Every child is a National Asset

A THREE YEAR CURRICULUM RECOVERY GUIDELINE

Mediation of the National Recovery ATP

AGRICULTURAL SCIENCES

Grade 10 - 12

Implementation date : January 2021

basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA

Read to Lead

Presentation Outline

1. Purpose
2. Introduction
3. Vision and Rationale
4. Principles
5. Underpinning assumptions
6. Key Recovery Strategies
7. Amendment to the Grade 10-12 Content Map for Agricultural Sciences
8. Amendments to the Annual Teaching Plan;
9. Amendments School Based Assessment (SBA)
10. Conclusion

Purpose

The Three Year Curriculum Recovery Guideline outlines the development of the three year recovery ATPs to manage learning loss over a period of three years **2021 Recovery ATPs as stipulated in Circular S13 of 2020**.

Introduction

COVID 19 led to losses in teaching and learning time due to:

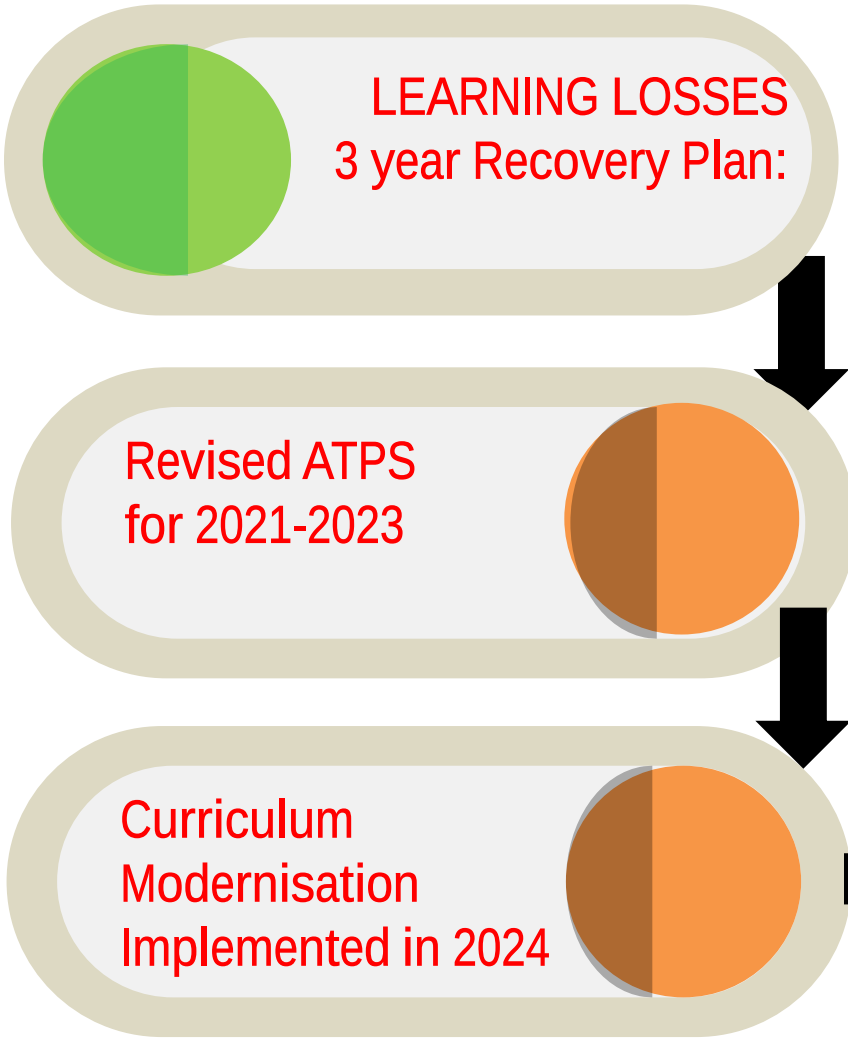
- the lockdown period and phased reopening of schools,
- Alternating time tabling models and
- the related health and safety protocols.

Furthermore, the revision of the school calendar and intermittent closure of many schools negatively impacted the ability of teachers to implement the revised 2020 ATPs as envisioned.

To mediate the impact and support teachers in managing teaching, assessment and learning within the reduced time, the DBE in 2020 implemented:

- Circular S3 that outlined and guided teachers to conduct context specific subject trimming, in consultation with subject advisors.
- National Assessment Circular 02 and Circular E 11 to guide school-based assessment in phases and subjects

Vision 2024

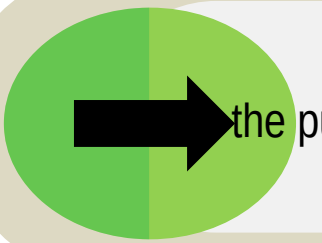


- Conceptualisation of a Curriculum Strengthening process that encompasses Competencies required for the Changing World;
- Develop Revised Modernised Curriculum Policy Statements in alignment with amended CAPS Section 4 and 2020 Assessment Circulars;
- Develop an Assessment for Learning pedagogical strategy, and
- Develop Educator Mediation Programmes.

Rationale for the Guideline

To outline the **process to develop** the Three-year Recovery Plan in managing the learning losses over a period of three years

RATIONALE FOR THIS GUIDELINE



LEARNING LOSSES the purpose of this exercise are defined as:

Learning Outcomes *(content, skills & competencies, values & attitudes) as stated in the revised ATPs not achieved during the 2020 school year.*

Principles

1. Use of the 2020 Curriculum Recovery Framework as the base document
2. Learning losses inform the Three Year Recovery Plans for School –based Assessment
3. Management of the learning losses and the School Based Recovery Plans
4. Create opportunities through adjusted ATPs to strengthen pre-knowledge, consolidation, revision, and deeper learning
5. Entrench Assessment for Learning as a Pedagogical Approach to address the learning losses

Principles

6. The 2021 Recovery ATPs maintains the use of current LTSM and resources already available in the system.

7. Content topics removed in 2020 were not automatically returned in the 2021 Recovery ATPs.

8. Fundamental and core topics were retained in the Recovery ATPs

9. To guide and support effective teaching and learning

Underpinning Assumptions

1

ASSUMPTION 1

All learners will return to school from day 1 of the 2021 academic year and norm-times as stipulated in the CAPS will be adhered to for the entire school year;

2

ASSUMPTION 2

Learning losses due to COVID-19 across grades and subjects will vary from school to school, class to class and even within classes.

3

ASSUMPTION 3

Each Teacher will have a record of learning losses and Departmental Heads and Subject Advisors will monitor progress in learning loss recovery;

Underpinning Assumptions

4

5

6

ASSUMPTION 4

All schools will develop & implement school-based support programmes for all grades/years with particular **focus on all the exit grades/years** (3, 6, 9 and 12) **throughout the three-year period.**

ASSUMPTION 5

All Circulars related to the 2020 ATPs including SBA to be withdrawn and revised to align to the 2021 ATPs.

ASSUMPTION 6

Schools have systems in place to manage the possibility of a second wave of the pandemic in Q1 and Q3 of the 2021

The Development of the 2021 Recovery ATPs

The Recovery ATPs are aligned to the:

- 2021 School calendar
- Abridged Section 4 of CAPS
- Curriculum and assessment principles as prescribed in the CAPS policy for Agricultural Sciences.

Amendments to the Content Map for Grades 10-12 Agricultural Sciences

Summary: Amendments to the Content Overview for the Phase

Grade 10	Grade 11	Grade 12
*Trimmed * Reorganised *No amendment		
Agricultural Ecology	Basic Agricultural Chemistry	Animal Nutrition
• Ecology and Agri- Ecology • Interactions in Ecosystems • Grazing Ecology and Pasture Sciences – Veld Types • Farming Systems • Biomes of SA • Climate and Weather phenomena and its influence on Agriculture	Basic terminology e.g. atoms • Elements • Chemical bonding • Inorganic and organic compounds • Alkanes and alcohols • Acids and bio-molecules • Proteins & carbohydrates	• Digestive systems of ruminants and non ruminants – ruminants, pig & poultry • Digestion • Components, Digestibility and types of feed **No amendments**

Summary: Amendments to the Content Overview for the Phase

Grade 10	Grade 11	Grade 12
*Trimmed * Reorganised *No amendment		
Agricultural Economics	**Soil Sciences**	Animal Production
• Agri – industry, classification and utilisation patterns of food products in SA • Impact of population growth and shift on agricultural production in SA, • Impact of the demand for agricultural commodities on industries, • Changes in the world's and SA population over the past 100 years, impact of secondary and tertiary agricultural development in SA. **Reduced teaching time**	• Soil Texture • Soil Structure • Soil Structure • Soil air • Soil colour and soil pores • Soil Moisture • Soil temperature • Soil morphology & Classification ❖ **Combining topics that fit together in term 2** **Soil Chemistry** • Colloidal and Chemical Properties • Alkalinity, salinity and Acidity • Soil Organic matter-	• Production Systems- Shelter, protection and housing • Animal Protection and Control • Animal Diseases – types and control • Animal Parasites- External / Internal- types and control No amendments

Summary: Amendments to the Content Overview for the Phase

Grade 10	Grade 11	Grade 12
*Trimmed * Reorganised *No amendment		
Agricultural Resources • Sustainable natural resource utilisation • Conservation and Management of Soil and Water • Agricultural Pollution • **Combine topics together in Term 2 Week 1-5**	**Plant Sciences** • Photosynthesis – The importance for agriculture – Not the process • Factors that influence the rate of photosynthesis • Storage organs of photosynthetic products • Plant Nutrition: water and Nutrient uptake • Organic & Inorganic fertilization • Fertilization processes • Plant reproduction – Vegetative& Sexual • Integrated pest and disease control • Plant Improvement- Only introduction to plant	**Animal Reproduction** • Male & female reproduction systems – organs and functions • Oestrus and hormones involved • Fertilization and pregnancy • Artificial Insemination and Embryo transfer • Birth and lactation NO amendment to content
Soil Science • Basic Components • Primary & Secondary Minerals • Rock formation • Soil weathering • Soil forming factors & processes		

Summary: Amendments to the Content Overview for the Phase

Grade 10	Grade 11	Grade 12
*Trimmed * Reorganised *No amendment		
Animal Sciences	**Optimal resource utilization**	**Agricultural genetics**
• Ruminants and Non-Ruminants • Breeds of Cattle • Sheep • Goats • Pigs • Poultry • Horses ❖ **Reduced number of examples to 2 per catogory** ❖ **Overview of main characteristics**	**Remove utilization of water ,Soil Drainage and Soil Cultivation- Fit with Soil Sciences** **Green houses , aquaculture & Hydroponics. Just an overveiw**	**NO amendments:** • Genetic concepts, genetic crosses • The pattern of inheritance that leads to different phenotypes, prepotency and atavism with examples, variation and mutation • General principles of selection, natural and artificial selection, breeding systems • Genetic modification/genetic engineering

Summary: Amendments to the Content Overview for the Phase

Grade 10	Grade 11	Grade 12
*Trimmed * Reorganised *No amendment		
Plant studies		**Production Factors**
Introduction to different Crops: • Fodder Crops • Horticultural Crops • Forestry Crops • Grain Crops ❖ **Reduced number of examples to 2 per catogory** ❖ **Overview of main characteristics**		• Land • Labour • Capital • Management **NO Amendments**
Plant and Animal Cells		**Agricultural Marketing & Management**
The differences between plant and animal cells- **not functions of organelles** The importance of cell division Overview of the process- **not in depth knowledge** The difference in **outcome** of		• Agricultural Marketing • Market equilibrium • Agricultural Marketing systems • Agricultural entrepreneurship

2021 -2023 National Recovery Teaching Plan Grade 10

2021-2023 Amendment Summary

Sub-topics were trimmed in the following topics:

Animal Sciences Gr 10

Plant Sciences Gr 10 & Gr 11

Biological Concepts Gr 10

Resource utilization Gr 10 & Gr 11

Sub-topics were reorganised in the following topics:

- Agricultural resources Gr 10 & Gr 11
- Soil Sciences Gr 11

Gr 10 Summary: Content/Topics Amended

Content/Topics	Term	Amendment
Animal Sciences	Term 3 Week 4-11	Removed: Reduction in number of examples Just overview of different breed no in-depth characteristics
Plant Sciences	Term 4 Week 1-4	Removed: Reduction in number of examples Just overview of different cultivars no in-depth characteristics
Sustainable resource utilization	Term 2 Week 1-5	Combination of Soil and water Management & Agricultural Pollution

Gr 11 Summary:
Content/Topics Amended

Content/Topics	Term	Amendment
Plant Sciences	Term 3 Week 1 Term 4 Week 1&2	Removed: The process of photosynthesis Depth of Plant Improvement and Biotechnology in Plants
Sustainable resource utilization	Term 4 Week 4-6	Removed: Utilization of water,Soil Drainage and Soil Cultivation- Fit with Soil Sciences

4. Amendments School Based Assessment (SBA)

Summary: Amendment to the weighting of tasks GRADES 10,11

- **SBA Weighting of tasks:** Amended to the ratio of **60:40**
- **Abridged amended Section 4** aligned to the 2021 School Calendar

2021-2023 Revised Programme of Assessment Gr 10 & Gr 11

Term 1	Term 2	Term 3	Term 4 (Promotion)
Task 1 Practical Investigation/ Research Task **20% of SBA** **25% of term**	**Task 3** June Control Test **30% of SBA** **100% of Term**	**Task 4** Practical Investigation/ Assignment **20% of SBA** **25% of term**	**End Of the year Examination** **Paper 1 and Paper 2** **150 + 150**
Task 2 March Control Test **15% of SBA** **75% of term**		**Task 5** September Test **15% Of SBA** **75% of term**	**300** **Converted to 40% of promotion**
SBA (100) converted to 60%			**Promotion mark :** **60+40 =100**

Summary: Amendment to the weighting of tasks GRADES 12

- **SBA Weighting of tasks:** Amended to the ratio of **25:75**
- **Abridged amended Section 4** aligned to the 2021 School Calendar

2021-2023 Revised Programme of Assessment Gr 12

Term 1	Term 2	Term 3	Term 4 (Final)
Task 1 Practical Investigation/ Research Task	**Task 3** Practical Investigation/ Assignment	**Task 4** Prelim exam/Trial examination Paper 1 and Paper 2 150 marks	**End Of the year Examination Paper 1 and Paper 2 150 marks + 150 marks**
Task 2 March Control Test 75-100 marks			

4. Conclusion

Conclusion

SBA

- A uniform, standardised approach is used across Grade 10-12 in Agricultural Sciences.
- No important aspect of the Grade 10 & Grade 11 Agricultural Sciences curriculum is compromised.
- The foundational principles of the National Curriculum Statement (NCS) as stated for Agricultural Sciences are included.
- The Recovery ATP exposes learners to a variety of forms of assessment.
- The amended School Based Assessment (SBA) aligns to the content and time available.
- Informal assessment focuses on the principles of assessment for learning.
- Informal activities are compulsory in preparation of the formal assessment.

Contact Details

CES:Mr Kanthan Naidoo

Department of Basic Education

Tel: 012 357-4160

Email:naidoo.k@dbe.gov.za


Thank
You