



education

Department:
Education
REPUBLIC OF SOUTH AFRICA

**National Curriculum Statement
Grades 10–12
(General)**

**AGRICULTURAL
MANAGEMENT
PRACTICES**



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HOW TO USE THIS BOOK

This document is a draft policy document divided into four chapters. The reader must read and integrate the information from the different sections in the document. The content of each chapter is described below.

■ Chapter 1 – Introducing the National Curriculum Statement

This chapter describes the principles and the design features of the National Curriculum Statement Grade 10–12 (General). It introduces the curriculum to the reader.

■ Chapter 2 – Introducing the Subject

This chapter describes the definition, purpose, scope, career links and Learning Outcomes of the subject. It provides an orientation to the Subject Statement.

■ Chapter 3 – Learning Outcomes, Assessment Standards, Content and Contexts

This chapter contains the Assessment Standards for each Learning Outcome and the content and contexts for the subject. The Assessment Standards are arranged to assist the reader to see the intended progression from Grade 10 to Grade 12. At the end of the chapter is the proposed content and contexts, which may be used to teach, learn and attain the Assessment Standards.

■ Chapter 4 – Assessment

This chapter deals with the generic approach to assessment suggested by the National Curriculum Statement. At the end of the chapter is a table of subject-specific competence descriptions. Codes, scales and competence descriptions are provided for each grade. The competence descriptions are arranged to demonstrate progression from Grade 10 to Grade 12.

■ Symbols

The following are used to identify Learning Outcomes, Assessment Standards, grades, codes, scales, competence description, and content and context.



= Learning Outcome



= Scale



= Assessment Standard



= Competence Description



= Grade



= Content and Contexts



= Code

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ACRONYMS

AI	Artificial Insemination
AIDS	Acquired Immune Deficiency Syndrome
AS	Assessment Standard
CASS	Continuous Assessment
FET	Further Education and Training
FETC	Further Education and Training Certificate
GET	General Education and Training
GIS	Geographic Information System
GMO	Genetically Modified Organisms
GPS	Global Positioning Systems
HIV	Human Immuno-Deficiency Virus
HRI	Human Rights and Inclusivity
ISO	International Standardisation Organisation
IT	Information Technology
LO	Learning Outcome
LPG	Learning Programme Guidelines
LSEN	Learners with Special Educational Needs
NCS	National Curriculum Statement
OBE	Outcomes-Based Education
OHS	Occupational Health and Safety
SKVA	Skills, Knowledge, Values, and Attitudes
WTO	World Trade Organisation

CHAPTER 1

INTRODUCING THE NATIONAL CURRICULUM STATEMENT

The adoption of the Constitution of the Republic of South Africa (Act 108 of 1996) provided a basis for curriculum transformation and development in South Africa. The Preamble states that the aims of the Constitution are to:

- heal the divisions of the past and establish a society based on democratic values, social justice and fundamental human rights;
- improve the quality of life of all citizens and free the potential of each person;
- lay the foundation for a democratic and open society in which government is based on the will of the people and every citizen is equally protected by law; and
- build a united and democratic South Africa able to take its rightful place as a sovereign state in the family of nations.

The Constitution further states that 'everyone has the right ... to further education which the State, through reasonable measures, must make progressively available and accessible'.

The National Curriculum Statement Grades 10–12 (General) lays a foundation for the achievement of these goals by stipulating Learning Outcomes and Assessment Standards and by spelling out the key principles and values that underpin the curriculum.

1.1 PRINCIPLES

The National Curriculum Statement Grades 10–12 (General) is based on the following principles:

- social transformation;
- outcomes-based education;
- high knowledge and high skills;
- integration and applied competence;
- progression;
- articulation and portability;
- human rights, inclusivity, environmental and social justice;
- valuing indigenous knowledge systems; and
- credibility, quality and efficiency.

1.1.1 Social transformation

The imperative to transform South African society by making use of various transformative tools stems from a need to address the legacy of apartheid in all areas of human activity and in education in particular. Social transformation in education is aimed at ensuring that the educational imbalances of the past are redressed and of providing equal educational opportunities for all sections of our population. To achieve social transformation, all South Africans must receive an education which recognises their potential and removes artificial barriers to the attainment of qualifications.

1.1.2 Outcomes-based education

Outcomes-based education (OBE) forms the foundation of the curriculum in South Africa. It strives to enable all learners to reach their maximum learning potential by setting Learning Outcomes that must be achieved by the end of the education process. Outcomes-Based Education encourages a learner-centred and activity-based approach to education. The National Curriculum Statement builds its Learning Outcomes for Grades 10–12 on the Critical and Developmental Outcomes that were inspired by the Constitution and developed through a democratic process.

Critical Outcomes

The Critical Outcomes (CO) require learners to be able to:

- identify and solve problems and make decisions using critical and creative thinking;
- work effectively with others as members of a team, group, organisation and community;
- organise and manage themselves and their activities responsibly and effectively;
- collect, analyse, organise and critically evaluate information;
- communicate effectively using visual, symbolic and/or language skills in various modes;
- use science and technology effectively and critically showing responsibility towards the environment and the health of others; and
- demonstrate an understanding of the world as a set of related systems by recognising that problem-solving contexts do not exist in isolation.

Developmental Outcomes

The Developmental Outcomes (DO) require learners to be able to:

- reflect on and explore a variety of strategies to learn more effectively;
- participate as responsible citizens in the life of local, national and global communities;
- be culturally and aesthetically sensitive across a range of social contexts;

- explore education and career opportunities; and
- develop entrepreneurial opportunities.

1.1.3 High knowledge and high skills

The National Curriculum Statement Grades 10–12 (General) aims to develop a high level of knowledge and skills in learners. It sets high expectations of what all South African learners can achieve. Social justice requires the empowerment of those sections of the population previously disempowered by the lack of knowledge and skills. The National Curriculum Statement specifies the minimum standards of knowledge and skills to be achieved at each grade and sets high, achievable standards in all subjects.

1.1.4 Integration and applied competence

Integration is achieved within and across subjects and Learning Fields. The integration of knowledge and skills across subjects and terrains of practice is crucial to achieve applied competence as defined in the National Qualifications Framework (NQF). Applied competence aims at integrating three discrete competences - namely, practical, foundational and reflective competences. In adopting integration and applied competence, the National Curriculum Statement Grades 10–12 (General) seeks to promote the integrated learning of theory, practice and reflection.

1.1.5 Progression

Progression refers to the process of developing more advanced and complex knowledge and skills. The Subject Statements show progression from one grade to another. Each Learning Outcome is followed by an explicit statement of what level of performance is expected for the Learning Outcome. Assessment Standards are arranged in a format that shows an increased level of expected performance per grade. The content and contexts of each grade also show progression from simple to complex.

1.1.6 Articulation and portability

Articulation refers to the relationship between qualifications in different National Qualifications Framework levels or bands which allows access from one qualification to another. This is especially important for qualifications falling within the same learning pathway. Given that the Further Education and Training (FET) Band falls between the General Education and Training (GET) and the Higher Education (HE) Bands, it is vital that the Further Education and Training Certificate (General) corresponds with the General Education and Training Certificate (GETC) and with qualifications in similar learning pathways of Higher Education. During the development of each Subject Statement, the exit level expectations of the General Education and

Training Learning Areas and the entrance level learning expectations of related disciplines in Higher Education were scrutinised to achieve this articulation.

Portability refers to the extent to which parts of a qualification (subjects or unit standards) can be transferred to another qualification in a different learning pathway of the same National Qualifications Framework band. To enhance the portability of subjects obtained in Grades 10–12, various mechanisms have been explored, for example, regarding a subject as a 20-credit unit standard. Subjects in the National Curriculum Statement Grades 10–12 (General) compare with appropriate unit standards registered on the National Qualifications Framework.

1.1.7 Human rights (HR), inclusivity and environmental and social justice

The National Curriculum Statement Grades 10–12 (General) seeks to promote human rights, inclusivity and environmental and social justice. All newly developed Subject Statements are infused with the principles and practices of social and environmental justice and human rights as defined by the Constitution of the Republic of South Africa. In particular, the National Curriculum Statement Grades 10–12 (General) is sensitive to issues of diversity such as poverty, inequality, race, gender, language, age, disability and other factors.

The National Curriculum Statement Grades 10–12 (General) adopts an inclusive approach by specifying minimum requirements for all learners. It acknowledges that all learners should be able to develop to their full potential provided they receive the necessary support. The intellectual, social, emotional, spiritual and physical needs of learners should be addressed through the design and development of appropriate Learning Programmes (LP) and through the use of appropriate assessment instruments.

1.1.8 Valuing indigenous knowledge systems (IKS)

In the 1960s, the theory of multi-intelligences illustrated to educationists that there are many ways to process information to make sense of the world and that if one were to redefine intelligence, one would have to take these different approaches into account. Up until then, the Western world had only valued logical, mathematical and specific linguistic abilities and rated people as 'intelligent' only if they were adept in these fields. Now, people recognise the wide diversity of knowledge systems through which people make sense of and attach meaning to the world in which they live in. Indigenous knowledge systems in the South African context refer to a body of knowledge embedded in African philosophical thinking and social practices that have evolved over thousands of years. Therefore, the National Curriculum Statement Grades 10–12 (General) has infused indigenous knowledge systems into the Subject Statements. It acknowledges the rich history and heritage of this country as important contributors to nurturing the values contained in the Constitution. As many different perspectives as possible have been included to assist problem solving in all fields.

1.1.9 Credibility, quality and efficiency

The National Curriculum Statement Grades 10–12 (General) aims to achieve credibility through pursuing a transformational agenda and providing an education that is comparable in quality, breadth and depth to those of other countries. Quality assurance is regulated by the requirements of the South African Qualifications Authority Act (Act 58 of 1995), the Education and Training Quality Assurance Regulations and the General and Further Education and Training Quality Assurance Act (Act 58 of 2001).

1.2 THE KIND OF LEARNER THAT IS ENVISAGED

Of vital importance to our development as people are the values that give meaning to our personal spiritual and intellectual journeys. *The Manifesto on Values, Education and Democracy* (Department of Education, 2001: 9–10) states the following about education and values:

Values and morality give meaning to our individual and social relationships. They are the common currencies that help make life more meaningful than might otherwise have been. An education system does not exist to simply serve a market, important as that may be for economic growth and material prosperity. Its primary purpose must be to enrich the individual and, by extension, the broader society.

The kind of learner that is envisaged is one who will be imbued with moral and ethical values and who will act in the interests of a society based on respect for democracy, equality, human dignity and social justice as promoted in the Constitution.

The learner emerging from the Further Education and Training Band must also demonstrate achievement of the Critical and Developmental Outcomes listed in this document. Subjects in the Fundamental Learning Component collectively promote the achievement of the Critical and Developmental Outcomes, while specific subjects in the Core and Elective Components individually promote the achievement of particular Critical and Developmental Outcomes.

In addition, learners emerging from the Further Education and Training band must:

- have access to and succeed in lifelong education and training of good quality;
- demonstrate an ability to think logically and analytically as well as holistically and laterally; and
- be able to transfer skills from familiar to unfamiliar situations.

1.3 THE KIND OF TEACHER THAT IS ENVISAGED

All teachers and educators are key contributors to the transformation of education in South Africa. The National Curriculum Statement Grades 10–12 (General) requires educators who are qualified, competent, dedicated and caring. These teachers are able to fulfil the various roles outlined in the *Norms and Standards for Educators*. These include being mediators of learning, interpreters and designers of

Learning Programmes and materials, leaders, administrators and managers, researchers and lifelong learners, community members, citizens and pastors, assessors and subject specialists.

1.4 STRUCTURE AND DESIGN FEATURES

1.4.1 Structure of the National Curriculum Statement

The National Curriculum Statement Grades 10–12 (General) consists of an Overview Document, the Qualifications and Assessment Policy Framework and the Subject Statements.

The subjects in the National Curriculum Statement Grades 10–12 (General) are categorised into Learning Fields.

What is a Learning Field?

A Learning Field is a category that serves as a home for related subjects and formulates the rules of combination for the Further Education and Training Certificate (General). The Learning Fields for Grades 10–12 were demarcated with due consideration of articulation with the General Education and Training and Higher Education Bands, and with classification schemes in other countries.

Although the development of the National Curriculum Statement Grades 10–12 (General) takes the twelve National Qualifications Framework organising fields as its point of departure, it should be emphasised that those organising fields are not necessarily Learning Fields or 'knowledge' fields, but rather are linked to occupational categories.

The following subject groupings were demarcated into Learning Fields to help with learner subject combinations:

- Agricultural Studies: Agricultural Sciences, Agricultural Management Practices and Agricultural Technology
- Languages: 11 Official languages
- Arts and Culture: Dance Studies, Design, Dramatic Arts, Music and Visual Arts
- Business, Commerce, Management
- Manufacturing, Engineering and Technology
- Services: Consumer Studies, Hospitality Studies and Tourism
- Human and Social Sciences
- Physical, Mathematical, Computer and Life Sciences

What is a subject?

Historically, a subject has been defined as a specific body of academic knowledge. This understanding of a subject emphasised knowledge at the expense of skills, values and attitudes. Subjects were viewed by some as static and unchanging and with rigid boundaries. Very often, subjects focussed virtually exclusively on Western contributions to knowledge.

In an outcomes-based curriculum like the National Curriculum Statement Grades 10–12 (General), subject boundaries are blurred. Knowledge integrates theory, skills and values. Subjects are viewed as dynamic and always responsive to new and diverse knowledge, including knowledge that traditionally has been excluded from the formal curriculum.

A subject in an outcomes-based curriculum is broadly defined by Learning Outcomes and not only by its body of content. In the South African context, the Learning Outcomes should, by design, lead to the achievement of the Critical and Developmental Outcomes. Learning Outcomes are defined in broad terms and are flexible, allowing for the inclusion of local inputs.

What is a Learning Outcome?

A Learning Outcome is a statement of an intended result of learning and teaching. It describes knowledge, skills and values that learners should acquire by the end of the Further Education and Training Band.

What is an Assessment Standard?

Assessment Standards are criteria that collectively describe what a learner should know and be able to demonstrate at a specific grade. They embody the knowledge, skills, values and attitudes required to achieve the Learning Outcomes. Assessment Standards within each Learning Outcome collectively show how conceptual progression occurs from grade to grade.

1.4.2 Content of Subject Statements

Each Subject Statement consists of four chapters and a glossary:

- Chapter 1: Introducing the National Curriculum Statement – This generic chapter introduces the National Curriculum Statement Grades 10–12 (General).
- Chapter 2: Introducing the Subject – This chapter introduces the key features of the specific subject. It defines the subject and outlines its purpose, scope, educational and career links and Learning Outcomes.
- Chapter 3: Learning Outcomes, Assessment Standards, Content and Context – This chapter contains the Learning Outcomes with their associated Assessment Standards, Content and Context.

- Chapter 4: Assessment – This chapter deals with the generic approach to assessment being suggested by the National Curriculum Statement.
- Glossary: When appropriate, a list selected general and subject – specific terms are briefly defined.

1.5 LEARNING PROGRAMME GUIDELINES

A Learning Programme specifies the scope of learning and assessment for the three grades in the Further Education and Training Band. It is the plan that ensures that learners achieve the Learning Outcomes as prescribed by the Assessment Standards for a particular grade. The Learning Programme Guidelines (LPG) assists teachers and other Learning Programme developers to plan and design quality learning, teaching and assessment programmes.

CHAPTER 2

AGRICULTURAL MANAGEMENT PRACTICES

2.1 DEFINITION

Agricultural Management Practices is the study and application of economic and management principles that are used in the production, transformation and marketing of food and other agricultural products. These principles are used to produce and add value to high quality agricultural products so that these products have economic, aesthetic, social and cultural value.

2.2 PURPOSE

By studying Agricultural Management Practices, learners will be exposed to and acquire skills, knowledge, values, and attitudes (SKVA) relevant to agricultural production. The subject takes cognisance of and relates to the Critical and Developmental Outcomes outlined in Chapter 1, by preparing learners to:

- understand the social contribution of Agricultural Management Practices to promote a culture of human rights, economic growth and sustainability as a tool for change, improve quality of life and provide solutions that are responsive to individual and community needs;
- foster a positive attitude towards rural lifestyles associated with farming;
- assist with the management of a farming enterprise and to be aware of the discipline required by a well-organised farm;
- organise and manage activities responsibly and to effectively collect, analyse, critically evaluate and present agricultural information;
- master and apply the skills gained in Agricultural Management Practices;
- communicate effectively using verbal, written, visual, graphical and electronic communication skills and mathematical skills as applied to Agricultural Management Practices;
- be competent, informed, and responsible citizens in the field of agriculture, caring for the environment by addressing indigenous knowledge (IK) and social issues;
- creatively and critically think in an agribusiness environment and to develop and enhance entrepreneurial skills;
- identify and solve problems by being exposed to the agribusiness management environment;
- care for the environment through the management of natural resources and the acceptable treatment of animals and plants;
- acquire and use relevant technology in agriculture; and
- access and value lifelong learning and possible career opportunities.

2.3 SCOPE

Learners will gain personal skills in the management of agricultural enterprises by studying Agricultural Management Practices, especially by participating in agricultural-related activities. Simultaneously, learners will attain insights into the productive possibilities of human, financial and natural resources, considering the vulnerability, strategic importance and limitations of these resources.

Agricultural Management Practices introduces learners to the essential skills and techniques of basic scientific research.

The following concepts must be embedded in Agricultural Management Practices:

- Biological productivity through maintaining and/or improving production and diversity in both plant and animal production lines
- Economic and financial viability
- Conservation of agricultural resources (i.e. soil, water and natural vegetation) and management of the environment
- Social and economic justice issues such as poverty and food security
- The minimisation of plant and animal production risks through management

Agricultural Management Practices consist of the following:

■ ***Management skills***

Management skills are the knowledge and skills required to plan, organise, guide, control and evaluate production factors to achieve sustainable production enterprises.

■ ***Entrepreneurial skills***

Entrepreneurial skills are the ability to manage risks and combine production factors creatively to produce superior goods and services.

■ ***Operational skills***

Operational skills involve the day-to-day management of crop and animal enterprises. Learners gain tactical decision-making skills regarding resource allocation, enterprise choice, crop and animal production management, product harvesting, processing and transportation to markets. Learners will obtain specific skills related to the management of crop enterprises such as grain, fodder, sugar cane, fruit, timber, flower, vegetables, etc. They will also obtain skills that are relevant to animal production enterprises, such as dairy, beef, small stock (wool, pelt, mutton, goat and mohair), pig, poultry (broilers and layers), game and ostrich farming, pasture management, aquaculture and management of production lines.

■ **Marketing skills**

Marketing skills are those value-adding activities along the agricultural supply chain that deal with various agricultural production lines including post-harvesting aspects, such as storage, processing (drying freezing, pasteurising, etc.), food safety, product packaging and distribution to consumers in domestic and global markets. Value-adding activities also include developing and growing agritourism marketing in South Africa.

■ **Research skills**

Research skills involve aspects of problem identification, objective setting, data collection, analysis, evaluation and report writing. The development of data entry, data management and storage capabilities should be included with these skills.

2.4 EDUCATIONAL AND CAREER LINKS

The study of Agricultural Management Practices builds on the Natural Sciences, Economic and Management Sciences, Mathematical Sciences, Technology, Social Sciences and Arts and Culture of the General Education and Training Band. It also links with the following subjects in Further Education and Training Institutions:

- Management Sciences
- Agricultural Technology
- Physical Sciences, Agricultural Sciences and Life Sciences
- Mathematics, Geography and Economical Sciences
- Services and relevant Computer and Technological Studies (Grade 10–12)

The subject is designed to provide learners with a sound practice-orientated base that integrates theoretical and practical competencies in a way that also incorporates Learners with Special Educational Needs (LSEN). The subject ingrains entrepreneurship and is a gateway to further studies at Higher Education Institutions to allow learners the opportunity to become economically productive citizens.

Agricultural Management Practices links with the following employment areas:

- Farm and Ranch Management
- Marketing
- Research
- Civil Service
- Education
- Nature Conservation
- Agricultural Advisory Service
- Agricultural Economy
- Agribanking

2.5 LEARNING OUTCOMES



Learning Outcome 1: Knowledge and understanding of the interrelationships between Agricultural Management Practices, society and the environment

The learner is able to demonstrate knowledge and understanding of the interrelationship between Agricultural Management Practices, society and the environment.

This Learning Outcome acknowledges the interrelationship between Agricultural Management Practices, society and the environment. The focus is on understanding the developments in transformative legislation, poverty and the global environment. The Learning Outcome addresses how learners can use this understanding to improve the quality of life of individuals and communities.



Learning Outcome 2: Management practice process

The learner is able to understand and apply the management practice process.

This Learning Outcome captures the management processes and skills underpinning Agricultural Management Practices.



Learning Outcome 3: Knowledge and understanding of management practices in Agriculture

The learner is able to demonstrate an understanding of the principles and concepts used in Agricultural Management Practices.

The focus of this Learning Outcome is to assist learners to gain knowledge, acquire a broader understanding of how Agricultural Management Practices relate to their everyday lives and make informed decisions to incorporate all relevant practices, systems and technologies to manage a sustainable agricultural environment.



Learning Outcome 4: Application of knowledge and skills in Agriculture

The learner is able to apply the principles, practices and skills used in Agricultural Management Practices by organising and managing activities in a responsible and effective way.

The focus of this Learning Outcome addresses the various skills needed to access, process and use information to meet the challenges in Agricultural Management Practices. It also involves the knowledge and skills to handle basic and relevant agricultural machinery and equipment to solve agricultural related problems.

CHAPTER 3

LEARNING OUTCOMES, ASSESSMENT STANDARDS, CONTENT AND CONTEXTS

INTERRELATEDNESS OF THE LEARNING OUTCOMES

The four Learning Outcomes (LOs) are interrelated and should be integrated so that they are not dealt with in isolation.

All the Learning Outcomes are of equal importance but not all have the same weighting in terms of time and resource allocation. Learning Outcome 3 reflects knowledge and understanding, whilst Learning Outcome 4 deals with the application of this knowledge. These two Learning Outcomes are underpinned by Learning Outcome 1 and 2 where Learning Outcome 1 reflects the interrelationship of Agricultural Management Practices, society and the environment and Learning Outcome 2, which outlines the managerial process that is used as the organising concept.

THE NUMBERING SYSTEM

All Assessment Standards are numbered in the following manner:

- The first number refers to the grade.
- The second number refers to the Learning Outcome.
- The third number refers to the Assessment Standard, for example 10.1.4 implies Grade 10, LO 1 and AS 4.



Learning Outcome 1

Knowledge and understanding of the interrelationship between Agricultural Management Practices, society and the environment

The learner is able to demonstrate an understanding of the interrelationships between Agricultural Management Practices, society and the environment.



Assessment Standards

We know this when the learner is able to:

- 10.1.1
Demonstrate a general awareness of human health and physical environment issues related to various Agricultural Management Practices.
- 10.1.2
Demonstrate a general awareness of poverty, cultural diversity and inequality issues related to various Agricultural Management Practices.
- 10.1.3
Demonstrate a general awareness of domestic regulatory issues related to general Agricultural Management Practices.
- 10.1.4
Demonstrate a general awareness of emerging global issues related to general Agricultural Management Practices.
- 10.1.5
Demonstrate a general awareness of the role of indigenous knowledge systems in Agricultural Management Practices.

Grade 11



Assessment Standards

We know this when the learner is able to:

- 11.1.1
Demonstrate and understand the inter-relationships between human health and physical environment issues related to the specific agricultural production enterprises.
- 11.1.2
Demonstrate and understand the interrelationship among poverty, cultural diversity and inequality issues related to the specific agricultural production enterprises.
- 11.1.3
Demonstrate and understand the inter-relationships between domestic regulatory issues related to specific agricultural production enterprises.
- 11.1.4
Demonstrate and understand the inter-relationships between emerging global issues related to specific agricultural production enterprises.
- 11.1.5
Demonstrate an understanding of the role of indigenous knowledge systems and conservation practices in specific agricultural production enterprises.

Grade 12



Assessment Standards

We know this when the learner is able to:

- 12.1.1
Demonstrate, understand and explain the interrelationships between human health and physical environment issues related to specific agribusiness.
- 12.1.2
Demonstrate, understand and explain the interrelationship among poverty, cultural diversity and inequality issues related to specific agribusiness enterprise.
- 12.1.3
Demonstrate, understand and explain the interrelationships between domestic regulatory issues related to specific agribusiness enterprise.
- 12.1.4
Demonstrate, understand and explain the interrelationships between emerging global issues related to specific agribusiness enterprise.
- 12.1.5
Demonstrate an understanding of the role of indigenous knowledge systems and conservation practices in agribusiness enterprise.



Learning Outcome 2

Management practice process

The learner is able to understand and apply the management practice process.

Note: There is no progression in the Assessment Standards across the grades as the above Learning Outcome is a process. The progression across the grades is reflected in the degree of complexity of the content.



Assessment Standards

We know this when the learner is able to:

- 10.2.1
Identify, investigate, define and analyse the concept and process of planning in the agricultural practice environment using relevant information and communication technology when applicable.
- 10.2.2
Identify, define and analyse the concept and principles of leadership and motivation in an agricultural practice environment.
- 10.2.3
Identify, define and analyse the concept and process of organisation in an agricultural practice environment.
- 10.2.4
Identify, define and analyse the concept and process of control in an agricultural practice environment.
- 10.2.5
Identify, define and analyse the concept of co-ordination of resources and the evaluation of the outcome in an agricultural environment.

Grade 11



Assessment Standards

We know this when the learner is able to:

- 11.2.1
Identify, investigate, define and analyse the decision-making process in a specific agricultural production enterprise using relevant information and communication technology when applicable.
- 11.2.2
Identify, define and analyse the concept and principles of leadership and motivation in a specific agricultural production enterprise.
- 11.2.3
Identify, define and analyse the concept and process of organisation in an agricultural production enterprise.
- 11.2.4
Identify, define and analyse the concept and process of control in an agricultural production enterprise.
- 11.2.5
Identify, define and analyse the concept of co-ordination of resources and the evaluation of the outcome in an agricultural production enterprise.

Grade 12



Assessment Standards

We know this when the learner is able to:

- 12.2.1
Identify, investigate, define and analyse the decision-making process in a specific agribusiness enterprise using relevant information and communication technology when applicable.
- 12.2.2
Identify, define and analyse the concept and principles of leadership and motivation in a specific agribusiness enterprise.
- 12.2.3
Identify, define and analyse the concept and process of organisation in a specific agribusiness enterprise.
- 12.2.4
Identify, define and analyse the concept and process of control in a specific agribusiness enterprise.
- 12.2.5
Identify, define and analyse the concept of co-ordination of resources and the evaluation of the outcome in a specific agribusiness enterprise.



Learning Outcome 3

Knowledge and understanding in Agricultural Management Practices

The learner is able to demonstrate an understanding of the knowledge, principles and concepts used in Agricultural Management Practices.



Assessment Standards

We know this when the learner is able to:

- 10.3.1
Identify and describe management principles used in crop and animal production enterprises.
- 10.3.2
Identify and describe farming systems and the classification of crop and animal production enterprises.
- 10.3.3
Demonstrate an awareness of the economic importance of crop and animal production enterprises.
- 10.3.4
Investigate and describe general soil and water management practices in plant and animal production.
- 10.3.5
Acquire general knowledge and distinguish between various crop and animal management practices.

Grade 11



Assessment Standards

We know this when the learner is able to:

- 11.3.1
Identify, describe and explain management principles used in specific crop and animal production enterprises.
- 11.3.2
Identify, describe and explain farming systems used by specific crop and animal production enterprises.
- 11.3.3
Identify, describe and explain the economic importance of specific crop and/or animal production enterprises.
- 11.3.4
Investigate, characterise and analyse soil and water management aspects for specific crop and animal production enterprises.
- 11.3.5
Acquire specific knowledge related to relevant crop and animal production enterprises.

Grade 12



Assessment Standards

We know this when the learner is able to:

- 12.3.1
Analyse management principles used in relevant agribusinesses.
- 12.3.2
Analyse farming systems as used by specific crop and animal production enterprises.
- 12.3.3
Analyse the economic and financial aspects of specific agribusiness enterprises or supply chains.
- 12.3.4
Analyse post-harvesting, product-assessment practices and other value-adding activities (marketing and processing) for relevant enterprises.
- 12.3.5
Apply specific knowledge related to relevant crop and animal production enterprises in an agribusiness environment.



Learning Outcome 4

Application of knowledge and skills in Agriculture

The learner is able to apply the principles, practices and skills used in Agricultural Management Practices by organising and managing activities in a responsible and effective way.

In Learning Outcome 4 the Assessment Standards of Learning Outcome 3 must be applied in the following contexts:

- ❖ Research skills
- ❖ Management skills
- ❖ Operational skills
- ❖ Technological skills



Assessment Standards

We know this when the learner is able to:

- 10.4.1
Plan, investigate collect, organise and analyse information to apply agricultural principles and identify basic agricultural problems.
- 10.4.2
Identify basic management aspects related to various agricultural production enterprises.
- 10.4.3
Demonstrate the handling of animals and the use of basic agricultural equipment according to relevant health and safety guidelines.
- 10.4.4
Apply and use basic information technology skills to enhance production enterprises.

Grade 11



Assessment Standards

We know this when the learner is able to:

- 11.4.1
Plan, investigate collect, organise and analyse information to apply agricultural principles to production aspects related to agro-ecological regions to solve agricultural-related problems.
- 11.4.2
Identify basic management aspects related to production in certain agro-ecological regions.
- 11.4.3
Demonstrate the responsible handling of animals and the use of related agricultural equipment according to relevant health and safety guidelines.
- 11.4.4
Apply and use information technology skills to enhance specific production enterprises.

Grade 12



Assessment Standards

We know this when the learner is able to:

- 12.4.1
Plan, investigate collect, organise and analyse information to apply agricultural principles to processing and marketing aspects related to a specific agribusiness in a given agro-ecological region to predict and solve agricultural-related problems through responsible decision-making.
- 12.4.2
Identify basic management aspects related processing and marketing aspects in a specific agribusiness in a given agro-ecological region.
- 12.4.3
Demonstrate the responsible handling of animals and the use and comparison of related agricultural equipment according to relevant health and safety guidelines.
- 12.4.4
Apply and use information technology skills to enhance specific agribusiness enterprises.

3.2 CONTENT AND CONTEXTS FOR THE ATTAINMENT OF ASSESSMENT STANDARDS

In this section, content and context are provided to support the attainment of the Assessment Standards. The content indicated needs to be dealt with in such a way to assist the learner to progress to achieve the Learning Outcome. Content must serve the Learning Outcome and not be an end in itself. The context suggested will embed the content in situations that are meaningful to learners and so assist in learning and teaching. The teacher should be aware of and use local context, not necessarily indicated here, which could be more suited to the experiences of the learners. Content and context, when aligned to the attainment of the Assessment Standards, provide a framework for the development of Learning Programmes. The Learning Programme Guidelines give more detail in this respect.



Learning Outcome 1

Knowledge and understanding of the interrelationships between Agricultural Management Practices, society and the environment

The learner is able to demonstrate an understanding of the interrelationships between Agricultural Management Practices, society and the environment.



Assessment Standards

The content and context could include the following:

- 10.1.1
demonstrating a general awareness of human health and physical environment issues related to various Agricultural Management Practices (e.g. HIV and AIDS, chronic ailments and environmental pollution);
- 10.1.2
demonstrating a general awareness of poverty, cultural diversity and inequality issues related to various Agricultural Management Practices (e.g. lack of food security);
- 10.1.3
demonstrating a general awareness of domestic regulatory issues related to general Agricultural Management Practices (e.g. OHS Act [Act 85 of 1993] and Agri-BEE);
- 10.1.4
demonstrating a general awareness of emerging global issues related to general Agricultural Management Practices (e.g. biological farming, biotechnology and the World Trade Organisation); and
- 10.1.5
demonstrating an awareness of the role of indigenous knowledge systems in Agricultural Management Practices.

Grade 11



Assessment Standards

The content and context could include the following:

- 11.1.1 demonstrating and understanding the inter-relationships between human health and physical environment issues related to specific agricultural production enterprises (e.g. HIV and AIDS, chronic ailments and environmental pollution);
- 11.1.2 demonstrating and understanding the inter-relationships amongst poverty, cultural diversity and inequality issues related to specific agricultural production enterprises (e.g. lack of food security);
- 11.1.3 demonstrating and understanding the relationship between domestic regulatory issues related to specific agricultural production enterprises (e.g. OHS Act [Act 85 of 1993] and Agri-BEE);
- 11.1.4 demonstrating and understanding the inter-relationships between emerging global issues related to specific agricultural production enterprises (e.g. biological farming, biotechnology and the World Trade Organisation); and
- 11.1.5 demonstrating an understanding of the role of indigenous knowledge systems and conservation practices in specific agricultural production enterprises.

Grade 12



Assessment Standards

The content and context could include the following:

- 12.1.1 demonstrating, understanding and explaining the interrelationships between human health and physical environment issues related to a specific agribusiness (e.g. HIV and AIDS, chronic ailments and environmental pollution);
- 12.1.2 demonstrating, understanding and explaining the interrelationships amongst poverty, cultural diversity and inequality issues related to specific agribusiness enterprises (e.g. lack of food security);
- 12.1.3 demonstrating, understanding and explaining the relationship between domestic regulatory issues related to specific agribusiness enterprises (e.g. OHS Act [Act 85 of 1993] and Agri-BEE);
- 12.1.4 demonstrating, understanding and explaining the interrelationships between emerging global issues related to specific agribusiness enterprises (e.g. biological farming, biotechnology and the World Trade Organisation); and
- 12.1.5 demonstrating an understanding of the role of indigenous knowledge systems and conservation practices in agribusiness enterprises.



Learning Outcome 2

Management practice process

The learner is able to understand and apply the management practice process.



Assessment Standards

The content and context could include the following:

- 10.2.1
identifying, investigating, defining and analysing the concepts and process of planning in an agricultural practice environment;
- 10.2.2
identifying, defining and analysing the concepts and principles of leadership and motivation in an agricultural practice environment;
- 10.2.3
identifying, defining and analysing the concepts and process of organisation in the agricultural practice environment, for example resource mobilisation (human, physical & financial);
- 10.2.4
identifying, defining and analysing the concepts and process of control (monitoring and directing) in an agricultural practice environment; and
- 10.2.5
identifying, defining and analysing the concepts and principles of co-ordination and the evaluation of the optimal use of resources in an agricultural environment, for example profit maximisation and cost maximisation.

Grade 11



Assessment Standards

The content and context could include the following:

- 11.2.1 identifying, investigating, defining and analysing concepts in the decision-making process in a specific agricultural production enterprise;
- 11.2.2 identifying, defining and analysing the concepts and principles of leadership and motivation (e.g. labour management, supervision and training) in a specific agricultural production enterprise;
- 11.2.3 identifying, defining and analysing the concepts and process of organisation in the specific agricultural production enterprises, for example resource mobilisation (human, physical & financial);
- 11.2.4 identifying, defining and analysing the concepts and process of control (monitoring and directing) in specific agricultural production enterprises; and
- 11.2.5 identifying, defining and analysing the concepts and principles of co-ordination of and the evaluation of optimal use of resources in specific agricultural production enterprises, for example profit maximisation and cost maximisation.

Grade 12



Assessment Standards

The content and context could include the following:

- 12.2.1 identifying, investigating, defining and analysing concepts in the decision-making process in a specific agribusiness enterprise, for example business plan;
- 12.2.2 identifying, defining and analysing the concepts and principles of leadership and motivation (e.g. labour management, supervision and training) in a specific agribusiness enterprise;
- 12.2.3 identifying, defining and analysing the concepts and process of organisation in the specific agribusiness enterprise e.g. resource mobilisation (human, physical and financial);
- 12.2.4 identifying, defining and analysing the concepts and process of control (monitoring and directing) in a specific agribusiness enterprise; and
- 12.2.5 identifying, defining and analysing the concepts and principles of co-ordination of and the evaluation of optimal use of resources in specific agribusiness enterprises, for example profit maximisation and cost maximisation.



Learning Outcome 3

Knowledge and understanding in Agricultural Management Practices

The learner is able to demonstrate an understanding of the knowledge, principles and concepts used in Agricultural Management Practices



Assessment Standards

The content and context could include the following:

- 10.3.1 identifying and describing management principles used in crop and animal production enterprises;
- 10.3.2 identifying and describing farming systems (subsistence or commercial regarding inputs, production and markets) and the classification (types, breeds, cultivars) of crop and animal production enterprises;
- 10.3.3 demonstrating an awareness of the economic importance of crop and animal production enterprises;
- 10.3.4 investigating and describing general soil and water management practices (use and care, soil nutrition, climatic requirements) in plant and animal production; and
- 10.3.5 acquiring general knowledge (establishment, protection, nutrition, reproduction, aftercare) and distinguishing between various crop and animal management practices.

Grade 11



Assessment Standards

The content and context could include the following:

- 11.3.1 identifying, describing and explaining management principles used in specific crop and animal production enterprises;
- 11.3.2 identifying, describing and explaining farming systems, used by specific crop and animal production enterprises;
- 11.3.3 identifying, describing and explaining the economic importance of specific crop and/or animal production enterprises;
- 11.3.4 investigating, characterising and analysing soil and water management aspects (use and care, soil nutrition, climatic requirements) for specific crop and animal production enterprises; and
- 11.3.5 acquiring specific knowledge (establishment, protection, nutrition, reproduction, aftercare) and distinguishing management practices (breeding programme, fodder flow, health programme and yearly programme) related to the relevant crop and animal production enterprises.

Grade 12



Assessment Standards

The content and context could include the following:

- 12.3.1 analysing and explaining management principles used in relevant agribusinesses;
- 12.3.2 analysing farming systems used by specific crop and animal production enterprises;
- 12.3.3 analysing the economic and financial aspects of specific agribusiness enterprises or supply chains;
- 12.3.4 analysing the post-harvesting, product-assessment practices and other value-adding activities (marketing and processing) for relevant enterprises; and
- 12.3.5 applying specific knowledge related to relevant crop and animal production enterprises in an agribusiness environment.



Learning Outcome 4

Application of knowledge and skills in Agriculture

The learner is able to apply the principles, practices and skills used in Agricultural Management Practices by organising and managing activities in a responsible and effective way.



Assessment Standards

The content and context could include the following:

- 10.4.1
Research skills
planning, investigating collecting, organising and analysing information (e.g. soil aspects, reproduction, nutrition and aftercare) to apply agricultural principles and identify basic agricultural problems;
- 10.4.2
Management skills
identifying basic management aspects related to various agricultural production enterprises;
- 10.4.3
Operational skills
demonstrating the handling of animals and the use of basic agricultural equipment according to the manufacturer's instruction manual and the Occupational Health and Safety Act; and
- 10.4.4
Technological skills
applying and using basic information technology skills to enhance production enterprises (e.g. crop rotation, simple records and health programmes).

Grade 11



Assessment Standards

The content and context could include the following:

- 11.4.1
Research skills
 planning, investigating collecting, organising and analysing information (e.g. soil analyses, reproduction, nutrition and aftercare) to apply agricultural principles to production aspects related to agro-ecological regions to solve agricultural-related problems;
- 11.4.2
Management skills
 identifying management aspects (e.g. planning, organising, control, evaluation, feedback) of production aspects related to agro-ecological regions to solve agricultural-related problems;
- 11.4.3
Operational skills
 demonstrating the responsible (ethical treatment) handling of animals and the use of related agricultural equipment according to the manufacturer's instruction manual and the Occupational Health and Safety Act; and
- 11.4.4
Technological skills
 applying and using information technology skills to enhance specific production enterprises (e.g. breeding programmes, basic crop simulation programmes).

Grade 12



Assessment Standards

The content and context could include the following:

- 12.4.1
Research skills
 planning, investigating collecting, organising and analysing information to apply agricultural principles to processing and marketing aspects (e.g. value adding) related to a specific agribusiness in a given agro-ecological region to predict and solve agricultural-related problems through responsible decision making;
- 12.4.2
Management skills
 identifying management aspects (e.g. planning, organising, control, evaluation, feedback) of processing and marketing related to a specific agribusiness in a given agro-ecological region;
- 12.4.3
Operational skills
 demonstrating the responsible (ethical treatment) handling of animals and the use of related agricultural equipment according to the manufacturer's instruction manual and the Occupational Health and Safety Act; and
- 12.4.4
Technological skills
 applying and using information technology skills to enhance specific agribusiness practices (e.g. record-keeping, cash flow, basic feed formulation and fodder flow programmes).

CHAPTER 4

ASSESSMENT

4.1 INTRODUCTION

Assessment is a critical element of the National Curriculum Statement Grades 10–12 (General). It is a process of collecting and interpreting evidence to determine a learner's progress in learning and to evaluate a learner's performance. Evidence can be collected at different times and places, using various methods, instruments, modes and media.

To ensure that assessment results can be accessed and used for various purposes at a future date, the results have to be recorded. There are various approaches to recording learners' performances. Some of these are explored in this chapter. Others are dealt with in a more subject-specific manner in the Learning Programme Guidelines.

Many stakeholders have an interest in how learners perform in Grades 10–12. These include the learners themselves, parents, guardians, sponsors, Provincial Departments of Education, the Department of Education, the Ministry of Education, employers and Higher Education and Training Institutions. Therefore, assessment results have to be reported to facilitate access to learners' overall performances and to infer learners' competences. There are many ways of reporting. The Learning Programme Guidelines and the *Qualifications and Assessment Policy Framework for Grades 10–12 (General)* discuss ways of recording and reporting on school-based and external assessment and guide assessment issues specific to the subject.

4.2 WHY ASSESS

Before a teacher assesses learners, it is crucial that the purposes of the assessment be clearly and unambiguously established. When the purpose of the assessment is understood, a method of assessment can be appropriately matched to the purpose. In turn, decisions and conclusions made based on the assessment will be fair and appropriate to the particular purpose or purposes.

There are many reasons why a learner's performance is assessed. These include monitoring progress and providing feedback; diagnosing or remediating barriers to learning; selecting, guiding and supporting learning; certification and promotion.

In this curriculum, learning and assessment are very closely linked. Assessment helps learners to measure the effectiveness of their learning. It informs them about their own progress and empowers them to take control of and decide about their learning. In this sense, assessment provides information about whether teaching and learning support the achievement of specified Learning Outcomes. When assessment indicates a lack of progress, teaching and learning plans should be changed accordingly.

4.3 TYPES OF ASSESSMENT

This section discusses the following types of assessment:

- Baseline assessment
- Diagnostic assessment
- Formative assessment
- Summative assessment

4.3.1 Baseline assessment

Baseline assessment is important at the start of a grade but can occur at the beginning of any learning cycle. It is used to establish what learners already know and can do. It helps in the planning of activities and developing of Learning Programmes. Baseline assessment is usually recorded informally.

4.3.2 Diagnostic assessment

Any assessment can be used for diagnostic purposes – that is, to discover the cause or causes of a learning barrier. Diagnostic assessment assists in deciding on support strategies or identifying the need for professional help or remediation. It acts as a gauge to redefine Learning Programme goals or to discover what learning has not taken place to put intervention strategies in place.

4.3.3 Formative assessment

Any form of assessment that is used to give feedback to the learner is fulfilling a formative purpose. Formative assessment is a crucial element of teaching and learning. It monitors and supports the learning process. This type of assessment informs all stakeholders about learners' progress. Constructive feedback is a vital component of formative assessment.

4.3.4 Summative assessment

When assessment is used to record a judgment of the learner's competence or performance, it serves a summative purpose. Summative assessment gives a picture of a learner's competence or progress at any specific moment. It can occur at the end of a single learning activity, unit, cycle, term, semester or year of learning. Summative assessment should be planned and a variety of assessment instruments and strategies should be used to enable learners to demonstrate competence.

4.4 WHAT ASSESSMENT SHOULD DO

Assessment should:

- be understood by the learner and by the broader public;
- be clearly focused;
- be integrated with teaching and learning;
- be based on pre-set criteria of the Assessment Standards;
- use a variety of instruments;
- use a variety of methods;
- allow for expanded opportunities for learners;
- be learner-paced and fair; and
- be flexible.

4.5 HOW TO ASSESS

Teachers' assessment of learners' performances must be reliable. This means that teachers' judgments of learners' competences should be consistent across different times, assessment items and markers. The judgments made through assessment should also be valid; that is, they should be made on the aspects of learning that were assessed.

As each assessment cannot be totally valid or reliable by itself, decisions on learner progress must be based on more than one assessment. This is the principle behind continuous assessment (CASS). Continuous assessment bases decisions about learning on a range of different assessment activities and events that happen at different times throughout the learning process. It involves assessment activities that are spread throughout the year, using various kinds of assessment instruments and methods such as tests, examinations, projects and assignments. Oral, written and performance assessments are included. The different pieces of evidence that learners produce as part of the continuous assessment process can be included in a portfolio. Different subjects have different requirements for what should be included in the portfolio. The Learning Programme Guidelines discuss these requirements further.

Continuous assessment is classroom-based and school-based and focuses on the ongoing manner in which assessment is integrated into the process of teaching and learning. Teachers get to know their learners through day-to-day teaching, questioning, observation and interactions.

Continuous assessment should be applied to those sections of the curriculum that are best assessed through written tests and assignments and those that are best assessed through other methods such as by performance, using practical or spoken evidence of learning.

4.6 METHODS OF ASSESSMENT

4.6.1 Self-assessment

As all Learning Outcomes and Assessment Standards are transparent, learners know what is expected of them. Therefore, through self-assessment, learners can 'pre-assess' their work before the teacher does the final assessment. Reflection on one's own learning is a vital component of learning.

4.6.2 Peer assessment

Peer assessment, using a check list or rubric, helps both the learners whose work is being assessed and the learners who are doing the assessment. The sharing of the criteria for assessment empowers learners to evaluate their own and others' performances.

4.6.3 Group assessment

The ability to work effectively in groups is one of the Critical Outcomes. Assessing group work involves looking for evidence that the group of learners co-operate, assist one another, divide work, and combine individual contributions into a single, composite assessable product. Group assessment looks at the process and the product. It involves assessing social skills, time management, resource management and group dynamics as well as the output of the group.

4.7 METHODS OF COLLECTING ASSESSMENT EVIDENCE

There are various methods of collecting evidence. Some of these are discussed below.

4.7.1 Observation-based assessment

Observation-based assessment tends to be less structured and develops of a record of different kinds of evidence for different learners at different times. This kind of assessment is often based on tasks that require learners to interact with one another in pursuit of a common solution or product. Observation has to be intentional and should be conducted with the help of an appropriate observation instrument.

4.7.2 Test-based assessment

Test-based assessment is more structured and enables teachers to gather the same evidence for all learners in the same way and at the same time. This kind of assessment creates evidence of

learning that is verified by a specific score. If used correctly, tests and examinations are an important part of the curriculum because they give precise evidence of what has been learned.

4.7.3 Task-based assessment

Task-based or performance assessment methods aim to show whether learners can apply the skills and knowledge they have learned to unfamiliar contexts or in contexts outside of the classroom. Performance assessment also covers the practical components of subjects by determining how learners put theory into practice. The criteria, standards or rules by which the task will be assessed are described in rubrics or task check lists and help the teacher to assess each learner's performance.

4.8 RECORDING AND REPORTING

Recording and reporting involves the capturing of data collected during assessment so that it can be logically analysed and published in an accurate and understandable way.

4.8.1 Methods of recording

There are different methods of recording. It is often difficult to separate methods of recording from methods of evaluating learners' performances.

The following are examples of different types of recording instruments:

- Rating scales
- Task lists or check lists
- Rubrics

Rating scales

Rating scales are any marking system where a symbol (such as A or B) or a mark (such as 5/10 or 50%) is defined in detail to link the coded score to a competence description which outlines what is required to achieve that score. The detail is more important than the coded score in the process of teaching and learning; it gives learners a much clearer idea of what has been achieved and where and why learning has fallen short of the target. Traditional marking tended to use rating scales without the descriptive details, making it difficult to have a sense of the learners' strengths and weaknesses in terms of intended outcomes. A six-point scale is used in the National Curriculum Statement Grades 10–12 (General).

Task lists or checklists

Task lists or checklists consist of discrete statements describing the expected performance in a particular task. When a particular statement (criterion) on the check list can be observed as having been satisfied by a learner during a performance, the statement is ticked off. All the statements that have been ticked off on the list (as criteria that have been met) describe the learner's performance. These check lists are very useful in peer or group assessment activities.

Rubrics

Rubrics combine rating codes and descriptions of standards. They consist of a hierarchy of standards with benchmarks that describe the range of acceptable performance in each code band. Rubrics require teachers to know exactly what is required by the Learning Outcome. Rubrics can be holistic, giving a global picture of the standard required, or analytic, giving a clear picture of the distinct features that make up the criteria, or can combine both. The Learning Programme Guidelines give examples of subject-specific rubrics.

To design a rubric, a teacher has to decide the following:

- What Learning Outcomes are being targeted?
- What Assessment Standards are targeted by the task?
- What kind of evidence should be collected?
- What are the different parts of the performance that will be assessed?
- What different assessment instruments best suit each part of the task (such as the process and the product)?
- What knowledge should be evident?
- What skills should be applied or actions taken?
- What opportunities for expressing personal opinions, values or attitudes arise in the task and which of these should be assessed and how?
- Should one rubric target all the Learning Outcomes and Assessment Standards of the task or does the task need several rubrics?
- How many rubrics are needed for the task?

It is crucial that a teacher shares the rubric or rubrics for the task with the learners before they do the required task. The rubric focuses both the learning and the performance and becomes a powerful tool for self-assessment.

4.8.2 Reporting performance and achievement

Reporting performance and achievement informs all those involved with or interested in the learner's progress. Once the evidence has been collected and interpreted, teachers need to record the learner's achievements. Sufficient summative assessments need to be made so that the standard achieved by the learner can be reported.

The National Curriculum Statement Grades 10–12 (General) adopts a six-point scale of achievement. The scale is shown in Table 4.1.

Table 4.1 Scale of achievement for the National Curriculum Statement Grades 10–12 (General)

Rating Code	Description of Competence	Marks (%)
6	Outstanding	80–100
5	Meritorious	60–79
4	Satisfactory	50–59
3	Adequate	40–49
2	Partial	30–39
1	Inadequate	0–29

To evaluate the achievement of Learning Outcomes in Grades 10–12, subject competences have been described to distinguish the grade expectations of what learners must know and be able to achieve. Six levels of competence have been described for each subject for each grade. These descriptions will assist teachers to assess learners and place them in the correct rating. The descriptions summarise what is spelled out in detail in the Learning Outcomes and the Assessment Standards and stipulate the distinguishing features that indicate a particular rating that has been achieved. The various achievement levels and their corresponding percentage bands are as shown in Table 4.1.

In line with the principles and practice of outcomes-based assessment, all assessment – both school-based and external – should primarily be criterion-referenced. Marks can be used to evaluate specific assessment tasks but the tasks should be assessed against rubrics instead of simply ticking correct answers and awarding marks in terms of the number of ticks. The statements of competence for a subject describe the minimum skills, knowledge, values and attitudes that a learner should demonstrate to achieve each level of the rating scale.

When teachers or assessors prepare an assessment task or question, they must ensure that the task or question addresses an aspect of a particular Learning Outcome. The relevant Assessment Standard or Standards must be used to create an assessment rubric for the task or question. The descriptions clearly indicate the minimum level of attainment for each category on the rating scale.

4.9 PROMOTION

Although, promotion at Grade 10 and Grade 11 level will be based on internal assessment only, it must be based on the same conditions as stipulated for promotion to attain the Further Education and Training Certificate. The requirements, conditions and rules of combination and condonation are spelled out in the *Qualification and Assessment Policy Framework*.

4.10 WHAT REPORT CARDS SHOULD LOOK LIKE

There are many ways to structure a report card but the simpler the report card the better, providing that all pertinent information is included. Report cards should include information about a learner's overall progress, including the following:

- the learning achievement against Learning Outcomes;
- the learner's strengths;
- the support needed or provided where relevant;
- constructive feedback commenting on the performance in relation to the learner's previous performance and the requirements of the subject; and
- the learner's developmental progress in learning how to learn.

In addition, report cards should include the following:

- Name of school
- Name of learner
- Learner's grade
- Year and term
- Space for signature of parent or guardian
- Signature of teacher and of principal
- Date
- Dates of closing and re-opening of school
- School stamp
- School attendance profile of learner

4.11 ASSESSMENT OF LEARNERS WHO EXPERIENCE BARRIERS TO LEARNING

Learners who experience any barriers to learning are assessed in accordance with the recommended alternative and/or adaptive methods as stipulated in the *Qualifications and Assessment Policy Framework for Grades 10–12 (General)*.

4.12 SUBJECT COMPETENCE DESCRIPTIONS FOR AGRICULTURAL MANAGEMENT PRACTICES

The competence descriptors are a reporting tool. They report on the learners' level of achievement based on the Assessment Standards and the Learning Outcomes.

Grade 10



Code



Scale

6

Outstanding
80%–100%



Competence Descriptions

At the end of Grade 10 the learner with Outstanding Achievement can:

- Develop a justifiable, responsible approach to conservation and socio-economic and global issues in various agricultural production enterprises.
- Always display a positive attitude, interest, enthusiasm and participation and works with complex assignments independently and shows organisational skills.
- Display critical thinking skills and shows an in-depth understanding of various agricultural production enterprises.
- Display extensive evidence of planning, analysis, critical evaluation and interpretation of knowledge gained in various agricultural production enterprises.
- Show exceptional skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate exceptional problem-solving skills in various agricultural production enterprises.

Grade 11



Competence Descriptions

At the end of Grade 11 the learner with Outstanding Achievement can:

- Develop a justifiable, responsible approach to conservation and socio-economic and global issues in specific agricultural production enterprises.
- Always display a positive attitude, interest, enthusiasm and participation and works with complex assignments independently and shows organisational skills.
- Display critical thinking skills and shows an in-depth understanding of specific agricultural production enterprises.
- Display extensive evidence of planning, analysis, critical evaluation and interpretation of knowledge gained in specific agricultural production enterprises.
- Expand on skills developed in previous grades by displaying exceptional skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate exceptional problem-solving skills in the specific agricultural production enterprises.

Grade 12



Competence Descriptions

At the end of Grade 12 the learner with Outstanding Achievement can:

- Develop a justifiable, responsible approach in to conservation and socio-economic and global issues in agribusiness.
- Always display a positive attitude, interest, enthusiasm and participation and works with complex assignments independently and shows organisational skills.
- Display critical thinking skills and shows an in-depth understanding of agribusiness entrepreneurial skills.
- Display extensive evidence of planning, analysis, critical evaluation and interpretation of knowledge gained in agribusiness.
- Expand on skills developed in previous grades by displaying exceptional skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate exceptional problem-solving skills in agribusiness.

Grade 10



Code



Scale

5

Meritorious
60%–79%



Competence Descriptions

At the end of Grade 10 the learner with Meritorious Achievement can:

- Develop a sound, responsible approach to conservation and socio-economic and global issues in agricultural production enterprises.
- Regularly display a positive attitude, interest, enthusiasm and participation, is organised and works independently most of the time.
- Display critical thinking skills and shows understanding of various agricultural production enterprises.
- Display evidence of planning, analysis, evaluation and interpretation of knowledge gained in various agricultural production enterprises.
- Show advanced skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate advanced problem-solving skills in general agricultural production enterprises.

Grade 11



Competence Descriptions

At the end of Grade 11 the learner with Meritorious Achievement can:

- Develop a sound, responsible approach to conservation and, socio-economic and global issues in agricultural production enterprises.
- Regularly display a positive attitude, interest, enthusiasm and participation, is organised and works independently most of the time.
- Display critical thinking skills and shows an understanding of specific agricultural production enterprises.
- Display evidence of planning, analysis, evaluation and interpretation of knowledge gained in specific agricultural production enterprises.
- Expand on skills developed in previous grades by displaying advanced skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate advanced problem-solving skills in specific agricultural production enterprises.

Grade 12



Competence Descriptions

At the end of Grade 12 the learner with Meritorious Achievement can:

- Develop a sound, responsible approach to conservation and socio-economic and global issues in agribusiness.
- Regularly display a positive attitude, interest, enthusiasm and participation, is organised and works independently most of the time.
- Display critical thinking skills and shows an understanding of agribusiness.
- Display evidence of planning, analysis evaluation and interpretation of knowledge gained in agribusiness.
- Expand on skills developed in previous grades by displaying advanced skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate advanced problem-solving skills in agribusiness.

Grade 10



Code



Scale

4

Satisfactory
50%–59%



Competence Descriptions

At the end of Grade 10 the learner with Satisfactory Achievement can:

- Develop a general knowledge of conservation and socio-economic and global issues in agricultural production enterprises.
- Usually display a positive attitude, interest, enthusiasm and participation, is organised and works independently with minimum guidance.
- Display critical thinking skills and shows some understanding of general agricultural production enterprises.
- Display some evidence of planning, analysis, evaluation and interpretation of knowledge gained in various agricultural production enterprises.
- Show above average skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate above average problem-solving skills in general agricultural production enterprises.

Grade 11



Competence Descriptions

At the end of Grade 11 the learner with Satisfactory Achievement can:

- Develop a general knowledge of conservation and socio-economic and global issues in agricultural production enterprises.
- Usually display a positive attitude, interest, enthusiasm and participation, is organised and works independently with minimum guidance
- Display critical thinking skills and shows some understanding of specific agricultural production enterprises.
- Display some evidence of planning, analysis, evaluation and interpretation of knowledge gained in specific agricultural production enterprises.
- Expand on skills developed in previous grades by displaying above average skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate above average problem-solving skills in specific agricultural production enterprises.

Grade 12



Competence Descriptions

At the end of Grade 12 the learner with Satisfactory Achievement can:

- Develop a general knowledge of conservation, and socio-economic and global issues in agribusiness.
- Usually display a positive attitude, interest, enthusiasm and participation, is organised and works independently with minimum guidance.
- Display critical thinking skills and shows some understanding of agribusiness.
- Display some evidence of planning, analysis evaluation and interpretation of knowledge gained in agribusiness.
- Expand on skills developed in previous grades by displaying above average skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate above average problem-solving skills in agribusiness.

Grade 10



Code



Scale

3

Adequate
40%–49%



Competence Descriptions

At the end of Grade 10 the learner with Adequate Achievement can:

- Develop a basic approach to conservation and socio-economic and global issues in agricultural production enterprises.
- Occasionally display a positive attitude, interest, enthusiasm and participation, is organised and works under limited supervision.
- Display basic thinking skills and shows basic understanding of general agricultural production enterprises.
- Display limited evidence of planning, evaluation and interpretation of knowledge gained in various agricultural production enterprises.
- Show average skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate average problem-solving skills in various agricultural production enterprises.

Grade 11



Competence Descriptions

At the end of Grade 11 the learner with Adequate Achievement can:

- Develop a basic approach to conservation and socio-economic and global issues in agricultural production enterprises.
- Occasionally display a positive attitude, interest, enthusiasm and participation, is organised and works under limited supervision.
- Display basic thinking skills and shows general understanding of specific agricultural production enterprises.
- Display limited evidence of planning, evaluation and interpretation of knowledge gained in specific agricultural production enterprises.
- Expand on skills developed in previous grades by displaying average skills in handling the specific agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate average problem-solving skills in the specific agricultural production enterprises.

Grade 12



Competence Descriptions

At the end of Grade 12 the learner with Adequate Achievement can:

- Develop a basic approach to conservation and socio-economic and global issues in agribusiness.
- Occasionally display a positive attitude, interest, enthusiasm and participation, is organised and works under limited supervision.
- Display basic thinking skills and shows an understanding of agribusiness.
- Display limited evidence of planning, evaluation and interpretation of knowledge gained in general agribusiness.
- Expand on skills developed in previous grades by displaying average skills in handling specific agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate average problem-solving skills in agribusiness.

Grade 10



Code



Scale

2

Partial
30%–39%



Competence Descriptions

At the end of Grade 10 the learner with Partial Achievement can:

- Develop a limited approach in conservation, socio-economic and global issues in agricultural production enterprises.
- Occasionally display a poor attitude, with little interest, enthusiasm or participation, shows very limited ability to organise and works independently with difficulty needing regular supervision.
- Display basic thinking skills with difficulty and shows a limited understanding of various agricultural production enterprises.
- Display restricted evidence only with assistance of planning, evaluation and interpretation of knowledge gained in various agricultural production enterprises.
- Show below average level skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate partial problem-solving skills in various agricultural production enterprises.

Grade 11



Competence Descriptions

At the end of Grade 11 the learner with Partial Achievement can:

- Develop a limited approach to conservation and socio-economic and global issues in specific agricultural production enterprises.
- Occasionally display a poor attitude, with little interest, enthusiasm or participation, shows very limited ability to organise and works independently with difficulty needing regular supervision.
- Display basic thinking skills with difficulty and shows a limited understanding of specific agricultural production enterprises.
- Display restricted evidence only with assistance of planning, evaluation and interpretation of knowledge gained in specific agricultural production enterprises.
- Expand on skills developed in previous grades by displaying below average skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate partial problem-solving skills in specific agricultural production enterprises.

Grade 12



Competence Descriptions

At the end of Grade 12 the learner with Partial Achievement can:

- Develop a limited approach to conservation and socio-economic and global agribusiness.
- Occasionally display a poor attitude, with little interest, enthusiasm or participation, shows very limited ability to organise and works independently with difficulty needing regular supervision.
- Display basic thinking skills with difficulty and shows a limited understanding of agribusiness.
- Display restricted evidence only with assistance of planning, evaluation and interpretation of knowledge gained in agribusiness.
- Expand on skills developed in previous grades by displaying below average skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate partial problem-solving skills in agribusiness.

Grade 10



Code



Scale



Competence Descriptions

1

Inadequate
0%–29%

At the end of Grade 10 the learner with Inadequate Achievement can:

- Seldom show a responsible approach to conservation and socio-economic and global issues in agricultural production enterprises.
- Often display a negative attitude, interest, enthusiasm or participation, is not organised and works independently with difficulty needing constant supervision.
- Display some critical thinking skills with difficulty and assistance and shows a limited understanding of various agricultural production enterprises.
- Display limited evidence and need assistance in the evaluation and interpretation of knowledge gained in various agricultural production enterprises.
- Show limited skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate limited problem-solving skills in various agricultural production enterprises.

Grade 11



Competence Descriptions

At the end of Grade 11 the learner with Inadequate Achievement can:

- Seldom show a responsible approach to conservation and socio-economic and global issues in specific agricultural production enterprises.
- Often display a negative attitude, interest, enthusiasm or participation, is not organised and works independently with difficulty needing constant supervision.
- Display some critical thinking skills with difficulty and assistance and shows a limited understanding of specific agricultural production enterprises.
- Display limited evidence and need assistance in the evaluation and interpretation of knowledge gained in specific agricultural production enterprises.
- Expand on skills developed in previous grades by displaying limited skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate limited problem-solving skills in the specific agricultural production enterprises.

Grade 12



Competence Descriptions

At the end of Grade 12 the learner with Inadequate Achievement can:

- Seldom show a responsible approach to conservation and socio-economic and global issues in agribusiness.
- Often display a negative attitude, interest, enthusiasm or participation, is not organised and works independently with difficulty needing constant supervision.
- Display some critical thinking skills with difficulty and assistance and shows a limited understanding of agribusiness.
- Display limited evidence and need assistance in the evaluation and interpretation of knowledge gained in agribusiness.
- Expand on skills developed in previous grades by displaying limited skills in handling basic agricultural equipment suited to the task according to the prescribed guidelines.
- Demonstrate limited problem-solving skills in general agribusiness.

GLOSSARY

agribusiness – production, transportation, processing (value-adding) and marketing of agronomic crops, livestock, livestock products and natural fibres

agritourism – the act of visiting a working farm or any agricultural, horticultural or agribusiness operation for the purpose of enjoyment, education or active involvement in the activities of the farm or operation

agro-ecological region – natural habitat defined by similar soils, temperature and rainfall patterns that are unique for the production of certain plants and animals

agronomy – the science of land cultivation, soil management and crop production

animal production – the rearing of any animals for food or other use within farming systems

aquaculture – a production system using water as the main medium of rearing animals

biological farming – A farming system that excludes the use of synthetically manufactured fertilisers, pesticides, growth regulators and livestock feed additives. It relies on crop rotations, crop residues, animal manure, legumes, green manure, organic waste and aspects of biological inputs to maintain soil productivity and tillage to supply plant nutrients and control insects, weeds and other pests.

biotechnology – the use of scientific techniques to increase production efficiency of plants and animals to improve their quality and meet the changing demands of consumers

commercial farming – specialised farming enterprise that is capital-intensive and aimed at profit maximisation

conservation – preservation and protection of the environment and its natural resources like soil, water, plants and animals

crop production – production of any group of plants for food or other use within farming systems

crop rotation – production of crops alternatively on the same piece of soil in consecutive seasons

enterprise – organised business activities aimed specifically at growth and profit

entrepreneur – an individual with the creative ability to initiate a business venture

environment – immediate surroundings that influence an individual's actions and livelihood

farming systems – a population of individual farms that have broadly similar resource bases, enterprise patterns, household livelihoods and constraints and for which similar development strategies and interventions would be appropriate, for example subsistence versus commercial, irrigated versus dryland, monoculture versus crop rotation and mixed farming versus simple enterprises

food security – the availability and/or access to sufficient food required to lead a normal life at individual, household and national level

global – concerning or including the world; relating to or happening throughout the world

horticultural – science and art of growing fruits, vegetables flowers shrubs and trees

indigenous knowledge – knowledge originating in and typical of a region or country

integrated pest management – the sustainable management of pests, using multiple intervention methods such as biological, cultural, mechanical and chemical control techniques

natural resources – a resource produced by nature; present in or produced by nature, rather than being artificial or created by people

outcome – result of an action or process

precision farming – using information technology (GPS and GIS) to tailor soil and manage crops to fit the specific conditions of a field

risk management – reducing the probability of economic loss resulting from physical financial market and social upheaval using intervention methods that include insurance, contracting, portfolio diversification and/or fireguards

skills – the knowledge and ability to do something well; a type of work or craft which requires special training and knowledge

sustainability – meeting the needs of the present generation without compromising the ability of future generations to meet their own needs

subsistence farming – form of agriculture where farmers aim to provide enough food for themselves and their families

value adding – the activity of increasing the economic value of agricultural products (services)

viticulture – the production and harvesting of grapes