

Every child is a National Asset

Setting the scene:

The holistic GEC Assessment Model

National Training Workshop

25 June 2022



basic education
Department:
Basic Education
REPUBLIC OF SOUTH AFRICA



Read to Lead
A Reading Nation is a Leading Nation

Presentation Outline



What is the GEC?



Working definition

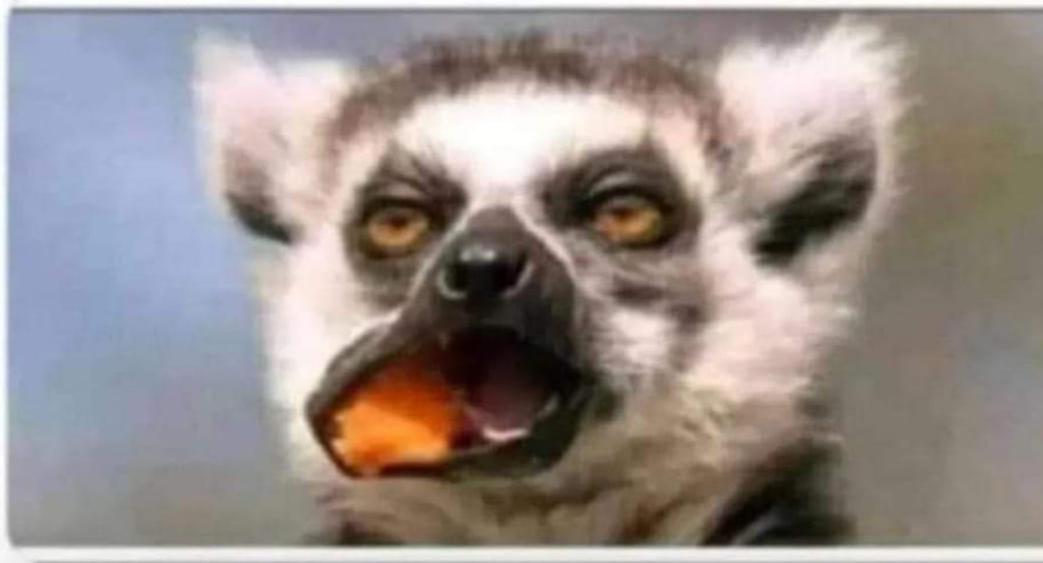
It is an assessment programme based on the teaching and learning of skills over 10 years aimed at advancing general education further for a brighter future for 21st-century learners.



2. Why do we need a holistic model? - Assessment reform



It is trust issues that makes us write exams. You have taught me, I have learnt. Why can't we just move on? 🧑



Reason 1



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Reason 2



Reason 3



“Logic is not always logical”

$$3 \times 10 \neq 10 \times 3$$

Reason 4

Taking 3 tablets per day for 10 days is not the same as taking 10 tablets per day for 3 days.

Context on pre-defined norms matters:



Reason 5

Context for change

The fast
changing
21st century

A new
breadth of
skills

Recurriculate
and
curriculum
strengthening

Learning
progression &
Learning
pathways

Assessment
for learning



3. What problem are we trying to solve?



What is the broad problem statement?

- Lack of learning opportunities for the poor and marginalized leading to: high dropout (at Gr. 9) & high unemployment (post school)

What can we do?

- 1) Re-define teaching and learning outcomes
- 2) Re-skill for 21st century
- 3) Re-focus teacher professional development
- 4) Re-engineer learning pathways
- 5) **Reform the current assessment regime**



The future of work

- We are currently educating for jobs of the past.
- **We teach to jobs of the past.**
- What is needed is less subject knowledge – but skills of problem solving and thinking – digital skills.
- **We are not showing learners the world of the future – there is a growing disconnect.**
- **We are still teaching 19th century mastery of existing or past knowledge – we are not teaching learners to construct knowledge (which they are faced with increasingly in their everyday life). Learners are taught to be passive recipients of knowledge – don't know how to take action to do something with knowledge. We don't give learners agency to change their future.**
- **Teachers of tomorrow will need to adapt their pedagogies to reflect new global and local needs of societies.** Culture is developed from education
- We need to embed values and attitudes in our curriculum design.



Expanding the breadth of skills in GET

An expanded Breadth of skills (Save the children/JET/Brookings Institute/Future Wise)

a) 21st century skills:

1. Critical thinking
2. Communication
3. Collaboration
4. Creativity
5. Cognition (meta)

b) Basic skills: Foundation phase

1. Literacy
2. Numeracy
3. Digital

c) Subject knowledge skills: (Intermediate and Senior phases)

1. Fundamentals
2. Electives

d) Socio-emotional skills: Inclinations assessment

1. What are your talents?
2. What kind of worker are you?
3. What can you do with your talents?

Broad goals of the GEC

- To:
 - Recognise the holistic skill-set for learners over schooling in GET.
 - Set an appropriate curriculum standards to be achieved at the end of Grade 9.
 - Enable learners to access further education streams linked to 3-stream model.
 - Integrate and facilitate the assessment of 21st century skills (critical thinking; creative thinking; collaboration; and communication; digital literacy, self-knowledge, constructing knowledge).
 - To award learners a report card/certificate that reflects the skills, talents and competencies that will be inclusive to all learners and assist them transition from school to work or further education.

4. What key principles are we advocating?



Principle 1: Promote Inclusivity

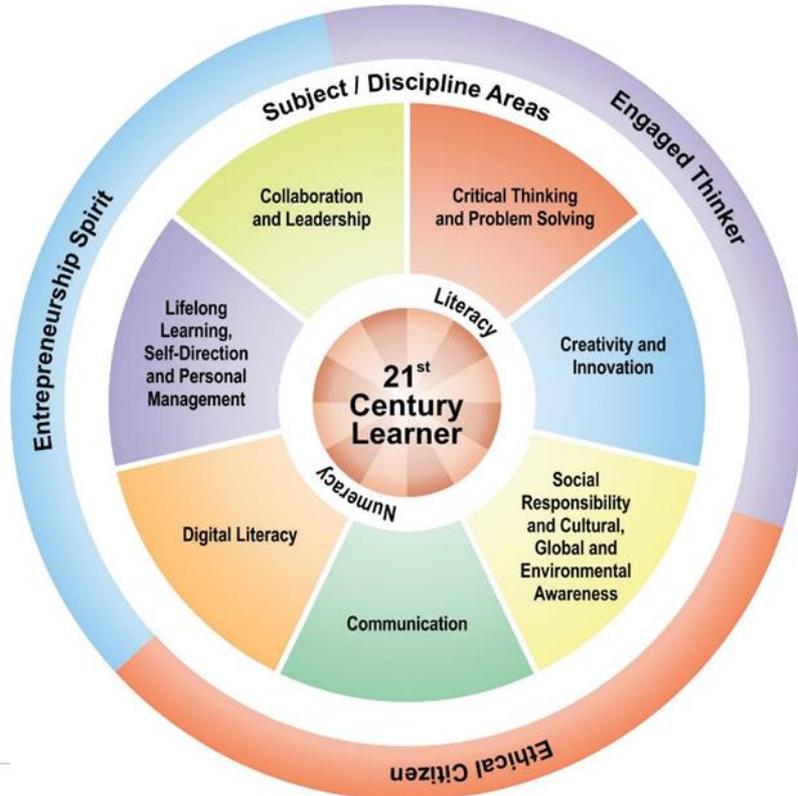
- We are working towards an inclusive model.



- Establishing an education and training system for the 21st century that values human dignity and ensure that all learners, with and without disabilities, pursue their learning potential to the fullest (DBE White Paper 6/2001).
- All learners whether in mainstream or special schools are capable of something and this needs to be recognized at the end of GET.



Principal 2: Infuse 21st Century skills



SA infusing:

1. Critical thinking
2. Communication
3. Creativity
4. Collaboration
5. Cognition (meta)



Principle 3: Apply differentiation

- The GEC must as far as possible be seamlessly implemented at school level (so there will be differentiation in assessment forms linked to a common programme of assessment).
- There must be some minimum norms/standards linked to expected curriculum skills (CAPS or differentiated curriculum) but gradually shifting from norm referenced testing to criterion referenced testing and performance levels.
- Standardisation will come in with common assessment tasks (e.g. integrated projects/ end of year tests) where relevant or suitable to do so.
- The assessment frameworks must be able to work in different school settings.

Principal 4: Broaden the assessment landscape

Current emphasis

Subject-specific skills and capabilities assessed through end of year tests

- Languages
- Mathematics
- Life orientation
- Economics and management sciences
- Social sciences
- Natural sciences
- Technology
- Creative arts
- Occupational Subjects

Fundamentals

Core

Electives

New added emphasis is on assessing 21C skills

- Metacognition
- Critical thinking
- Creative thinking
- Collaboration
- Communication

Broader learner skills and capabilities

- Leadership Initiative
- Working with others
- Persistence
- Planning
- Concern for others
- Enterprise

Inclinations & Talents



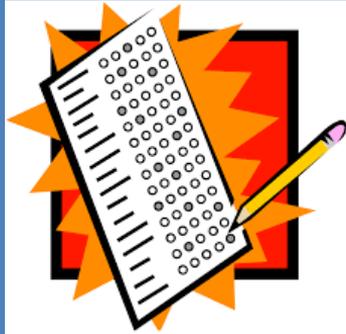
5. What model are we mediating?



The GEC Assessment Model:



An integrated assessment report card



Curriculum
Standardised tests



School Based
Assessment with
an Integrated
project



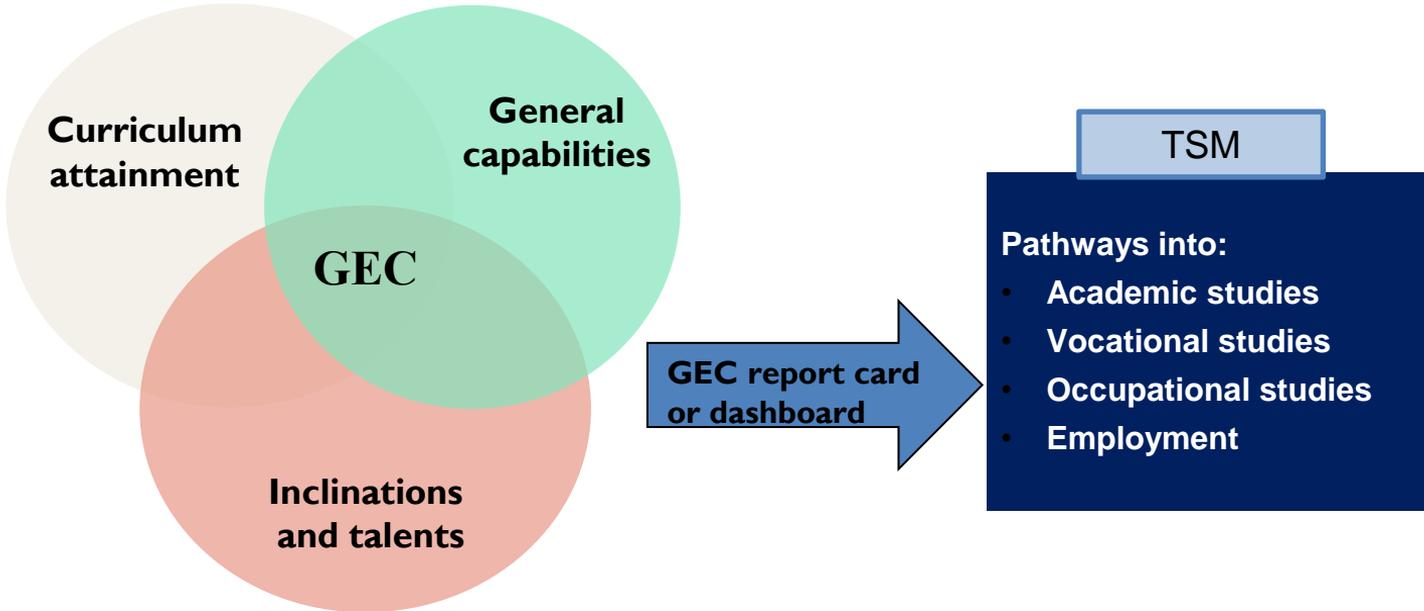
Inclinations/Talents
assessment

GEC REPORT CARD



21st Century Assessment

Holistically assessing learners



6. What are we researching (2021-2022)?



GEC Pilot Study – Research Questions

What are we researching?

1. To what extent will the DBE be able to implement the GEC model in the South African context (Can the pilot study model be upscaled w.r.t administration of the GEC)?
2. How will learners perform in the different components of the GEC assessment model: SBA (and Integrated Project), Curriculum benchmark tests and Inclinations (How can we generate a holistic dashboard)?
3. Were the assessment tasks suitable in terms of key design features and whether learners were disadvantaged?
4. What is the quality of marking of marking of the GEC curriculum tests and Integrated projects (How do quality assure internal school processes with a view to moving from externally set tests to internally set tests)?

Based on these research questions, what are the recommendations needed to be taken in consideration to ensure a successful implementation of the GEC model in SA

2.1 The 2021 Pilot Study

The small-scale pilot in 2021 gave the GEC an opportunity for rich and deep learnings.

Some key points for the 2022 roll out include:

Ensure clear communication, advocacy around time frames and pilot objectives.

Teachers require timely access to rubrics and exemplars to support their understanding and application of training.

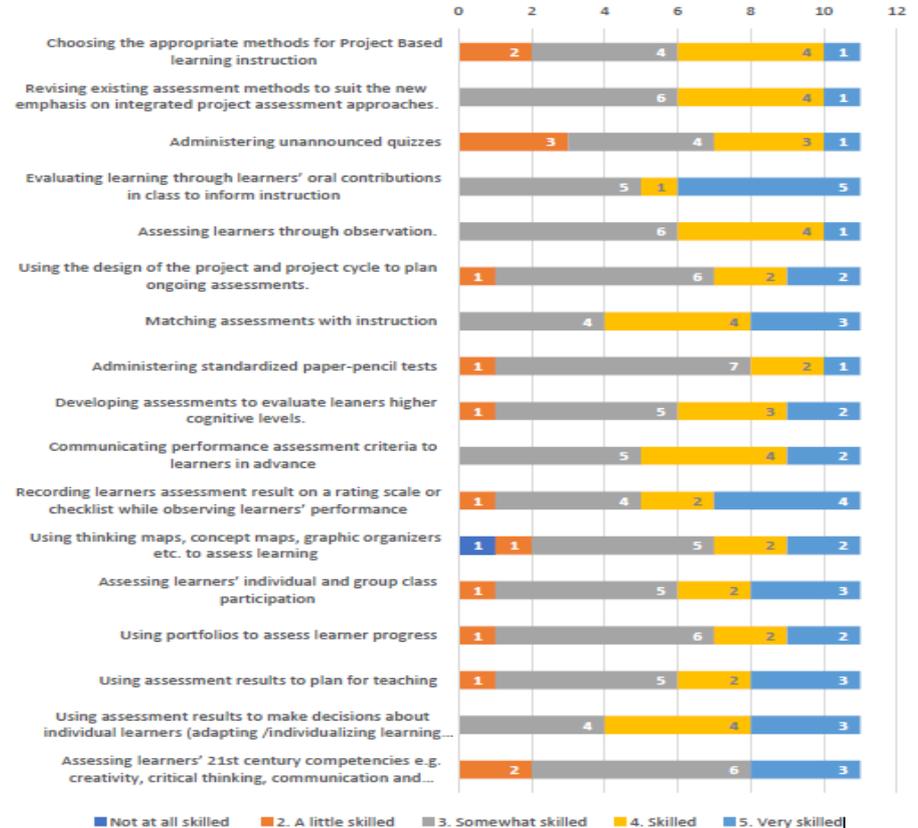
Institutionalised support for low-tech solutions is required for success.

Schools want to use the marks for promotion.

Amendments need to be made on SA-SAMS for extracting the data.

A GEC system is needed for data integration.

FIGURE 10: RESPONDENT PERCEPTION OF THEIR LEVEL OF SKILL WITH ADMINISTERING DIFFERENT TYPES OF ASSESSMENTS



The 2022 pilot study

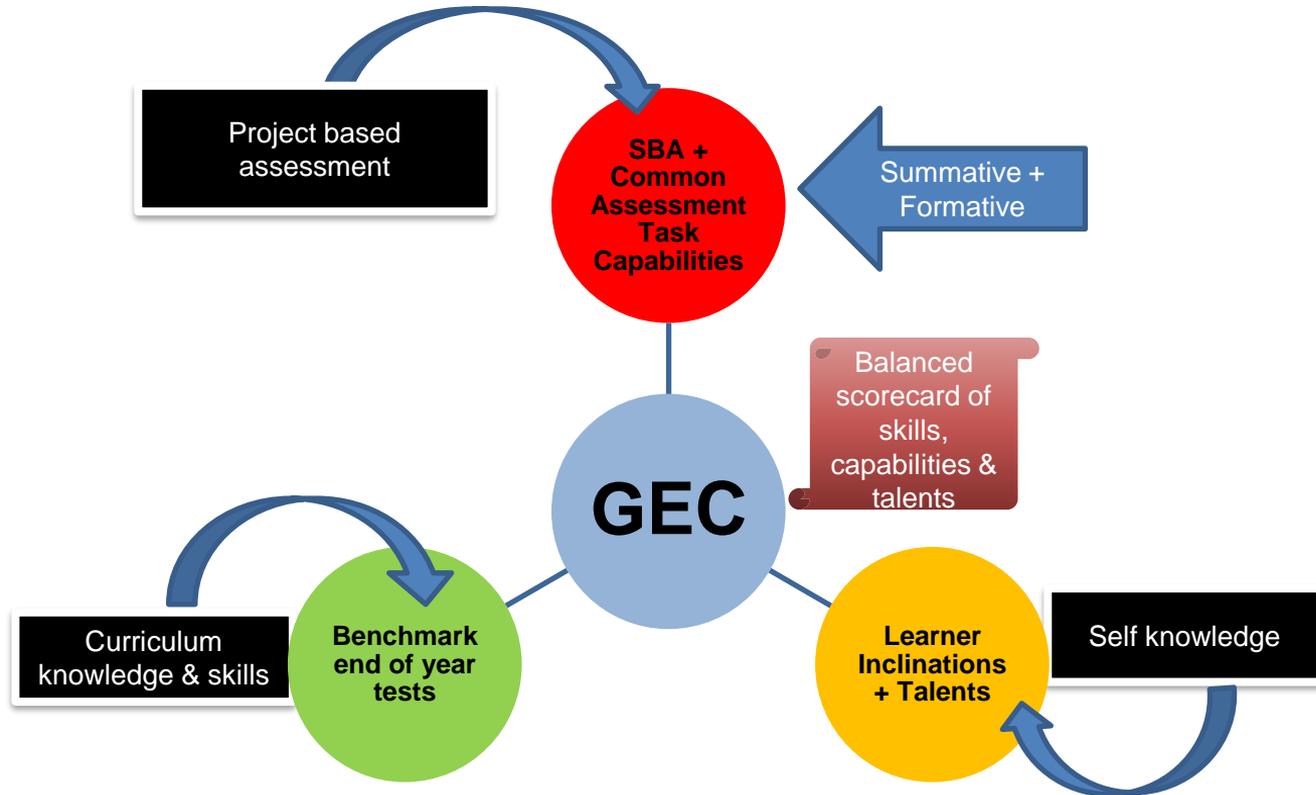
In 2022, the sample for the field trial has increased to 277 schools, representative of the types of schools across all 9 Provinces (approximately 29 schools per province). The table below is a high-level summary of the GEC roll out in 2022

Advocacy	Training (in Term 2)	Integrated Project & Inclinations Assessment (in Term 3)	Curriculum Tests (in Term 4)
<p>Sample for PEDs have been sent through a DG letter to the HoD</p> <p>GEC advocacy will run throughout the trial, starting at the beginning of Term 2.</p>	<p>NB Dates</p> <p>Province & District Officials: May Workshop: 20-22</p> <p>Teacher Training: May- June</p> <p>Sector Workshop: 22-23 July</p>	<p>NB Dates</p> <p>Midline reflection session: wc 15 August</p> <p>Focus Groups: 29 Aug 5 Sep</p> <p>School Visits</p>	<p>NB Dates</p> <p>Endline reflection session: 3 October</p> <p>Project Summit: December</p>
<p style="text-align: center;">   Continuous Support</p>			

All monitored by an online dashboard, in-person visits and a final evaluation report.



Assessment forms



Programme of Assessment Gr 9 requirements - ATP

Subject	Term 1 Tasks	Term 2 Tasks	Term 3 Tasks		Term 4 Tasks	
Home Language First additional Language	3 Tasks	2 Tasks + Controlled test	3 Tasks (1 task carries over to term 4)	Integrated Project – cross cutting theme; subject competencies + 21st century skills	2 tasks + Controlled test	Externally set in identified subjects
Mathematics	1 Task 1 Test	1 Task + 1 Controlled Test	1 Task 1 Test		Controlled test	
Natural Sciences	1 Task 1 Test	1 Task+ 1 Controlled Test	1 Task 1 Test		Controlled test	
Economic and Management Sciences	1 Task 1 Test	Controlled Test P1 & P2	1 Task		Controlled test P1 & P2	
		80%			20%	

[..\..\NATIONAL ASSESSMENT CIRCULARS 2021\2022\NA Circular No. 2 of 2022.pdf](#)

[..\..\NATIONAL ASSESSMENT CIRCULARS 2021\2022\SP Circular 2 Annexure C.docx.pdf](#)

Project-based Learning Process

Solution-seeking mindset



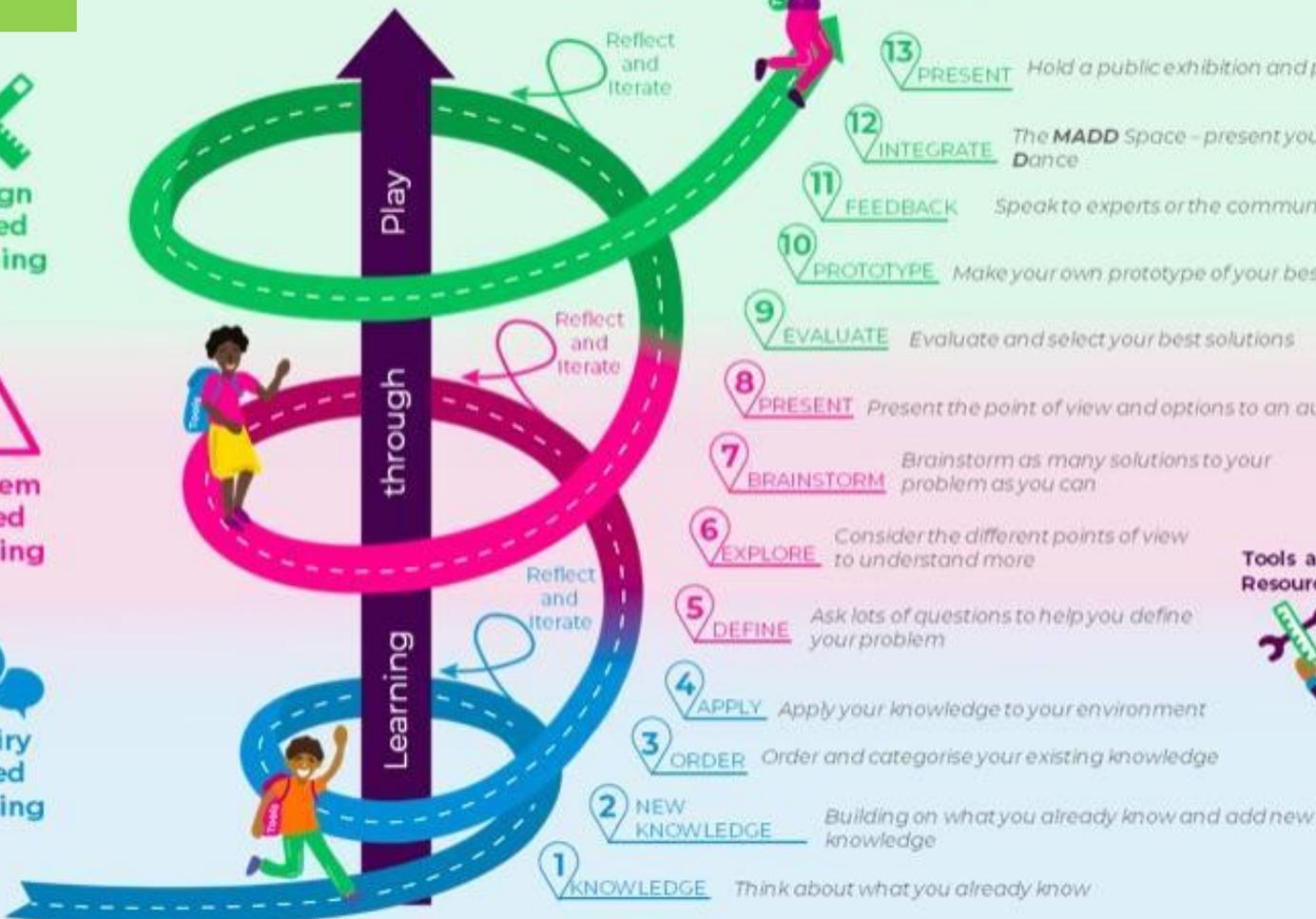
Design Based Learning



Problem Based Learning



Inquiry Based Learning



1 KNOWLEDGE Think about what you already know

2 NEW KNOWLEDGE Building on what you already know and add new knowledge

3 ORDER Order and categorise your existing knowledge

4 APPLY Apply your knowledge to your environment

5 DEFINE Ask lots of questions to help you define your problem

6 EXPLORE Consider the different points of view to understand more

7 BRAINSTORM Brainstorm as many solutions to your problem as you can

8 PRESENT Present the point of view and options to an audience

9 EVALUATE Evaluate and select your best solutions

10 PROTOTYPE Make your own prototype of your best solution

11 FEEDBACK Speak to experts or the community to get REAL feedback

12 INTEGRATE The MADD Space – present your work using Music, Art, Drama, Dance

13 PRESENT Hold a public exhibition and present to the public

The teacher facilitates this learning process using tools and resources and learning through play

Tools and Resources



Multi literacy pedagogy
Experiencing
Conceptualising
Analysing
Applying

ENGLISH FAL (70)

- Literature **Project**
- Choose genre:
Business
Plan/Report writing
- S1: Research topic
- S2: Writing
- S3: Presenting

MUSIC (50)

- Create an advertisement for a product or event OR
- Own lyrics/music
- Practical performance

DANCE (50)

- Warm-up, low brush, high brushes, kicks
- Composition movement sequence

SOCIAL SCIENCES PROJECT (50)

- Research Apartheid laws (business and careers)
- Write Report and
- Present oral

LIFE ORIENTATION (70)

- Entrepreneurship as a possible career choice
- Research 3 possible careers
- Write a report
- Present oral

OTHER

- Information Literacy: Researching, finding, selecting, organizing and presenting information

EMS PROJECT (70)

- Research volunteer/business opportunities
- Create a business plan
- Present to investors/sponsors
- SWOT analysis, 8 business functions

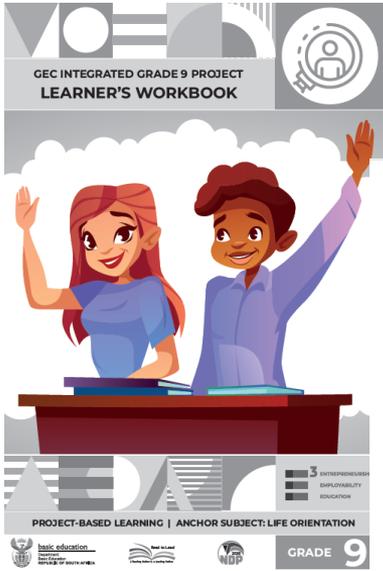
DRAMA (50)

- Relaxation, breathing, tone, articulation, projection
- Create advertisement OR
- Classroom improvised drama

VISUAL ARTS (50)

- Create 2D flyer/leaflet/poster
- Create 3D model of puppet making commentary

Integrated Project



Integrated Maps – 21c

Map 1: 21st Century Skills development Integrated Map: Project 1 (LO anchor)

Subjects:	Language	Economic Management Sciences	Social Sciences (History)	Creative Arts	Life Orientation
Critical thinking			•		

Map 2: 21st Century Skills development Integrated Map: Project 2 (MST)

Communication	•	Subjects:	Mathematics	Natural Sciences	Technology
Creativity		Critical thinking	•		
Collaboration		Communication			•
Metacognition		Creativity		•	
		Collaboration			•
		Metacognition	•		

Map 3: Combination Map 21st Century Skills

	Project 1	Project 2	Subtotal
Critical thinking	SS	Math	5 + 5
Communication	Lang	Tech	5 + 5
Creativity	ARTS	NS	5 + 5
Collaboration	EMS	Tech	5 + 5
Metacognition	LO	Maths	5 + 5
Total			50

Assessing 21st century skills/General Capabilities

		Scoring Rubric 21 st Century Skills					
3. Creativity: (Creative thinking is defined as the ability to come up with many different ideas and apply them to find realistic solutions to problems. There are two important aspects to creative thinking: Originality and usefulness)	ARTS			NS			Total
	3.1 Good at generating ideas	Y 1	N	3.1 Good at generating ideas (circuit design)	Y	N 0	3/10
	3.2 Knows how to consider and evaluate best ideas	Y	N 0	3.2 Knows how to consider and evaluate best ideas	Y	N 0	
	3.3 Can manipulate ideas to fit the setting	Y	N 0	3.3 Can manipulate ideas to fit the setting	Y 1	N	
	3.4 Ideas are original	Y	N 0	3.4 Ideas are realistic	Y	N 0	
	3.5 Ideas are useful and relevant	Y 1	N	3.5 Ideas are relevant to solving the problem	Y	N 0	
			2/5		1/5		

Creativity

**Critical thinking
Communication
Collaboration
Metacognition**

- Tests are set in terms of content prescribed in the Annual Teaching Plans.
- One question paper per subject (EMS (P2) & Maths (P2) set at school)
- 80%/20% Multiple Choice Question to Open ended/structured responses
- Setting completed and final QA is underway

For the pilot, there have been printed by DBE, but in 2023 will have to be printed at school level

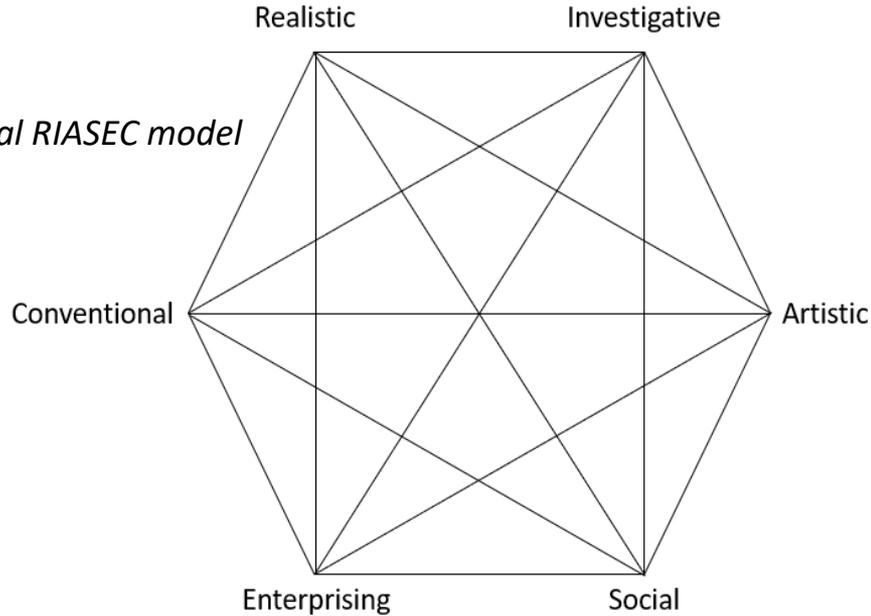


Test frameworks

- Each panel develops a test specification framework for its own subject
<..\Documents\DBE DOCUMENTS\NA 2021\GEC\GEC preps\Frameworks\Mathematics Framework.doc>
- Why: to plan, allocate and distribute the content, skills, cognitive and difficulty levels as well as mark allocation
- The framework allows the examiners to set the test according to the agreed framework
- It is also used as a tool to moderate the test against
- Versioning panels adapt the framework's content to suit their language ATPs/CAPS before versioning takes place. Skills assessed must still match the test blueprints as far as possible especially for Languages.



Holland's hexagonal RIASEC model



DOTS model – Watts (2006).
Student Self-Directed Search - (Holland, 1997; PAR, 2020).
Career Interest Test – (Athanasou, 2002; Bartlett et al., 2016)
Work personality index 2 nd edition – Macnab and Bakker (2014)
Career Values Scales – Macnab et al. (2003).



Stakeholder workshops

- Training of provincial officials took place in May 2022.
- 2 Sector workshops have been held in July 2021 and July 2022 (last weekend) to solicit input on from a wide range of stakeholders on the GEC policy and process matters.
- Technical working group meetings are held weekly as well as focus group sessions.
- The DBE has partnered with E-cubed & Head Start (locally) and ACER (internationally) for technical support and international scoping around the GEC. Working towards a TAG.
- Some key recommendations/inputs will be factored into draft policy as well as serve as a springboard for further engagement.



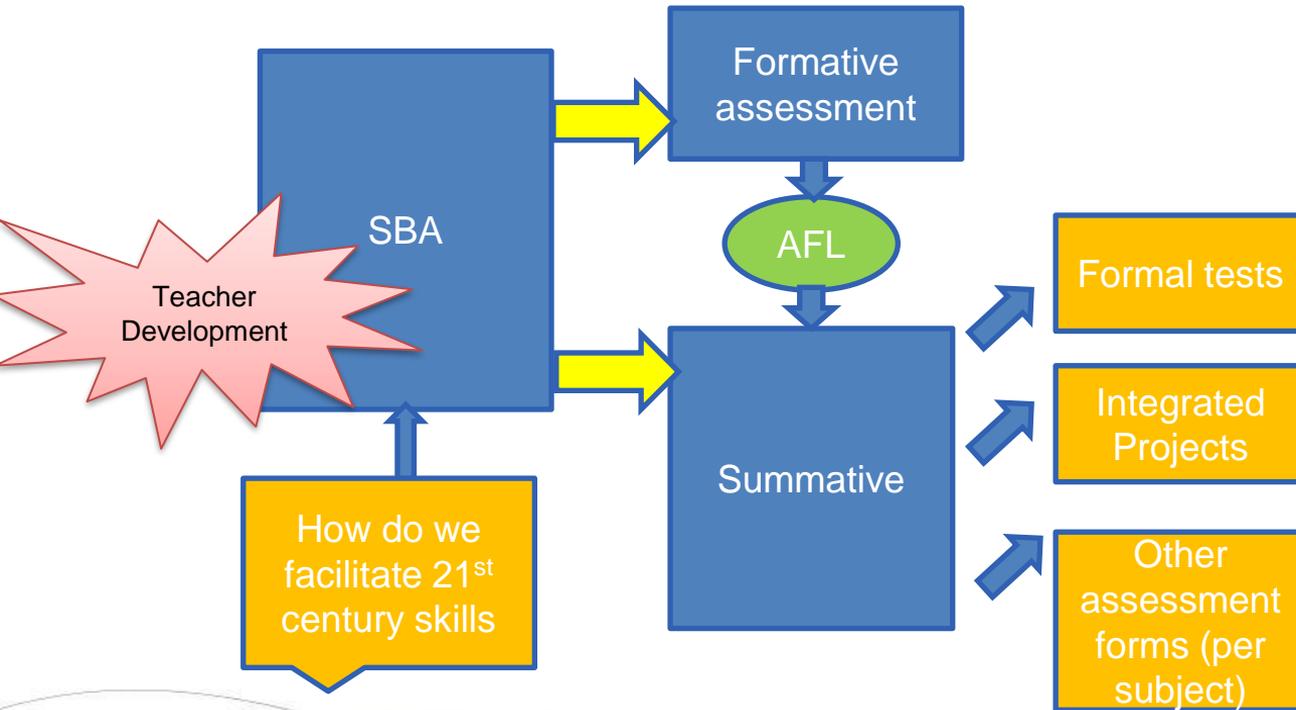
Stakeholder inputs

- a) Change in terms of the South African schooling system, with particular focus on modernizing the curriculum (curriculum policy, teaching, learning and assessment) is urgently required. This will inform the form and structure of the GEC.
- b) The GEC model must be context related and relevant to the SA challenges.
- c) The Curriculum Roadmap and Curriculum Strengthening must be expedited given that the form and structure of the GEC is dependent on the curriculum review process.
- d) The primary focus of the GEC is not on the issuing of the certificate but on getting teaching, learning and assessment right. The certificate/report card that is finally issued, must confirm that the learner demonstrates the knowledge, skills, values, attitudes and character attributes envisaged of a Grade 9 learner.
- e) The assessment must focus on learning (what learners can know and can do) and not on scores that are used for ranking purposes (performativity culture).
- f) The Department must expedite the implementation of the Three Streams Model, with particular reference to the Vocational and Occupational Stream. The GEC should be seen as an enabling programme that precedes and provides useful information to learners and parents and to inform potential selection of pathways.

School Based Assessment

NA
Circulars

How do we deal
with SBA being the
larger chunk of the
GEC



Issues on the
periphery :

1. AFL implementation
2. Assessing 21st century skills
3. Deeper learning

Curriculum
Roadmap

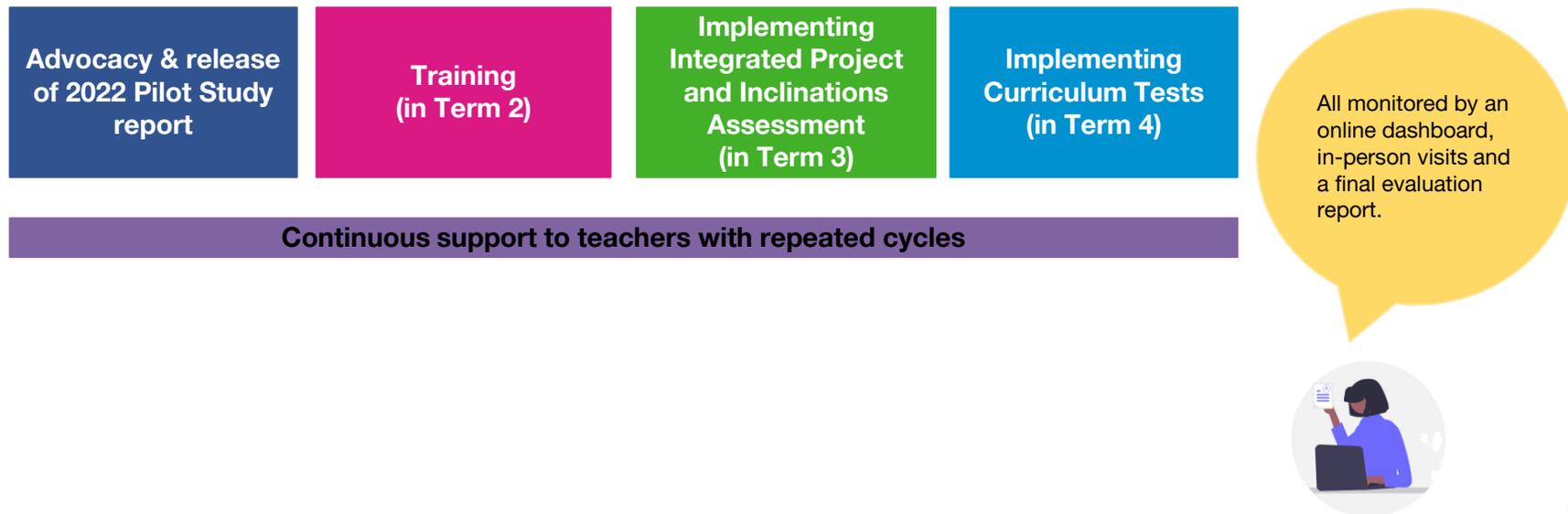


7. What are the plans for 2023 & beyond?



What is planned for 2023?

In 2023, the sample for the field trial will increase 277 schools (approximately 30 schools per province) to 1000 schools, representative of the types of schools across all 9 Provinces The table below is a high-level summary of the GEC roll out in 2022



GEC Reporting Framework

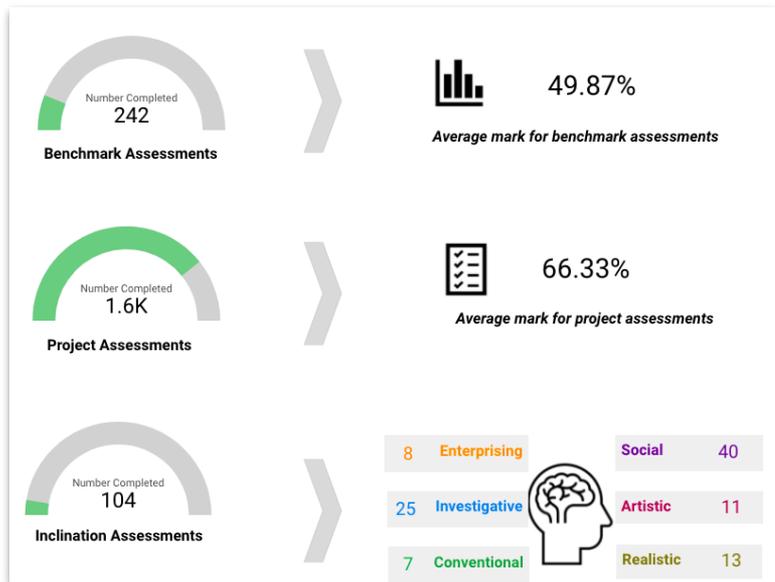
GEC Components

Subjects and sub-components of the GEC assessment

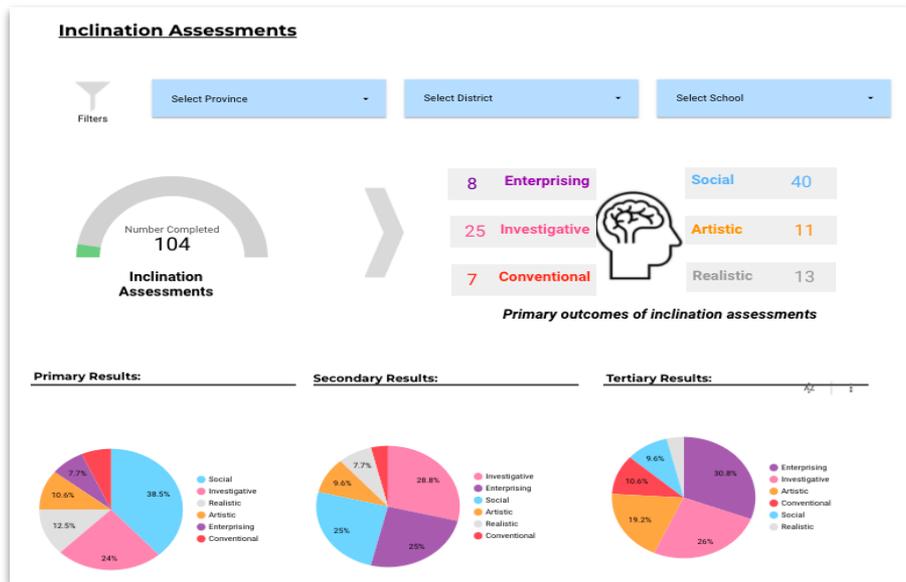
GEC assessment components

Performance bands to highlight learner achievement

		Performance bands						Assessment approaches				
		1	2	3	4	5	6	Traditional assessments	Common Assessment Tasks	Surveys & inventories		
GEC assessment	Components	GEC Subjects/Sub-components										
	Curriculum Attainment	Languages								•	•	
		Mathematics								•	•	
		Life orientation								•	•	
		Economic and management sciences								•	•	
		Social sciences								•	•	
		Natural sciences								•	•	
		Technology								•	•	
		Creative arts								•	•	
	General Capabilities	Metacognition									•	
		Address community challenges									•	
		Critical thinking									•	
		Collaborative work									•	
		Gather, analyse and report real-world data									•	
		Self-reflect and evaluate work/performance									•	
		Respond to open-ended problems/challenges									•	
	Aptitude and Inclinations	Initiative									•	•
		Leadership									•	•
		Persistence									•	•
		Planning									•	•
		Concern for others									•	•
		Working with others									•	•
		Self-expression									•	•
		Opportunity awareness										•
		Transition learning										•
		Enterprising									•	•
		Conventional									•	•



Draft version of an overview of an online school report.



Draft version of an overview of the online system report.

Policy & documentation

Activity	2021	2022	2023	2024	2025
Policy (qualification)	<ul style="list-style-type: none">• Draft policy gazette for public comment• GEC sector Lekgotla	<ul style="list-style-type: none">• Infusion of public comments and Lekgotla recommendations infused into policy framework.• Sector workshop undertaken in July 2022– further inputs onto policy	Policy approval, advocacy and dissemination	Policy implementation	Policy implementation

The intention is to have the following documents finalised:

1. The GEC policy
2. The GEC conceptual framework
3. The GEC theory of change document

Timelines on implementation

Activity	2021	2022	2023	2024	2025
Curriculum	Alignment to Recovery ATPs	Alignment to Recovery ATPs	Alignment to Recovery ATPs	Alignment to modernised Curriculum	Alignment and implementation to a modernised Curriculum
Assessment	Sample: Small-scale pilot	Sample: Representative field trial (277 schools)	Sample: Expanded field trial of 1000 schools + schools of skill (cover all districts)	Target: Extend the sample to almost 3000 schools + special schools	Target all schools (full-scale administration)



 We are here

2023 Sampled GEC Schools

Province	Sampled Schools (Mainstream + SOS)	School of Skills
Eastern Cape	100	3
Free State	85	7
Gauteng	137	44
KwaZulu Natal	167	4
Limpopo	148	27
Mpumalanga	89	5
Northern Cape	93	2
North West	85	5
Western Cape	96	22 (*Category A & C)
Total	1000	110* - some are part of the 1000.

8. Conclusion



Some necessary support structures

- Provincial training workshops coordinated by provincial and district teams.
- Public-private partnerships to support research, analysis, digitisation, material development, teacher development & support, and broader advocacy.
- Further guidance on a differentiated approach towards assessing learners (mainstream/special/schools of skill).
- Pre-service and in-service training of teachers that takes into account pedagogical shifts in assessment and new approaches featuring in the GEC.
- Further development of hosting systems & resource platforms.

Focus of commissions

1. SBA – integration & quality assurance
2. Teacher development - model
3. Provincial & district support – institutionalizing the GEC
4. Inclusive education – development of frameworks, accommodations and concessions



Success Indicators

1. All participating schools trained by provincial training teams.
2. School coordinate and implement the GEC model.
3. GEC assessment & SBA models integrated.
4. GEC assessment data uploaded onto SA-SAMS and data platforms.
5. Sample provincial & national moderation done.
6. GEC national report on 2023 pilot study complete.

