



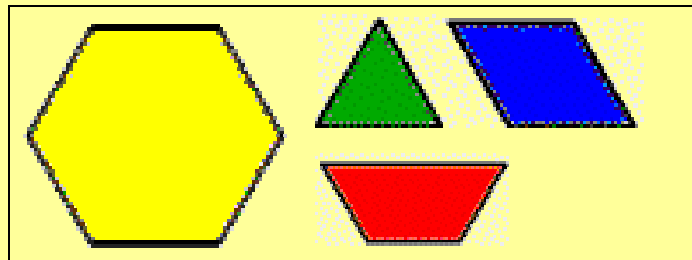
NQF Level: 2

US No: 9007

# Facilitator Guide

## Primary Agriculture

Work with a range of patterns and functions and solve problems



Facilitator: .....

Company: .....

Commodity: ..... Date: .....

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agriculture

Department:  
Agriculture  
REPUBLIC OF SOUTH AFRICA



# Before you get started...

Dear Facilitator,

This Facilitator Guide (together with the relevant Learner Guide) is aimed at facilitators who will be assisting learners wishing to complete the following unit standard:

<b>Title:</b>	Work with a range of patterns and functions and solve problems		
<b>US No:</b>	<b>9007</b>	<b>NQF Level:</b>	<b>2</b>
		<b>Credits:</b>	<b>3</b>

This guide contains all necessary facilitation instructions to ensure that learners will attain the expected competencies required by the above-mentioned unit standard. This guide is designed to be used during the presentation of a learning session based on this unit standard. The full unit standard is attached at the end of the relevant Learner Guide. Learners are advised to read the unit standard at their time. Please discuss the unit standard with the learners to ensure that they understand what is expected from them to achieve the outcomes of the unit standard.

This unit standard is one of the building blocks in the qualifications listed below. Please mark the qualification you are currently facilitating, because that will be determined by the context of application:

Title	ID Number	NQF Level	Credits	Mark
National Certificate in Animal Production	48976	2	120	<input type="checkbox"/>
National Certificate in Mixed Farming Systems	48977	2	120	<input type="checkbox"/>
National Certificate in Plant Production	48975	2	120	<input type="checkbox"/>

Please mark the learning program the learners are enrolled in:

Are you enrolled in a:	Y	N
Learnership?	<input type="checkbox"/>	<input type="checkbox"/>
Skills Program?	<input type="checkbox"/>	<input type="checkbox"/>
Short Course?	<input type="checkbox"/>	<input type="checkbox"/>

**Note to Facilitator:**

If you are presenting this module as part of a full qualification or learnership, please ensure that you have familiarised yourself with the content of the qualification.

Please explain the above concepts to the learner.

There are three guides, namely the Learner Guide (with activities), Assessor Guide and the Facilitator Guide.

These guides have been developed to address specific aspects of the learning experience. You therefore need to use these guides complementally to one another.

**Make this an enjoyable learning experience!**

# Context of Application ...

Primary Agriculture is a diverse sector and a wide range of commodities is being produced for both national and international market. Each commodity has its own production requirements and practices. You will be facilitating the learning process within a specific context where a specific agricultural commodity is being produced. The learning material has been written in a **generic** manner, as it is aimed to be available on national level and should be relevant to be applied within a variety of commodities. It is therefore inclusive of all agricultural commodities and crop in this field. Therefore, the examples that are being used in the materials may not always be applicable to your specific community, commodity, environment or region.

This presents you, the facilitator, with the challenge to **contextualise** the learning material. It is imperative that you, the Facilitator and Assessor interpret and present activities, case studies and projects related to the material in such a way that learners can easily identify and apply their knowledge within their own context. This will require from you to add examples of crop, which are applicable to the community or farm. Learners must be guided with examples from their own communities, commodities, environment or regions. This should be done by complementing the learning material with:

- Examples relevant to the commodity,
- Including commodity specific requirements,
- Including operating procedures of the farm,
- Including agricultural practice specific requirements,
- Agricultural markets,
- Guiding learners to write these specifics down in the learning guide, etc.

**The contextualisation of the learning material is a very important step in preparing for and facilitating the learning experience and enough time and effort should be put into this exercise.**

According to the qualifications mentioned on page 2, this module could be contextualised to fit the following groups of commodities:

Plant Production	Animal Production	
<ul style="list-style-type: none"> <li>• Organic production,</li> <li>• Hydroponic production,</li> <li>• Perma-culture production,</li> <li>• Agronomy,</li> <li>• Horticulture,</li> <li>• Natural resources harvesting.</li> </ul>	<ul style="list-style-type: none"> <li>• Small stock production,</li> <li>• Large stock production,</li> <li>• Dairy production,</li> <li>• Pig production,</li> <li>• Poultry production,</li> <li>• Game,</li> <li>• Aqua / mari culture,</li> <li>• Commercial insects</li> <li>• Animal fibres harvesting,</li> <li>• Bee keeping,</li> </ul>	<ul style="list-style-type: none"> <li>• Natural resources harvesting,</li> <li>• Organic production,</li> <li>• Perma-culture production,</li> <li>• Eco/Agri Tourism,</li> <li>• Agro Chemicals,</li> <li>• Horse Breeding,</li> <li>• Etc.</li> </ul>



# What & How will you be Facilitating?

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# Learning Program Time Frames

	Total time allocated (hours)	Theoretical learning time allocated (hours)	Practical learning time allocated (hours)	Activities to be completed
<b>Complete Program (including summative assessment)</b>	20 hours	6 hours	14 hours	5
<b>Learner Orientation and "Ice Breaker"</b>	1 hour	30 minutes	30 minutes	-
<b>Purpose, Introduction and Learner Directions</b>	1 hour	30 minutes	30 minutes	-
<b>Session 1</b>	4 hours	1 hour	3 hours	1
<b>Session 2</b>	4 hours	1 hour	3 hours	2
<b>Session 3</b>	8 hours	2 hours	6 hours	3 - 5
<b>Preparation for Assessment &amp; revision</b>	2 hours	1 hour	1 hour	-

## Tips for level of learning



Remember the following before you get started:

**Typically, a learning programme leading to the award of a qualification or unit standards at level 2 should develop learners who demonstrate an ability to:-**

- Work and learn in a disciplined manner in a well-structured and supervised environment.
- Manage their time effectively.
- Develop sound working relationships and an ability to work effectively as part of a group.
- Express an opinion on given information clearly in spoken and written form.
- Collect, organise and report information clearly and accurately.
- Use their knowledge to select and apply known solutions to well-defined routine problems.
- Use a variety of common tools and instruments; apply literacy and numeracy skills to a range of different but familiar contexts.
- Understand the environment within which he/she operates in a wider context.
- Gain knowledge of one or more areas or fields of study, in addition to the fundamental areas of study.

## Tips for the Facilitator



- Establish your learner profile at the start of the programme:
- What is their experience?
- What are their fields of expertise?
- What are their expectations?
- What areas are they working in?
- What Local Development programmes are working in their areas?
- Any other relevant information to help you to create a positive starting point
- It may be useful to meet regularly with your Programme Manager and the Host employers of the learners in order to reach a common understanding of what the learners will be required to gain practical experience in.
- As the facilitator, you need to oversee learners as they work through the activities for this qualification.
- **CRITICAL OUTCOMES ARE CRITICAL** - It is particularly important to improve these critical outcomes
- Please make time to give feedback to the learner as prescribed and expected:
- The feedback needs to be positive, constructive and clear.
- Before facilitation can begin, please ensure that the learners have been orientated to the qualification as a whole and its position on the National Qualifications Framework.
- Develop some icebreakers that you can use, especially when the concentration levels are ebbing.
- It might also be helpful to start each day with a short overview on what can be expected.
- Summaries the work at the end of the day.
- Assist the learners with techniques to write assignments, to complete tasks and on how to compile their portfolios of evidence.
- The techniques will help the learners to link and integrate the new concepts learnt.

## Facilitator's Checklist & Training Aids

### Learner support strategies:

Learners are supplied with all resources and aids as required by the programme – including:

- Objects & devices such as equipment, protective clothing, safety gear, etc.
- Learner Guides and Learner Workbook
- Visual aids, etc.

Use this checklist below during your preparation to ensure that you have all the equipment, documents and training aids for a successful session.

Preparation:	Yes	No
<b>Qualification Knowledge</b> – I have familiarised myself with the content of the applicable qualification		
<b>Unit Standard Knowledge</b> – I have familiarised myself with the content of all aspects of the applicable unit standard		
<b>Content Knowledge</b> – I have sufficient knowledge of the content to enable me to facilitate with ease		



<b>Application knowledge</b> – I understand the programme matrix & have prepared for programme delivery accordingly		
<b>Contextualisation</b> – I have included information which is specific to the commodity and practices related to the commodity		
<b>Ability to respond to learners background &amp; experience</b> – I have studied the learner demographics, age group, experience & circumstances & prepared for programme delivery accordingly		
<b>Enthusiasm &amp; Commitment</b> – I am passionate about my subject & have prepared my programme delivery to create a motivating environment with real commitment to success		
<b>Enterprise knowledge</b> – I know & understand the values, ethics, vision & mission of the workplace & have prepared my programme delivery, reporting & administrative tasks accordingly.		
<b>Equipment check:</b>		
Learner guides x 1 per learner		
Assessment guides x 1 per learner		
Writing materials & stationary (facilitator & learner)		
White board & pens		
Flip chart paper		
Proxima projector & screen		
Laptop & programme disk		
Sample Hand-outs and examples of laws and other relevant documents		
Safety gear as prescribed by unit standard and applicable legislation		
<b>Documentation checklist:</b>		
Attendance Register		
Course Evaluation		
Learner Course Evaluation		
Portfolios of evidence		

# Contextualisation of Content!

Go through this module and indicate what specific **information** / **activities** / **examples** should be included in this module?

Contextualisation	
<ul style="list-style-type: none"> <li>Commodity specific?</li> </ul>	
<ul style="list-style-type: none"> <li>Operating procedures of the farm?</li> </ul>	
<ul style="list-style-type: none"> <li>Agricultural practices?</li> </ul>	
<ul style="list-style-type: none"> <li>Agricultural markets?</li> </ul>	

# Session 1 Patterns

**Learner Guide:  
Page 7**

*After completing this session, the learner should be able to:*  
**SO 1: Convert flexibly between and within various representations of functions.**

Concept (SO 1)	Time frame	Activities related to the concept
Appropriate information is selected to convert flexibly between and within various representations of functions.	4 hours	Activity 1
Appropriate representations are selected for specific applications.		
Conversions represent the functions accurately and appropriately		



**Please allow learners to complete Activity 1 in their Learner Guides**

Type of activity	Resources
Individual Activity: Answer all the questions below:	Workbook, pen
Instructions to give to the learners	
As per instructions in Learner Guide.	

**My Notes ...**

.....

.....

.....

.....

.....

# 2 Functions

Session

**Learner Guide:**  
**Page 18**

*After completing this session, the learner should be able to:*

**SO 2: Compare, analyse and describe the behaviour of patterns and functions.**

Concept (SO 2)	Time frame	Activities related to the concept
Patterns and functions are compared in terms of: i. Shape and symmetry, ii. Finding function values, iii. Finding input values, iv. The average rate of change of function values.	4 hours	Activity 2
The key features of the graphs of functions are described and interpreted correctly.		
The behaviour of functions is described as being increasing or decreasing or constant as determined visually from graphical representations.		



**Please allow learners to complete Activity 2 in their Learner Guides**

Type of activity	Resources
Individual Activity: Answer all the questions below	Workbook, pen
Instructions to give to the learners	
As per instructions in Learner Guide	

# Session 3 Functions and their graphs

**Learner Guide:  
Page 30**

After completing this session, the learner should be able to:  
**SO 3: Represent situations mathematically in order to interpret and solve problems.**

Concept (SO 3)	Time frame	Activities related to the concept
Accurate point-by-point plotting is used to model contextual problems.	<b>8 hours</b>	<b>Activity 3 - 5</b>
Appropriate symbolic representations are used to model contextual problems.		
Representations are analysed and manipulated efficiently in arriving at results.		
Representations are verified in terms of available data.		
Results are interpreted correctly in terms of the situation.		
Interpretations and predictions are based on the properties of the mathematical model.		



# What will I do differently next time?

Take some time to **reflect** on your own activities as facilitator of this Unit Standard. 9007. Then write down five of the most important lessons you have learnt and include a motivation:

What will I do differently next time?	Motivate how or why (Give examples, reasons, etc.)
1.	
2.	
3.	
4.	
5.	

As facilitator, you have hands on experience in the application of the unit standard 9007 and you might experience difficulties with the unit standard that the developers did not anticipate. Also, the unit standard will be revised at the end of the registration period. Your comments below can be an important contribution in the revision process and should be brought to the attention of either the AgriSETA ETQA manager or the SGB chairperson.

Please take some time to reflect on your experience and list a few of the difficulties you had to address.

Difficulties I had with the Unit Standard	Recommended Changes to Address the Difficulty
6.	
7.	
8.	
9.	
10.	