KEEP IT COOL

CLIMATE CHANGE EDUCATION

Set 2 for School Leadership Teams:

The role of the SLT in creating resilience to climate change

vvob education for development

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Flanders State of the art

This is a support set for School Leadership Teams (SLT) - which includes the School Management Team and the School Governing Body. This set works together with a group of sets for teachers and Professional Learning Communities (PLCs) participating in the Keep It Cool: Climate Change Education (KIC:CCE) Project.

The KIC:CCE Project aims to implement innovative, curriculum activated CCE projects, involving learners and communities. The project aims to facilitate collaborative, continuing professional development and improve the teaching and learning of climate change education in the South African education system. School Leadership Teams are asked to guide and support Secondary school teachers as they implement the change projects, for their successful implementation. At the same time, teachers have the opportunity to form Professional Learning Communities (PLCs) to facilitate their professional development collaboratively. Key themes that run through the materials are gender equity, good governance, and social inclusion. The support sets provide a poster, stories, examples, tools and processes that can be used within the KIC:CCE Project by the School Leadership Team, PLCs, and teachers.

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SET #2 FOR SCHOOL LEADERSHIP TEAMS:

The role of the SLT in creating resilience to climate change

School Leadership Team Set 2 - The role of the SLT in creating resilience to climate change. The curriculum activated climate change project; SLT stories; local matters of concern and risk responses; understanding climate change; responses to climate change

School Leadership Team Set 1 Poster: What is a Climate Adapted and Climate Resilient School?

School Leadership Team Set 3 - Supporting your school in responding to climate variability

THERE ARE 8 SETS FOR TEACHERS IN THIS KEEP IT COOL: CLIMATE CHANGE EDUCATION PROJECT.

WHAT WILL YOU FIND IN THE SLT SETS?

The sets are arranged into three key activity groups:

IMAGINING POSSIBILITIES

A poster exploring **"WHAT DOES A CLIMATE ADAPTED AND CLIMATE RESILIENT SCHOOL LOOK LIKE?"**

FINDING OUT

"THE ROLE OF THE SLT IN CREATING RESILIENCE TO CLIMATE CHANGE"

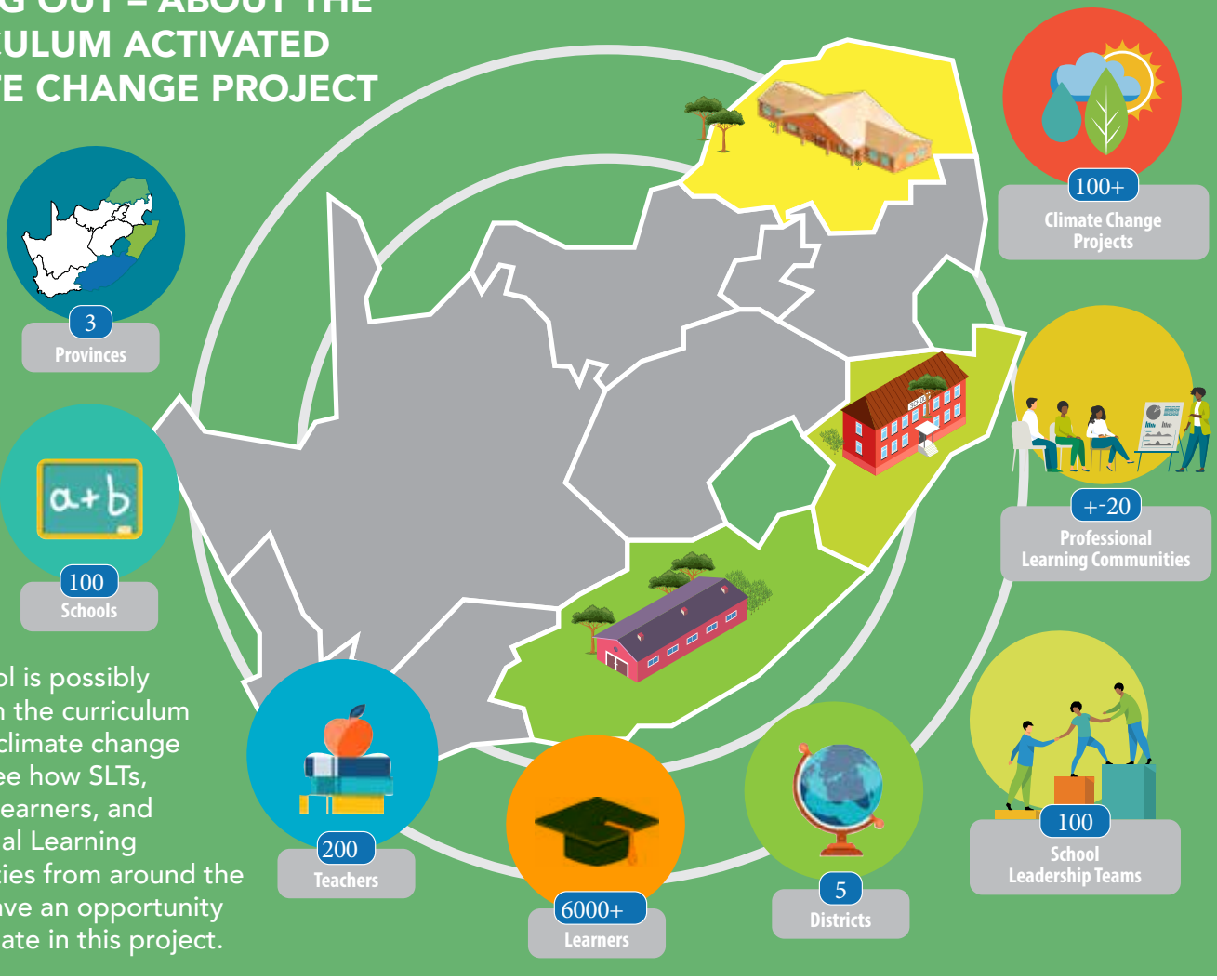
TRYING OUT

"SUPPORTING YOUR SCHOOL IN RESPONDING TO CLIMATE VARIABILITY"

'Imagining possibilities'; 'Finding out' and 'Trying out' appear in each set, as well as each being the focus of a set.

WHAT IS IN THIS SET?

FINDING OUT – ABOUT THE CURRICULUM ACTIVATED CLIMATE CHANGE PROJECT



Your school is possibly involved in the curriculum activated climate change project. See how SLTs, teachers, learners, and Professional Learning Communities from around the country have an opportunity to participate in this project.

FINDING OUT – ABOUT WHAT SLTS ARE DOING

School Leadership Teams taking a stand on climate change
The core responsibility of SLTs is to support, encourage and enable excellent teaching and learning. All other responsibilities support the creation of a conducive environment for teaching and learning.

SLTs can plan and influence how they respond to what happens in their schools and communities. The SLTs of the schools below embraced the idea of influencing what happens – and their leadership is yielding results.

These are examples of local responses to climate change.

SLTs plan for risk, resilience, adaptation, sustainability.

ADAPT
risk **assess**
sustainable

Jiyana Secondary School in Tembisa, Gauteng:

- The SLT supports the school's eco-activities:
  - **Climate–smart food garden -** provides vegetables for the feeding scheme, addressing the school and the community's food security (collaborative partnerships)
  - **Clean ups and waste recycling -** these activities create awareness of the need to care for our environment; encourage community involvement; and support a pleasant, climate adapted and resilient infrastructure. Waste recycling is about using resources wisely and raising funds.
- The SLT encourages teachers to use the school's eco-projects in their teaching.

Three Crowns Primary in Emalahleni, Eastern Cape:

- The SLT created opportunities for Mr Fundisile Zother, the groundkeeper, to learn about climate-smart agriculture and set up a biogas system.
- When the school won an eta* award Mr Zother attended a sustainable energy conference in Sweden.

**The eta awards are named after the Greek letter for efficiency*

Mr Zother says:

> I was introduced to the biogas system, learning how it works. I have never looked back!

(SLT stories from WESSA, 2020.)

DID YOU KNOW?

A **biogas system** relies on the interaction between microorganisms and organic wastes (manure, sewage, agricultural by-products, and discarded food) to produce a **clean and energy-efficient burnable gas.** The gas is used for cooking and heating.

From: Instructables

School Leadership Team Reflection

How can you (as an SLT):

- Create an environment that enables effective teaching and learning and supports your teachers' climate change projects?
- Seek out and use opportunities to learn more about climate variability, vulnerabilities and related risks to the school?
- Make all efforts count, no matter how small?
- Plan for a future that is different; that addresses the vulnerabilities, risks and matters of concern of the community?
- Determine which partnerships would be critical to establish, to support the school to manage risks and disasters?

Through proactive planning, SLTs could support teaching and learning to build resilience.

The depiction of the Namaqua Child and Youth Care Centre shows how it emphasises a holistic approach to learner growth and development – where all aspects are integrated and complementary.

Using their local environmental context supports holistic learner growth and development.

Learning:

- Takes place in connection with the environment.
- Is integrated with curriculum requirements.
- Includes the emotional, physical, cognitive, social and economic aspects of development.

FINDING OUT - ABOUT RISKS AND MATTERS OF CONCERN

How could the SLT's support for the curriculum activated climate change project result in a safer and healthier school environment?

Your teachers might have identified local matters of concern in a task in teacher's set 2.

Identifying areas of concern in your community is an important part of doing your school's annual risk analysis, as required by the DBE. Why is it necessary and important to identify matters of concern in your community?

An SLT must be aware of risks and matters of concern in the local community so that appropriate steps can be taken.

WHAT IS A 'SHARED MATTER OF CONCERN'?

Matters of concern are about building knowledge about *evolving, messy, uncertain* socio-ecological and economic risks and issues. When we work with matters of concern together, we recognise that:

a) No one person, or form of knowledge, holds all the answers.

b) Local contexts are important and valuable.

c) Our knowledge about the complexities of climate change is still uncertain and our understanding is evolving and changing daily.

d) ***Who*** creates knowledge about climate change counts, because their ideas about the world affect how they interpret and establish that knowledge.

e) ***Why*** a scientist makes a particular claim is important because issues related to climate change are always highly political and often, contentious. There are many motives and interests affecting ***how*** we produce knowledge about particular aspects of climate change, and avoid others.

f) The decisions we make using knowledge about climate change always impact on the world, and sometimes this can make things worse, rather than better. Understanding this helps us to be more thoughtful and careful about interventions in response to climate change.

g) We learn continuously while we work out ***what*** is happening; ***why*** it is happening; and ***what*** to do about it, together

The impacts of climate change affect us all differently, depending on who we are and where we live. Reducing our knowledge about climate change to a few (or even many) facts will not help us resolve the many changing risks and issues associated with climate change. Instead, it is useful to focus on ***matters of concern.***

WE ARE SUGGESTING THAT AS AN SLT YOU COULD:

a) Find out about the climate change content in your teachers' subjects.

b) Identify what YOU think are the most pressing 'matters of concern' in your school and community.

c) Apply the lens of governance; infrastructure; teaching and learning; and collaborative partnerships.

a) FIND OUT ABOUT THE CLIMATE CHANGE CONTENT IN YOUR TEACHERS' SUBJECTS

The teachers:

- Identified climate change content in CAPS.
- Identified local matters of concern.
- Thought about how local matters of concern link to the curriculum.
- Explained specifically how the school community is affected by these concerns.
- Had conversations around climate change as seen in your community.

You might like to ask:

- *What teachers found out from 'The Green Book'; the local newspaper; NGOs; community elders; and others.*
- *What they identified as a matter of concern.*
- *How this influenced the choice of a curriculum activated climate change project.*

b) IDENTIFY WHAT YOU THINK ARE THE MOST PRESSING 'MATTERS OF CONCERN' IN YOUR COMMUNITY

Think of the earlier stories and the matters of concern the other SLTs identified.

Increased poverty or ill health linked to changing environmental conditions

Food scarcity/ insecurity

Poor or scarce water supply, or wastage of water

Increased or decreased rainfall

More frequent fires

Flooding

Changes in growing seasons

Excessive heat, drought, desertification, deforestation/ loss of biodiversity

Polluted air, water or land

Are there other issues that we haven't listed, that are a matter of concern to your community? Perhaps you could make a note.

c) APPLY THE LENS OF GOVERNANCE; INFRASTRUCTURE; TEACHING AND LEARNING; AND COLLABORATIVE PARTNERSHIPS

As an SLT, one of your responsibilities is to undertake a risk analysis on your school, for the DBE. See below for the kinds of questions that you could think about when starting to prepare your school's risk assessment:

Reflection: Use the traffic light to rate how well or badly your school is applying each of the areas.

Area	Reflective Questions
Governance	• How do your current school policies and planning identify opportunities for climate resilience and adaption action? • How can the SLT adapt current policies and plans, or develop new policies, to action these?
Teaching and Learning	• How do we support and encourage teachers to implement teaching and learning through a curriculum activated climate change lens? • How are transformative teaching methodologies used by our teachers? • How do our teachers encourage and support critical thinking and action around developing resilience?
Infrastructure	• How do we assess and develop our infrastructure in a climate change resilient manner? • What do we need to change about how we plan and manage our infrastructure to adapt and develop resilience?
Community partnerships	• How do we develop supportive partnerships with the community/ties connected to our school around climate change actions to manage vulnerability and risk?

FINDING OUT

FINDING OUT – ABOUT CLIMATE CHANGE

Some SLT members might have an understanding of climate change. Also, some elders or community members may possess an understanding of the environment, and how conditions might have changed over the years. A broad overview of key concepts about climate change is provided for those who would like to know more.

WHY SHOULD THE SLT SUPPORT TEACHERS AND SCHOOL STAKEHOLDERS TO ACT ON CLIMATE CHANGE?

If we do not act now, the impact of climate change will have a noticeable effect on our environment and our people. Climate change causes: increased temperatures; an increase in diseases such as malaria; flooding or drought; crop failures; and extreme weather - impacting negatively on teaching and learning, the environment, and the school community.

The CSIR's The Green Book is a resource that enables local communities to check predictions of risks and climate events. It can be accessed at: https://greenbook.co.za.

WHEN, WHERE AND HOW DO WE NEED TO ACT FOR CLIMATE CHANGE?

When:	Why:	Where:	How:
We should act **IMMEDIATELY.**	If we do not act decisively **NOW**, there may be catastrophic results.	In our schools and communities.	Through teaching and learning; supportive partnerships; undertaking risk assessments; and planning for resilience.

WHAT IS CLIMATE CHANGE?

"Climate change refers to significant and lasting changes in long-term weather patterns in a specific region or across the whole Earth. It describes changes in overall weather patterns, including precipitation, temperatures, cloud cover, and so on. It can cause an increase or a decrease in the number of extreme weather conditions in an area, or result in a shift in an area's traditional weather patterns[1]."

WHAT IS THE IMPACT OF CLIMATE VARIABILITY?

Women, children, and communities with fewer resources to respond to climate variability impacts, are affected most severely.

WHAT CAUSES CLIMATE CHANGE?

Climate change "is caused by both human activities and natural phenomena, which alter the chemical composition of the atmosphere through the build-up of greenhouse gases[2]."

FINDING OUT – ABOUT RESPONSES TO CLIMATE CHANGE

The previous stories describe what some local schools are doing to respond to climate change challenges. In this section we look at some of our national responses.

THE NATIONAL RESPONSE TO CLIMATE CHANGE

National Climate Change Response White Paper
Lists priority flagship programmes.

National Climate Change Adaptation Strategy (NCCAS)
Provides a common vision of climate change adaptation and climate resilience primarily for the country, and outlines priority areas for achieving this vision.

Everyone has the right:

- to an environment that is not harmful to their health or well-being; and
- to have the environment protected…through measures that prevent pollution and ecological degradation; promote conservation; secure ecologically sustainable development and use of natural resources; while promoting justifiable economic and social development

Chapter 2, The Bill of Rights.

[1] From: Teaching Climate Change 2013 & 2014, pp.4&5. [2] *Ibid.*

State of the Nation Address
*"We cannot lose sight of the threat that **climate change** poses to our environmental health, socio-economic development and economic growth."*
Ramaphosa, 2021: SONA.

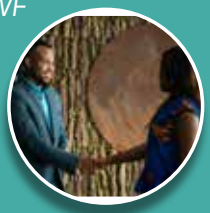
Curriculum and Assessment Policy Statements (CAPS) principles include:
Human rights, inclusivity, environmental and social justice: infusing the principles and practices of social and environmental justice and human rights.

The Department of Forestry, Fisheries and Environment (DFFE) provincial departments have programmes that flow from the national department's strategy. These include:

Working for Land
From WWF

Working for Wetlands

Working for Water
From DFFE



Partnering for Action on the Green Economy

Carbon Offset Programme

Examples of programmes run by Municipalities:

- eThekwini (KZN) – Environmental Health Services Department: air pollution, food safety
- Cape Town – Smart Water Meter Challenge
- Thohoyandou – Waste recycling
- Eastern Cape – Installation of solar geysers

SELECTED ORGANISATIONS WORKING IN CLIMATE CHANGE PROJECTS:

Wildlife and Environment Society South Africa (WESSA); Centre for the Advancement of Science and Mathematics Education (CASME); Earthlife Africa; World Wildlife Fund (WWF) South Africa; GroundWork; Centre for Environmental Rights.

SANBI (South African National Biodiversity Institute) plays an important role in safeguarding our biodiversity.

Your school might be able to partner with one of the initiatives. Organisers often look for schools to participate in their programmes. What other organisations do you know about?

GLOBAL RESPONSES TO CLIMATE CHANGE

Nations are working together with the United Nations to set goals for positive changes. The Sustainable Development Goals, as set out below, give broad targets:

The following information provides an idea about global matters of concern – but you might find that a number are also relevant to your local context.

Reflection: How can you link the Sustainable Development Goals to your context?

The Sustainable Development Goals were developed by the United Nations as *"A blueprint to achieve a better and more sustainable future for all people, and the world, by 2030"*.
https://www.undp.org/sustainable-development-goals

But as nations - and their governments - strive to achieve the goals, each of us can contribute in some way. Identifying, and then dealing with environmental risks and matters of concern in our local context, is a step in the right direction.

WHAT HAS BEEN COVERED IN THIS SET?

This set has looked at:

- How School Leadership Teams are supporting their school communities in implementing climate change projects such as vegetable gardens.
- How projects can be used as resources for teaching and learning.
- How to identify matters of concern in the local context.

Then:

- We explored the impact of climate change on communities.
- We looked at local, national and global responses to climate change.

The next set covers:

- Supporting your school in responding to climate variability.
- How a collaborative, integrated approach led by an SLT can help a school to be sustainable.
- Suggestions for a risk mitigation plan.

THIS SET FOCUSED ON ...

IN THE NEXT SET, YOU WILL BE ABLE TO START:

TRYING OUT - THE CURRICULUM ACTIVATED CLIMATE CHANGE PROJECT

TRYING OUT - APPLYING WHOLE SCHOOL DEVELOPMENT

TRYING OUT - SUPPORTING THE CURRICULUM ACTIVATED CLIMATE CHANGE PROJECT

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Another resource for you:

The KIC: Climate Change Education Project has developed an extensive digital library of materials for all KIC partners.

What is in the resource? Open Educational Resources (OER's) that focus on teaching and learning about climate change and sustainability

When will you be able to access it? The website is live

How can you access the resource? https://ibali.uct.ac.za/s/ccse/page/welcome

How can the resource be used? Its primary purpose is to provide the teaching community (from primary, through to teacher educators) with relevant text and media resources to enhance their teaching practices and courses. You can do general searches by main categories such as climate change topic, foregrounded approach, or target audience. Each general category is then broken down into subtopics to help you find your areas of interest

You will be able to add interesting materials that you generate or find!

If you would like more information about curriculum focused, transformative learning, and transformative teaching and learning methods, then look at the Fundisa for Change core resources. You can download them from the Fundisa for Change website.
https://fundisaforchange.co.za

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