable agriculture
6. Assignment 1 on sustainable agriculture
7. Reading Material 2 contribution of Agriculture to GDP
8. Quiz on contribution of Agriculture to GDP

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

1.3 Branches of Agriculture



Activity 1

Instructions:

Watch the you tube video on the branches of agriculture by Clicking on the link provided,

[https://www.youtube.com/watch?v=72FG2x6M11A \)](https://www.youtube.com/watch?v=72FG2x6M11A)

Branches of Agriculture

Learning Activities 2



QUIZ/ QUESTIONS

Provide for the posting of feedback in the journal

From the video clip watched

- a) In 100 words, explain what each branch of agriculture entails. Post your answers on the Journal forum. Ensure that you comment on two other posts from other learners.

1.4 IMPORTANCE OF THE BRANCHES OF AGRICULTURE

Learning Activity 3



READING MATERIAL

Read the content on importance of the branches of agriculture by clicking on the word icon below in readiness to the next activity:



Importance of the
branches of Agricultur

Learning Activity 4



QUIZ

Instructions

Informed by the reading activity on the importance of branches of agriculture attempt the binary quiz herein:

Quiz

1. Agriculture is divided into various branches to enhance specialization and improve efficiency in production. (True/False)

- True
- 2. Teaching the branches of agriculture to secondary school learners is unnecessary because it has no impact on their understanding of food production systems. (True/False)
 - False
- 3. One reason for teaching the branches of agriculture is to help learners understand the interdependence of agricultural sectors such as crop production, animal husbandry, and forestry. (True/False)
 - True
- 4. The study of agricultural branches does not contribute to learners' ability to address real-world challenges like food security and sustainable farming. (True/False)
 - False
- 5. Introducing the branches of agriculture in education inspires learners to explore diverse career opportunities in the agricultural sector. (True/False)
 - True

1.5 SUSTAINABLE AGRICULTURAL PRACTICES

Activity 5



Instructions

Click on the hyper link above and watch the video clip

<https://www.youtube.com/watch?v=Xxzvj2f7mkU>



Activity 6: Assignment 1

Instructions

Based on the video watched, develop an action plan on sustainable agriculture context around your home locale.

1.6 Agriculture's Contribution to Kenya's Gross domestic Product

Activity 7: Reading Material 2

Instructions

Read the summary on agriculture's contribution to Kenya's GDP and answer the question below:

Agriculture is a cornerstone of Kenya's economy, contributing approximately 20-25% to the country's GDP directly and supporting over 70% of the population through employment

and livelihoods. It is the primary source of food, raw materials for agro-industries, and export earnings, with key exports including tea, coffee, and horticultural products. Furthermore, agriculture drives rural development, reduces poverty, and fosters economic stability. However, challenges like climate change, land degradation, and limited access to modern technologies highlight the need for sustainable practices and innovation to maximize its potential in GDP growth.

Activity 8 Quiz

Instructions: Provide the Key to Quiz



END OF MODULE ASSESSMENT 1.2

Instructions: **Attempt all the questions which will be scored for you.**



TAKE HOME MESSAGE/SELF REFLECTION

As an agriculture trainer, appreciate the need for broad knowledge, sustainable practices, and entrepreneurial integration to empower learners and promote agriculture's role in driving economic growth and sustainability.



REFERENCE LIST AND FURTHER READING

1. FAO. (2022). The State of Food and Agriculture. FAO Website
2. World Bank. (2021). Agriculture for Development. World Bank
3. Abdul Kadir, M. K. (2014). "Development of Young Agropreneur in Malaysia." FFTC-RDA International Seminar on Enhanced Entry of Young Generation into Farming., Jeonju, Korea.

WHAT'S NEXT?

- Congratulations for successfully completing module one. You are going to be introduced to module two which takes you through the origin of agricultural education in Kenyan schools.

MODULE 2: THE ORIGIN OF THE TEACHING OF AGRICULTURE IN KENYAS' CURRICULUM

INSTRUCTIONAL HOURS: 4,

2.1 MODULE OVERVIEW

Welcome to module two. In this module, you will learn about a detailed review of the evolution of agriculture subject during the precolonial period, its mainstreaming to the formal education during colonial and post-colonial times, the policies that guided this evaluation and the current trends in of agriculture subject in schools. This history enriches your understanding as a trainer in appreciating the milestones the subject as achieved over the years. It also poses a challenge to the trainer to visualize the future of teaching agriculture in schools.

2.2 LEARNING OUTCOMES

Learning Outcomes

At the end of this module, you will be able to:

- ELO1. Summarize the historical development of agricultural education in Kenya.
- ELO2. Examine how the different educational the policies affected the teaching of agriculture subject in secondary schools.
- ELO3. Develop possible objectives of teaching agriculture in Kenya today.
- ELO4. Compare the past and the current agricultural curricula in schools

LEARNING ACTIVITIES/TASK LIST

1. Reading material on historical Development of Agricultural Education in Kenya.
2.  Quiz on historical Development of Agricultural Education.
3. You tube video on Commissions shaping agricultural education.
4. Quiz on Commissions shaping agricultural education
5. Observing a photograph on learners undertaking a project.
6. Quiz 3 on objectives of undertaking agriculture projects.
7. Reading Material on summary of objectives and challenges faced when teaching agriculture.
8. Reading material on past and current agriculture curricular.
9. Quiz on comparison between the past and current curriculum.
10. Online discussion on the strengths of either of the curriculum.

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

2.3 HISTORICAL DEVELOPMENT OF AGRICULTURAL EDUCATION IN KENYA



LEARNING ACTIVITY 1 – Reading Material

Upload the Material in Slide format

Instructions:

Click the Icon below and Read the slides on introduction of agriculture to secondary schools in readiness to respond to the quiz below.



LEARNING ACTIVITY 2: QUIZ



Matching items on -
INTRODUCTION OF A



2.4 COMMISSIONS INFORMING THE TEACHING OF AGRICULTURE SUBJECT IN SECONDARY SCHOOLS

LEARNING ACTIVITY 3

Instructions

Click on the link below and watch the video clip on commissions informing teaching of Agriculture then answer the questions that follow.



VIDEO 3: [HTTPS://WWW.YOUTUBE.COM/WATCH?V=MXWM9MRI63O](https://www.youtube.com/watch?v=MXWM9MRI63O)

Source: Kenya Broadcasting Television, 2013
<https://www.youtube.com/watch?v=MXwm9mri63o>

ACTIVITY 4: QUIZ/ QUESTIONS

Instructions:

Guided by the Video watch and documents read in Learning Activity 1, respond to the following questions:





MCQs on
Commissions shaping

2.5 OBJECTIVES OF TEACHING AGRICULTURE IN KENYA

Learning Activity 5 - Photograph

Critically observe the Photograph below:



Photo borrowed from Farming first (2024) website

<https://farmingfirst.org/2013/08/engaging-youth-in-agriculture-the-key-to-a-food-secure-future>

Learning activity 6: Quiz 3



Informed by the photograph above, develop three objectives of undertaking the agriculture projects. Post your responses on the discussion forum.

Learning Activity 7: Reading 2



Click on the word Icon below and read the summary on the objectives of teaching agriculture in schools and the challenges teachers face while teaching agriculture



Objectives -
challenges of Teaching

2.6 PAST AND THE CURRENT AGRICULTURAL CURRICULA IN SCHOOLS

Activity 8 : Reading material 3

Attached in the 8-4-4 agriculture syllabus and the grade Seven CBC subject design. Read through the two documents picking out points of departure.



KICD-
AGRICULTURE-SYLLAE



GRADE 7 AGRICULTURE
NUTRITION.pdf

Activity 9: Quiz4

Using a table format, compare the differences depicted by both

Activity 10



ONLINE DISCUSSION

Using the online discussion forum, discuss two strengths presented by any of the curricula and respond at least to two of your colleagues' posts.



END OF MODULE ASSESSMENT 2.2

Instructions:

Attempt all the items summarizing the entire module.



End of module two
exercise.docx



TAKE HOME MESSAGE/SELF REFLECTION

The history of agricultural education in schools is so rich and informative to all trainers of agriculture. This history prepares a background for the teacher to understand the journey that the subject has gone through, built on it while teaching as they identify opportunities for making agriculture learning more relevant.



REFERENCE LIST AND FURTHER READING

1. Corry, J. J. (1975). *The History of Agricultural Education in Kenya 1922-1954*. University of Nairobi.

2. FAO. (2021). Integrating agricultural education into secondary school curricula. FAO Publications.
3. Kenya Institute of Curriculum Development. (2017). The basic education curriculum. Framework. Nairobi: Kenya Literature Bureau
4. Poulton, C., and K. Kanyinga. 2013. "The Politics of Revitalising Agriculture in Kenya." Working Paper 59. Brighton: Future Agricultures, University of Sussex.

https://assets.publishing.service.gov.uk/media/57a08a2440f0b6497400044a/FAC_Working_Paper_059.pdf

WHAT'S NEXT?

Congratulations For Successfully Completing Module Two. The Next Module is on the Responsibilities of an Agriculture Teacher, Feel Welcome to Continue Learning

MODULE 3: RESPONSIBILITIES OF AN TEACHER OF AGRICULTURE

INSTRUCTIONAL HOURS: 4,

3.1 MODULE OVERVIEW

Welcome to this module. Through this module, you will learn about the responsibilities of an agriculture teacher up and above the teaching itself, categories of the teacher responsibilities, challenges faced when teaching agriculture and the qualities of a competence 21st century trainer. a detailed review of the secondary school agriculture syllabus, including objectives, topics, and evaluation methods.

3.2 LEARNING OUTCOMES

At the end of this module, you will be able to:

- ELO1. Discuss the key responsibilities of an agriculture teacher.
- ELO2. Categorize the responsibilities of an agriculture teacher.
- ELO4. Design a model of a competent 21st century teacher of agriculture
- ELO3. Critique the challenges faced by a teacher of agriculture

LEARNING ACTIVITIES/TASK LIST



1. online discussion on responsibilities of a teacher by observation
2. Reading Material on responsibilities of an agriculture teacher
3. You tube video on challenges facing CBC implementation
4. Quiz on the challenges that an agriculture teacher faces.
5. Reading material on challenges facing the teaching of agriculture
6. Case study on the qualities of a 21st teacher of agriculture and a quiz
7. Reading Material on qualities of a good teacher of agriculture.

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

3.3 KEY RESPONSIBILITIES OF AN AGRICULTURE TEACHERS

Provide for an online discussion forum

Learning Activity 1



Instructions:

From your experience as a student, discuss four responsibilities of an agriculture teacher and comment on two other posts

3.4: CATEGORIZE THE RESPONSIBILITIES OF AN AGRICULTURE TEACHER

Learning Activity 2



Instructions:

Read the content below on the responsibilities of a teacher of agriculture in a school set up.



Roles and
Responsibilities of an

3.5 THE CHALLENGES FACED BY A TEACHER OF AGRICULTURE

Learning Activity 3



Instructions:

Click on the video link below on the challenges facing CBC implementation by NTV Kenya and watch it in readiness to the quiz that follows.

[HTTPS://WWW.YOUTUBE.COM/WATCH?V=ELGRFI8T3L0](https://www.youtube.com/watch?v=ELGRFI8T3L0)

Source: NTV Kenya, 2018

Learning Activity 4:



Instructions

Critique the challenges facing the implementation of CBC presented in the video clip above and relate them to those that a teacher of agriculture would face in teaching agriculture. Post your answer on the chat and react to two other posts.

Learning Activity 5:



For further reading on Challenges facing the teaching of Agriculture, click on the word icon below and read.



Challenges_in_the_Te
aching_and_Learning_

3.6 QUALITIES OF A COMPETENT 21ST CENTURY TEACHER OF AGRICULTURE

Learning Activity 6



NOTE: The Questions and Answers for the case study are embedded in the word document

Instructions:

Read the case study below on a 21st century teacher and respond to the questions that follow:



Case Study of Beth -
Qualities of a 21st cer

Learning Activity 7



Instructions: Reading further on qualities of a good teacher of Agriculture



Characteristics of an
effective agriculture te



END OF MODULE ASSESSMENT 1.2

Instructions: Attempt the questions here in before proceeding.



End of module 3
Quiz.docx



TAKE HOME MESSAGE/SELF REFLECTION

A teacher of agriculture has to be adequately prepared to undertake their responsibilities in instruction, supervision and administration. As an agriculture teacher you have been exposed to the possible challenges you are likely to meet when teaching agriculture and hence it is critical to think of the possible solutions you can utilize and still be effective. As a teacher in the 21st century, be well equipped with the competencies and values necessary to prepare your trainees for the world of work.



REFERENCE LIST AND FURTHER READING

1. Allen, T., Croom, B., LaRose, S. E., Vaughn, R., & Lee, J. S. (2022). Foundations of Agricultural Education (4th Edition). Purdue University Press. DOI: 10.2307/j.ctv1zjgbr
2. Finch, C. R., & Crunkilton, J. R. (1999). Curriculum Development in Vocational and Technical Education: Planning, Content, and Implementation (5th Edition). Allyn & Bacon.
3. FAO. (2001). Participatory Curriculum Development in Agricultural Education: A Training Guide. Food and Agriculture Organization.

WHAT'S NEXT?

- Prepare now to dive deep into the resources required in the teaching of Agriculture in secondary schools.

MODULE 4: FACILITIES AND RESOURCES FOR TEACHING AGRICULTURE

INSTRUCTIONAL HOURS: 4

4.1 MODULE OVERVIEW

In this module, you will learn about the essential facilities and resources needed for effective teaching of agriculture. It includes strategies for planning, utilizing, and maintaining these resources to enhance practical and theoretical learning.

4.2 Learning Outcomes

At the end of this module, you will be able to:



- ELO1. Discuss essential facilities and resources for teaching agriculture.
- ELO2. Examine agriculture teaching facility layouts and recommend improvements.
- ELO3. develop a plan for integrating resources into lesson delivery.
- ELO4. Propose sustainable practices in managing teaching resources.
- ELO5. Apply digital tools and Open Educational Resources in teaching of Agriculture

LEARNING ACTIVITIES/TASK LIST



1. Reading material on types of facilities and resources for teaching agriculture
2. Quiz on types of facilities and resources for teaching agriculture
3. Reading Material on layout of agricultural facilities.
4. Video to be developed on an identified farm layout
5. Quiz on omissions in farm layouts and possible solutions
6. You tube video on integration of facilities and resources in lesson delivery
7. Quiz on development of a plan for resources and facility utilization in teaching
8. Reading material on sustainable practices in managing teaching facilities and resources
9. Quiz on proposing a plan for use of resources in agricultural production
10. You tube Video on digital tools and OERs used in teaching agriculture.
11. Quiz digital tools and OERs used in teaching agriculture

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

4.3 TYPES OF FACILITIES AND RESOURCES FOR TEACHING AGRICULTURE

ACTIVITY 1:



Instructions:

Read the following introduction on facilities and resources for teaching agriculture.



Types of facilities and resources for Teaching

<https://www.youtube.com/watch?v=YD-ElIdOef-M> Instructional Materials

ACTIVITY 2:



Instructions:

Visit a secondary school around you and document the available resources and facilities for teaching agriculture. Use the format provided here:

S/N	Facilities	Size/Number
	Resources	Number

4.4 LAYOUTS OF AGRICULTURAL FACILITIES

ACTIVITY 3:



Instructions:

Read the following document on layout of agricultural facilities



Layout of Agricultural
Facilities.docx

ACTIVITY 4 – VIDEO TO BE DEVELOPED



Instructions:

Identify a progressive school/farm around your locality. Take a three minutes Video of their farm layout. Upload your Video on journal.

ACTIVITY 5



Instructions:

From the Video that you developed, identify two areas/facilities that were not well laid out and suggest possible changes. Post on the Chat and respond to two other posts.

4.5 INTEGRATION OF FACILITIES AND RESOURCES INTO LESSON DELIVERY

ACTIVITY 6



Instructions:

Click the link below borrowed from CFANS University of Minnesota and watch the video clip. Take note of the different resources/facilities used at each step of teaching.

https://www.youtube.com/watch?v=oewDKpc_bjk

Source: College of Food, Agriculture and Natural Resource Sciences; 2023

ACTIVITY 7

Instructions:

Guided by the video watched, identify one agricultural production value chain that you want to teach your trainees. Develop a plan of the resources and facilities you will utilize at each production phase. Upload your plan on the portfolio.

4.6 SUSTAINABLE PRACTICES IN MANAGING TEACHING RESOURCES

ACTIVITY 8



Instructions:

Click on the icon below and read on the sustainable practices in managing teaching facilities.



Sustainable Practices
in Managing Teaching

ACTIVITY 9



Instructions:

View the image below and Propose a sustainable plan on how the resources involved in the agricultural activities displayed would be utilized sustainably. Post your plan on the learning journal



4.7 DIGITAL TOOLS AND OPEN EDUCATIONAL RESOURCES IN TEACHING OF AGRICULTURE

ACTIVITY 10

You **Instructions:**

Click on the links below and watch the video on types of open educational resources and answer the questions that follow.

<https://youtu.be/cJVqzTgJ0dA>

<https://youtu.be/ElmihZVE0sA>

ACTIVITY 11:

? **Instructions:**

After watching the videos, answer the questions below on digital tools and OERs.



MCQs on s Digital
and OER for teaching



END OF MODULE ASSESSMENT 1.2

Instructions:

Attempt the exercise below:



MCQs - Sustainable
use of resources.docx



TAKE HOME MESSAGE/SELF REFLECTION

1. Why do you need facilities and resources in the teaching and agriculture?
2. In what ways will you promote sustainable use of the resource used in teaching agriculture?
3. Suggest ways of making waste agricultural resources useful for teaching purposes



REFERENCE LIST AND FURTHER READING

1. UNESCO. (2021). Education for Sustainable Development.
2. United Nations Environment Programme (UNEP). (2022). Greening Education Practices.
3. FAO. (2020). Sustainable Management in Agricultural Education.
4. Ministry of Education, Kenya. (2020). Guidelines for Eco-Friendly Resource Use in Schools.

WHAT'S NEXT?

- Upon successfully going through the facilities and resource for teaching agriculture, the next module informs you about the teaching methods to use when teaching agriculture.

MODULE 5: METHODS OF TEACHING AGRICULTURE

INSTRUCTIONAL HOURS: 4, 5 or 6

5.1 MODULE OVERVIEW

In this module, you will learn about the methods of teaching agriculture, their categories, innovative technologies for use while teaching and how to design a teaching model of a given content area.

5.2 LEARNING OUTCOMES

At the end of this module, you will be able to:



1. Explain the terms used under methods of teaching.
2. Summarize the factors to consider when selecting a teaching method.
3. Apply appropriate teaching method (s)
4. Design a suitable instructional material to use in teaching agriculture.

LEARNING ACTIVITIES/TASK LIST



1. Video clip on introduction to method of teaching
2. Quiz on terms used in teaching methods
3. You tube video on factors to consider when selecting a method of teaching
4. Quiz on factors to consider when selecting a method of teaching
5. Reading Material instructional methods in agriculture
6. Quiz on instructional methods in agriculture
7. You tube video on instructional materials
8. Quiz on selection of teaching method for specific content.

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

5.3 terms used under methods of teaching

Activity 1

You

Instructions:

Click on the link below borrowed from UNIV-English website and watch the video on terms used in methods of teaching in readiness to answer the questions that follow:

<https://www.youtube.com/watch?v=TbRThpeFKfs>

Source: UNIV-English platform

ACTIVITY 2:



Instructions: Answer the questions herein



MCQs on methods of
teaching agric.--2.doc

5.4 FACTORS to consider when selecting methods of teaching Agriculture

ACTIVITY 3

You
Tube

Instructions:

Watch the video clip and note the factors discussed when selecting a teaching method.
After watching the videos, answer the questions that follow

<https://www.youtube.com/watch?v=to51R7QJOrM>

ACTIVITY 4



Instructions:

Respond to the questions herein guided by the video watched in activity 3.



MCQs on Methods
of teaching agriculture

5.5 METHODS OF TEACHING AGRICULTURE

ACTIVITY 5



methods of teaching
agric..docx

Instructions:

Click on the word Icon above and read on methods of teaching agriculture.

ACTIVITY 6



Instructions: Respond to quiz here in on methods of teaching agriculture



MCQs on Methods
of teaching agriculture

5.6 instructional materials to use in Teaching agriculture

ACTIVITY 7



<https://youtu.be/YD-EldOef-M>

Instructions:

Click the link above and watch. Then answer the questions that follow on instructional materials:

ACTIVITY 8



Instructions:

Guided by the video you watched above answer the following questions:

1. Identify a strand in grade Eight agriculture and Nutrition design and choose appropriate methods you would use to teach each sub-strand.
2. Justify the choice of the method.

Note: Use a table form with three columns for sub-strand; method of teaching; Justification



END OF MODULE ASSESSMENT 1.2

Which teaching method have you found interesting to you and why? Share your opinion on the discussion forum



TAKE HOME MESSAGE/SELF REFLECTION

What makes the teaching of agriculture unique from other subjects?
Express your opinion on the blog.



REFERENCE LIST AND FURTHER READING

1. Ayot, H. O., & Patel, M. M. (1992). Instructional Methods: General Methods. Nairobi: ERP.
2. Kenya Institute of Curriculum Development. (2017). The basic education curriculum. Framework. Nairobi: Kenya Literature Bureau
3. Serem, D. J. (2011). Attitude formation in teaching and learning of Home Science in secondary schools in Kenya. International Journal of Current Research, 3(8), 187- 195.

WHAT'S NEXT?

- The next module introduces you to transformative pedagogy as the country transits to CBET, these pedagogical practices are meant to prepare you as a facilitator of the learning process promoting learner centeredness.

MODULE 6: TRANSFORMATIVE PEDAGOGY IN AGRICULTURE

INSTRUCTIONAL HOURS: 6

6.1 MODULE OVERVIEW

In this module, you will learn about the methods of teaching agriculture, their categories, innovative technologies for use while teaching and how to design a teaching model of a given content area.

6.2 LEARNING OUTCOMES

At the end of this module, you will be able to:



1. Distinguish between teaching and facilitation
2. Describe the theories underpinning transformative pedagogy
3. Design a sample lesson plan that integrates technological tools, pedagogical strategies, and subject content knowledge.
4. Propose appropriate innovative pedagogies to complement effective teaching.

LEARNING ACTIVITIES/TASK LIST



1. You tube Videos on teaching versus facilitation
2. Quiz on teaching versus facilitation
3. Reading material on teaching versus facilitation
4. Reading material on theories underpinning transformative pedagogies
5. Quiz theories underpinning transformative pedagogies
6. Reading material on TPACK model
7. Exercise on integration of TPACK in planning for teaching
8. You tube video on transformative pedagogical practices
9. Quiz on transformative pedagogical practices
10. Reading material on transformative pedagogical practices

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

6.3 Teaching and Facilitation

ACTIVITY 1

Kindly set these two videos side by side

Instructions:

Watch the two video clips and familiarize yourself with teaching and facilitation. After watching the two videos, answer the questions that follow

<https://youtu.be/cXfK27u2GiA>



ACTIVITY 2



Instructions: Attempt the questions herein



MCQs on Teaching
Versus Facilitation.doc

ACTIVITY 3



Instructions:

Read further on teaching versus facilitation



Difference between
teaching and facilitation

6.4 Theories Underpinning Transformative Pedagogies

ACTIVITY 4



Instructions:

Read on the theories underpinning transformative pedagogy in readiness to respond to the items that follow:

- Learning theories are conceptual frameworks that describe how people absorb, process and retain information. Learning theories help teachers and others who work in education better understand how people acquire knowledge.
- Theories on which transformative pedagogy is founded on include: Social constructivism, multiple intelligence theory, Piaget's theory, Transformative learning theory, Social learning theory, and experiential learning theory.

Click on the links below and Read on how learning theories inform on use of transformative pedagogies in facilitation.

<https://www.phoenix.edu/blog/educational-learning-theories.html>

<https://www.wgu.edu/blog/five-educational-learning-theories2005.html>

ACTIVITY 5



Instructions:

Respond to the questions guided by the reading in activity 4.



MCQs on theories
underpinning transform

6.5 THE TECHNOLOGICAL, PEDAGOGICAL CONTENT AND KNOWLEDGE (TPACK) MODEL

ACTIVITY 6



Instructions:

Click on the word icon below and read on the TPACK model



The TPACK model
-Transformative Peda

ACTIVITY 7



ons:

Attempt the task technology, pedagogy and content perspectives in a lesson plan.

Design a sample lesson plan integrating technological tools, pedagogical strategies, and subject content knowledge.

6.6 TYPES OF TRANSFORMATIVE PEDAGOGICAL PRACTICES

ACTIVITY 8



Instructions:

Click the link below and watch. Then answer the questions that follow:

<https://www.youtube.com/watch?v=UCFg9bcW7B>

ACTIVITY 9



Instructions:

Guided by the Video watch above answer the following questions:



MCQs on
Transformative pedag

ACTIVITY 10



Instructions: Click on the word icon below and read further on transformative pedagogical practices



Transformative
pedagogical Practices



END OF MODULE ASSESSMENT 1.2

From the grade Seven agriculture and Nutrition design, identify four topics you could teach using transformative pedagogies. Provide context of how you would apply the identified pedagogy in each. Present your work in four PowerPoint slides and post it on the journal.



TAKE HOME MESSAGE/SELF REFLECTION

Which pedagogical practice did you like best and why?

Instructions: write down your own personal response and explain in depth on the discussion forum. Ensure you also respond to two other posts on the discussion thread.



REFERENCE LIST AND FURTHER READING

1. Freire, P. (1970). *Pedagogy of the Oppressed*.
2. Brookfield, S. (2012). *Teaching for Critical Thinking: Tools and Techniques to Help Students Question Their Assumptions*.
3. Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*.
4. Taylor, E. W. (2008). *Transformative Learning Theory*.
Published in the *New Directions for Adult and Continuing Education*.
5. Cranton, P. (2006). *Understanding and Promoting Transformative Learning: A Guide for Educators of Adults*.

WHAT'S NEXT?

- The next module introduces you to plan to teach having been equipped with the qualities of a trainer, resources used, methods of teaching and the transformative pedagogy you should be ready to plan for teaching.

MODULE 7: PLANNING FOR TEACHING

INSTRUCTIONAL HOURS: 6

7.1 MODULE OVERVIEW

In this module, you will learn about planning for teaching, factors to consider when planning, Stages of lesson planning, types of documents required when planning, the planning process.

7.2 LEARNING OUTCOMES

At the end of this module, you will be able to:

1. Explain the importance planning for teaching
2. Discuss the factors to consider when planning for teaching
3. Develop a 40 minutes sample lesson plan
4. Analyze the documents required when planning for teaching



LEARNING ACTIVITIES/TASK LIST

1. Reading material on introduction to planning for teaching agriculture.



2. Quiz on introduction to planning for teaching.
3. You tube video tips of planning to teach.
4. Reading material on planning to teach.
5. Quiz on factors to consider when planning to teach.
6. Reading Material and a you tube link on development of instructional objectives and qualities of a good lesson objective respectively.
7. Quiz on development of lesson objectives
8. Reading materials on professional documents and respective templates
9. Quiz on professional documents
10. You tube video on elements of a lesson plan
11. Exercise to develop a lesson plan

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

7.3 Introduction to planning for teaching Agriculture

ACTIVITY 1



Instructions: Open the word icon and read on introduction to planning for teaching and answer the questions that follow:



Introduction to
Planning to Teach.doc

ACTIVITY 2



Instructions: Respond to the items herein



TRUE-False Qns on
importance of plannin

7.4 PLANNING FOR TEACHING

7.4.1 FACTORS TO CONSIDER WHEN PLANNING FOR TEACHING

ACTIVITY 3

You Tube Instructions:

Click the link below and watch. Pay attention to the tips of planning to teach shared.

<https://www.youtube.com/watch?v=8yTMm5h7l4Q>

ACTIVITY 4



Instructions: Click on the word icon and read on the factors to consider when planning for teaching then answer the questions in the next activity



What is planning to
teach.docx

ACTIVITY 5:



Instructions: Respond to the questions in this task guide by reading material in activity 4



MCQs on factors to
consider when plannir

7.4.2 INSTRUCTIONAL OBJECTIVES

ACTIVITY 6



Instructions: Read the introduction notes on categories of instructional objectives and watch the Video clip on Qualities, development of instructional objectives.



Developing
Instructional objective

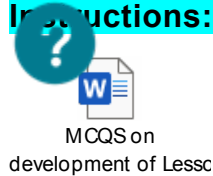


Instructions: Click on the you tube link provided and watch the qualities of a good lesson objective and its formulation.

https://www.youtube.com/watch?v=IS5wMv_ILXE

ACTIVITY 7

Instructions: Respond to the questions herein on development of leobjectives

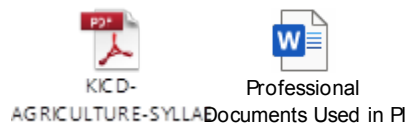


7.5 DOCUMENTS REQUIRED WHEN PLANNING FOR TEACHING

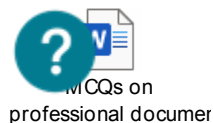
ACTIVITY 8



Instructions: Click on the attached word icon herein, download and read. Attached are also samples of some of the professional documents (Scheme of work, Lesson plan and Record of work covered) for your reference



ACTIVITY 9



Instructions:

7.6 LESSON PLAN DEVELOPMENT

ACTIVITY 10



Instructions: Click on the link above and watch the video clip taking note of the six elements of a lesson plan.

https://www.youtube.com/watch?v=1BqR7wUje_4

ACTIVITY 11



Instructions:

Using the lesson plan template shared in activity 8, develop a 40 minutes lesson plan guided by the video watched from an identified sub strand in grade 7.



MASTERY EXERCISE 1.1

Set the rubric provided such that moodle would score the work done.

Instructions:

Study the case below and answer the questions that follow:



Case Study - Planning
to teach.docx



END OF MODULE ASSESSMENT 1.2

Select a strand in the grade 8 curriculum design and prepare:

- 1) Two weeks scheme of work
- 2) Pick one lesson from the schemed work and prepare a 35 Minutes lesson plan.



TAKE HOME MESSAGE/SELF REFLECTION

What has interested you most in this module and why? Post your opinion on the discussion forum.



REFERENCE LIST AND FURTHER READING

1. Anderson, L. W., & Krathwohl, D. R. (Eds.) (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Longman.
2. Whittington, L. M; Rudd, R., ; and Elliot, J., (2023). *The Art and Science of Teaching Agriculture*. Retrieved form <https://pressbooks.lib.vt.edu/teachagriculture/chapter/planning-for-effective-instruction/?utm>
3. Rice, A. H., & Kitchel, T. (2018). Agriculture teachers' integrated belief systems and its influence on their pedagogical content knowledge. *Journal of Agricultural Education*, 59(1), 51–69. <http://doi.org/10.5032/jae.2018.01059>

WHAT'S NEXT?

- Think of this, you have your lesson plan ready for execution. How would you conduct your lesson session?

MODULE 8: CONDUCTING THE MICRO-LESSON SESSION

INSTRUCTIONAL HOURS: 4

8.1 MODULE OVERVIEW

In this module, you will cover the principles, techniques, and skills required for effective lesson presentation. Emphasis will be placed on understanding lesson structures, implementing instructional methods, integrating technology, and practicing micro-teaching for skill mastery. Through practical activities, reflective exercises, and feedback, participants will build the capacity for student-centered teaching.

8.2 LEARNING OUTCOMES

At the end of this module, you will be able to:

1. Describe the core principles of effective lesson delivery during of micro-teaching.
2. Differentiate between the Lesson Presentation steps in micro-teaching.
3. Prepare a micro-teaching session
4. Conduct the micro-teaching session



LEARNING ACTIVITIES/TASK LIST



1. Reading Material on principles, components, and skills of microteaching
2. Quiz on on principles, components, and skills of microteaching
3. Reading material on Principles of micro-teaching
4. Quiz on Principles of micro-teaching
5. You tube video on preparing a micro a micro teaching session.
6. Reading material on lesson planning for micro-teaching
7. Exercise on lesson plan development
8. Video on conducting a micro-lesson
9. Exercise on micro-lesson presentation.

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

8.3 PRINCIPLES, COMPONENTS, AND IMPORTANCE OF MICRO-LESSON PRESENTATION

ACTIVITY 1



Instructions:

Click on the link below read on the principles, components of microteaching, skills advanced during micro-teaching and importance of microteaching.

<https://content.wisestep.com/micro-teaching-principles-procedures-benefits-limitations/>

ACTIVITY 2



Instructions: Answer the questions herein



True-false Qns on principles of micro-te

8.4 THE MICRO-TEACHING CYCLE AND CLASSROOM MANAGEMENT

ACTIVITY 3



Instructions:

Click on the icon below and read a summary on the micro-teaching cycle and classroom management in readiness to respond to the questions that follow.



Qualities of a good micro - cycle.docx

ACTIVITY 4



Instructions: Answer the questions on microteaching cycle and classroom management



MCQs on the Micro-teaching cycle.c

8.5 PREPARING A MICRO-TEACHING SESSION

ACTIVITY 5:



Instructions:

Click on the link below and watch what entails a micro teaching session.

https://www.youtube.com/watch?v=_ic5f9K9Hpl

ACTIVITY 6: READING MATERIAL



Instructions:

Read further on the elements that you need in your lesson plan by clicking on the link below

<https://cte.smu.edu.sg/lesson-planning>

ACTIVITY 7

Instructions:



From your 40 minutes lesson plan you prepared in module 7, extract from it a 10 minutes lesson for your micro-teaching.

INDUCTING A MICROTEACHING SESSION

ACTIVITY 8



Instructions:

Click on the link below and watch a micro teaching session.

https://youtu.be/_fwdXjqlugQ

ACTIVITY 9



Instructions:

In a group of 8 members, present your micro-lesson to your colleagues.



MASTERY EXERCISE 1.1

Instructions: Answer the quiz below



MCQs – Mastery
Exercise on Microteac



END OF MODULE ASSESSMENT 1.2

Click on the link below and watch the video clip the answer the questions that follow:

<https://youtu.be/Sb57m7SPxhl>

- 1) write a reflective report outlining strengths, weaknesses, and improvement strategies for the lesson presented. Post it on your learning journal



TAKE HOME MESSAGE/SELF REFLECTION

On the discussion forum, share your experience on the micro-teaching session and react to two other posts.



REFERENCE LIST AND FURTHER READING

1. Anderson, L. W., & Krathwohl, D. R. (Eds.) (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. Longman.
2. Ayot, H. O., & Patel, M. M. (1992). Instructional Methods: General Methods. Nairobi: ERP.
3. Bloom, B. S., & Krathwohl, D. R. (1956) Taxonomy of educational objectives: The classification of educational goals by a committee of college and university examiners. Handbook I: Cognitive Domain. Longmans, Green.

WHAT'S NEXT?

- What fascinated you in this module? Share on the discussion form

MODULE 9: GENDER AND INCLUSIVE PEDAGOGY IN AGRICULTURAL TRAINING

INSTRUCTIONAL HOURS: 4

9.1 MODULE OVERVIEW

In this module, you will be introduced participants to gender concepts, inclusive pedagogy, and their application in agricultural training. Participants will explore strategies for addressing gender disparities, promoting equity, and creating inclusive learning environments in agricultural education programs. The module combines theoretical concepts with practical approaches to implementing gender-sensitive teaching.

9.2 Learning Outcomes

At the end of this module, you will be able to:

1. Explain key gender and inclusion terminologies, barriers, and their impact on agricultural training selection process.
2. Discuss inclusive teaching strategies in agricultural education
3. Apply gender responsive strategies in conducting an agriculture lesson
4. Promote gender responsive classrooms in agricultural education.



LEARNING ACTIVITIES/TASK LIST



1. Reading material on introduction gender and inclusivity; forms of diversity
2. Quiz introduction gender and inclusivity; forms of diversity
3. You tube video on strategies used in overcoming biasness.
4. Exercise on gender responsive and inclusion strategies
5. Case study on gender disparities in Agricultural education
6. Role play depicting gender responsive strategies
7. You tube video on gender responsive classroom
8. Quiz on gender responsive classroom

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

9.3 GENDER AND INCLUSION TERMINOLOGIES, BARRIERS, AND THEIR IMPACT ON AGRICULTURAL TRAINING

ACTIVITY 1



Instructions:

click on the word icon below and read on introduction to gender and inclusion and the various forms.



Introduction to forms
of diversity in teaching

ACTIVITY 2



Instructions:

Answer the questions herein

1. Identify two agricultural tasks do you feel you should do simply because you are a man/woman
2. Which two agricultural tasks do you feel you can do, but you don't do them simply because you are male/female

Post your answers on the chat and comment to two other posts.

9.4 INCLUSIVE STRATEGIES IN AGRICULTURAL EDUCATION



ACTIVITY 3

Instructions:

Click on the link below and watch the video clip. Take keen note on the strategies employed to overcome gender biasness.

<https://youtu.be/-kZleQM6vG0>



ACTIVITY 4: EXERCISE

Instructions:

Analyze the gender responsive and inclusion strategies in a conceptual representation that an institution offering agricultural courses should put in place and post it on the chat.

9.5 GENDER RESPONSIVE TEACHING STRATEGIES IN AGRICULTURAL EDUCATION



ACTIVITY 5: CASE STUDY

Instructions:

Below is a case study, read through it and respond to the items in the next activity

Case Study: Gender Disparities in Agricultural Education

Njeri, a bright and ambitious 17-year-old girl, grew up in rural Kenya, where her family relied on subsistence farming to make a living. Agriculture has been an integral part of her life, and she dreamed of pursuing a career in modern agricultural practices to help her community adopt more sustainable techniques.

Njeri enrolled at Mwamba Vocational Training Center (MVTC), a government-supported institution offering agricultural training. Despite her enthusiasm and potential, Njeri faced significant challenges as a female student in a traditionally male-dominated field.



ACTIVITY 6: ROLE PLAY

Instructions:

Guided by the case study above;

conduct a role play depicting the gender responsive strategies you would employ to support njeri in realizing her educational goal. post your roleplay outline on your journal.

9.6 GENDER RESPONSIVE CLASSROOMS IN AGRICULTURAL EDUCATION

ACTIVITY 7

You

Instructions:

Click on the link below and watch a clip on gender responsive classroom

[HTTPS://YOUTU.BE/JKHAMVCHSPK](https://youtu.be/JKHAMVCHSPK)

ACTIVITY 8



Instructions:

From the video watched in Activity 7;

Identify two unintended biases that a trainer in agriculture may perpetuate in the classroom and ways of overcoming each. Post your answer on the discussion forum.



MASTERY EXERCISE 1.1

Instructions: Answer the quiz below



MCQs – Mastery
Exercise on Microteac



END OF MODULE ASSESSMENT 1.2

Instructions: Answer the end of module quiz below

Set the questions in a reshuffled status to keep changing the order on the questions



MSQs -End of
module assessment -



TAKE HOME MESSAGE/SELF REFLECTION

Share your learning moment on this topic, highlighting your ah! Moments on gender and inclusive pedagogy in agriculture. Post your experience and the chat and comment on at least two other chats.

REFERENCE LIST AND FURTHER READING



1. Mack, K. M., Wood, J. L., & Harris, F., III. (2020). Creating inclusive classrooms by engaging STEM faculty in culturally responsive teaching workshops. *International Journal of STEM Education*, 7(1), Article 22. <https://doi.org/10.1186/s40594-020-00230-7>
2. Sollars, V., & Bartolo, P. A. (2002). Identifying a gender-inclusive pedagogy from Maltese science teachers' personal practical knowledge. *International Journal of Science Education*.
https://www.researchgate.net/publication/46102533_Identifying_a_gender-inclusive_pedagogy_from_Maltese_science_teachers%27_personal_practical_knowledge

3. Tanner, K. D., & Allen, D. (2007). Inclusive teaching. *CBE—Life Sciences Education*, 6(4), 215–219. <https://doi.org/10.1187/cbe.07-07-0045>

WHAT'S NEXT?

Congratulations for successfully completing module 9, you are getting into your last module.

MODULE 10: PERTINENT AND CONTEMPORARY ISSUES IN AGRICULTURAL EDUCATION

INSTRUCTIONAL HOURS: 4

10.1 MODULE OVERVIEW

In this module, you will learn emerging and important issues affecting agricultural education. Topics include innovative farming methods, environmental challenges like climate change, food security concerns in urban areas, and the role of gender, inclusion, health education, and youth involvement in agriculture. Practical approaches like precision agriculture, organic farming, and hydroponics will be explored.

10.2 LEARNING OUTCOMES

At the end of this module, you will be able to:

1. Describe the contemporary issues in CBC.
2. Explain the contemporary issues in agriculture
3. Establish a project on a modern technology in agriculture.



4. Initiate activities for youth programmes in secondary schools

LEARNING ACTIVITIES/TASK LIST



1. You tube video contemporary issue in Competency based Curriculum
2. Quiz on contemporary issue in Competency based Curriculum.
3. Case study on contemporary issue in Competency based Curriculum
4. Discuss on contemporary issues in Agriculture
5. You tube video on changes in climate change
6. Project work mitigating contemporary issues in agriculture
7. Reading material on young farmers clubs and observation on contemporary concern cases
8. Discussion on possible mitigation measures to PCIs in agriculture by young farmers clubs.

INSTRUCTIONAL MATERIALS & LEARNING ACTIVITIES

10.3 PERTINENT AND CONTEMPORARY ISSUES IN COMPETENCY BASED CURRICULUM (CBC)

ACTIVITY 1

You Instructions:

Click on the link below and watch as you take note of the pertinent and contemporary issue in Competency based Curriculum

<https://youtu.be/0UymWCz9Ca0>

Contemporary Issue in Competency Based Curriculum

ACTIVITY 2



Instructions:

Answer the quiz below on PCIs in CBC



MCQs on PCIs in
aged.docx

10.4 PERTINENT AND CONTEMPORARY ISSUES IN AGRICULTURAL EDUCATION

ACTIVITY 3



Instructions:

Read through the case study posted here and respond to the quiz below:

The agriculture teacher, Ms. Wanjiru, launched a student-led project titled "Smart Urban Farming for Food Security". The goal was to enable learners to understand pertinent and contemporary issues in agriculture education while developing practical skills, problem-solving abilities, and attitudes toward sustainable agricultural solutions.



ACTIVITY 4

Instructions:

In groups of four, discuss two contemporary issues that Ms. Wanjiru may have wanted the learners to learn. Engage on the discussion forum

10.5 PROJECTS ON MODERN TECHNOLOGIES IN AGRICULTURE

ACTIVITY 5



Instructions:

Click on the link below and watch the video by United Nations on Climate change effects in Kenya to prepare you for the activity that follows:

<https://youtu.be/i0V2xzEw44Y>

Climate Change Effects



ACTIVITY 6

Instructions:

Informed by the video watched, establish a micro-project addressing one of the pertinent and contemporary issues in Agriculture today. Document your project establish and upload all evidence of all activities of your learning portfolio

10.6 YOUTH PROGRAMMES IN SCHOOL AGRICULTURE

ACTIVITY 7



Instructions: Click on the word icon and read on young farmers clubs in schools the observe the photograph below.



Young Farmers Clubs
in Schools.docx

Instructions: Critically observe the photograph below depicting pertinent and contemporary concerns in agricultural production and answer the questions that follow:



Photograph by Union of Concerned Scientists

ACTIVITY 8



Instructions:

In groups of four, identify three pertinent and contemporary concerns depicted in the photograph which the YFC would engage in initiating their mitigation. Post on the discussion forum and each member to react to at least other two group posts



END OF MODULE ASSESSMENT 1.2

Instructions:

Answer the questions herein

Question 1:

"Competency-Based Curriculum (CBC) emphasizes theoretical knowledge over practical skills in addressing contemporary issues like climate change."

Correct Answer: False

Question 2:

"Gender and inclusion are considered key components in CBC to ensure equal opportunities in education for all learners."

Correct Answer: True

Question 3:

"Precision agriculture, as taught in CBC, integrates technology to promote sustainable farming methods."

Correct Answer: True

Question 4:

"The CBC approach excludes emerging agricultural practices such as hydroponics and vertical farming."

Correct Answer: False



TAKE HOME MESSAGE/SELF REFLECTION

What fascinated you during the establishment and management of your micro-project addressing a PCI? Share your thoughts on the discussion forum and respond to at least two other posts.



REFERENCE LIST AND FURTHER READING

1. Food and Agriculture Organization (FAO). (2022). *State of Food Security and Nutrition in the World*. Retrieved from [FAO Website](#)
2. Kenya Institute of Curriculum Development. (2017). The basic education curriculum. Framework. Nairobi: Kenya Literature Bureau
3. Ngugi, J. K. (2019). *Vertical Farming in Urban Agriculture: Impacts and Sustainability*. Nairobi: University of Nairobi Press.
4. World Bank. (2021). *Climate-Smart Agriculture: Challenges and Opportunities*. Washington, DC: World Bank.

WHAT'S NEXT?

- Congratulations, you have completed the module