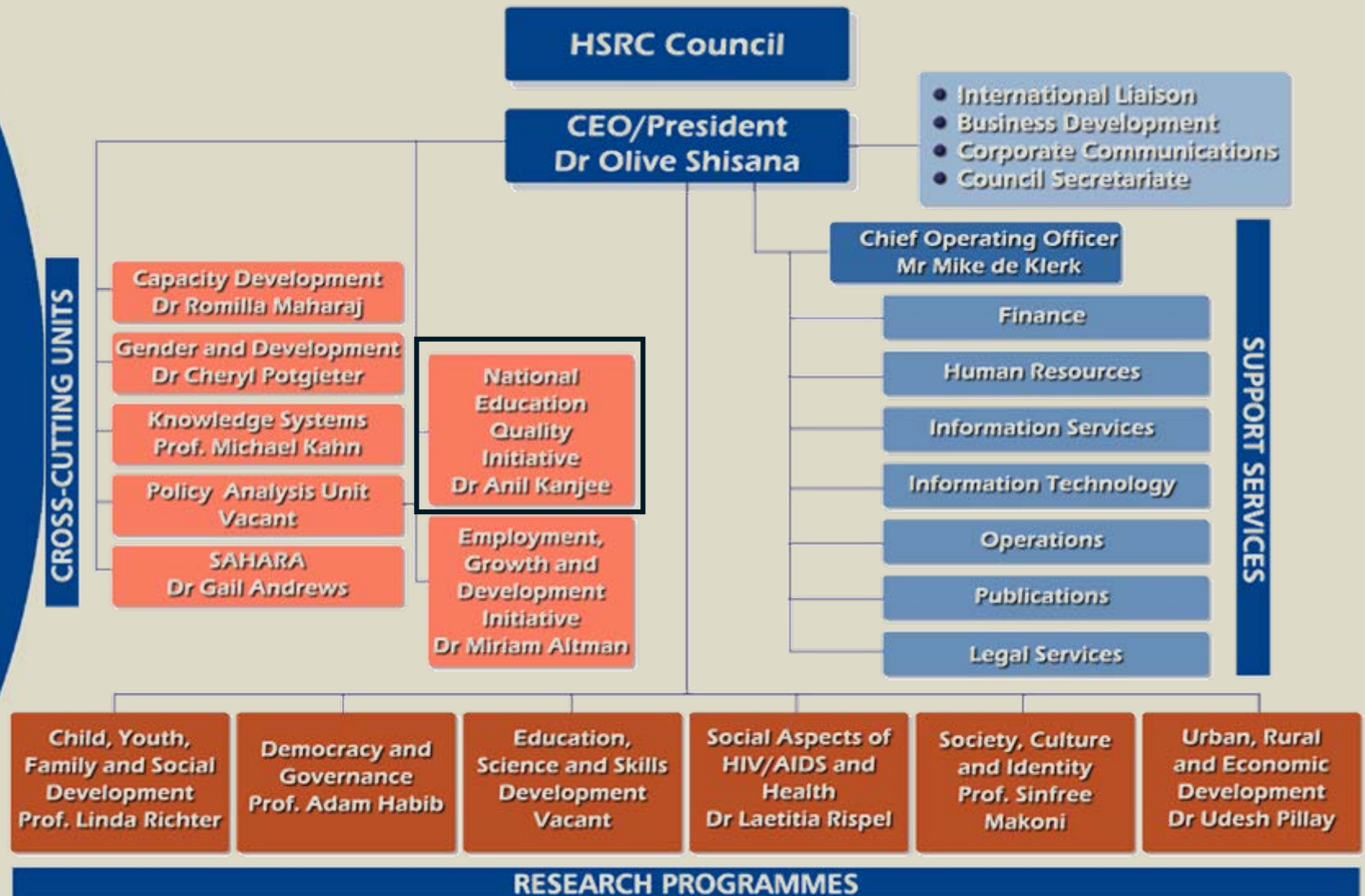# National assessment studies in South Africa: Implications for improving learning and teaching

Invited presentation
Gauteng Department of Education assessment for learning conference
Eskom Conference Center, 6 May 2005

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The structure of the HSRC

AIM

To support all education role-players (teachers, principals, parents, education officials, NGOs, private sector, donors, academics & researchers) enhance evidence-based decisions pertaining to policies and practices for improving educational quality for all

Objectives

Contribute towards national efforts for providing Quality Education for all in South Africa:

- Avenue for policy dialogue between "key" decision makers

- Enhance sharing of information and ideas (best practices)

- Exchange of national, regional and international experts and <u>decision makers</u>

- Consolidate & disseminate research findings to key decision makers

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Outputs/Outcomes

- High level policy dialogue fora - (1 per year)
- Regular policy briefs
- Working paper series – ideas for debate
- "What works" manual – i.e. specific issues
- Comprehensive review of quality improvement programs & projects
- Codes of practice, action plan or agreed accountability procedures

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Approach

- Initiative – 4 to 5 years
- Draw on Local, National, Regional and International expertise and experience
    - Fellowships
    - Joint appointments – (associates)
    - Advisory Committees
    - Commission work
    - High level policy dialogue fora
- Use available inter/national data

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Outcome of consultations

- **Improve reading and writing in schools**

- **Indicators for monitoring schools**

- **Free education in South Africa?**

- **Other issue raised:**
  - Learning and Teaching practices (at FET phase)
  - Maths & Science + Languages
  - Educator competency and teaching
  - Factors that affect learner performance – GET
  - Teacher incentives
  - Policy and practice implications of the NFTE

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Update & Next steps

- ## Complete consultations

  DG, DDGs, Ministers advisors, Minister, NGOs, SG, EPU, JET, CEPD, UNESCO, WB, UNICEF, (Inter)-national Experts, Teacher Unions, Teachers, ELRC, etc

- ## Set up National and International Advisory Committees

- ## Finalise proposals (i.e. consultations)

- ## Secure funding

- ## Started - Review of "Quality" Improvement Programs in SA

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Ultimate "Achievement"

- To get all relevant roleplayers on the SAME road

- Walking in the SAME direction

- i.e. towards improving education quality for ALL in South Africa
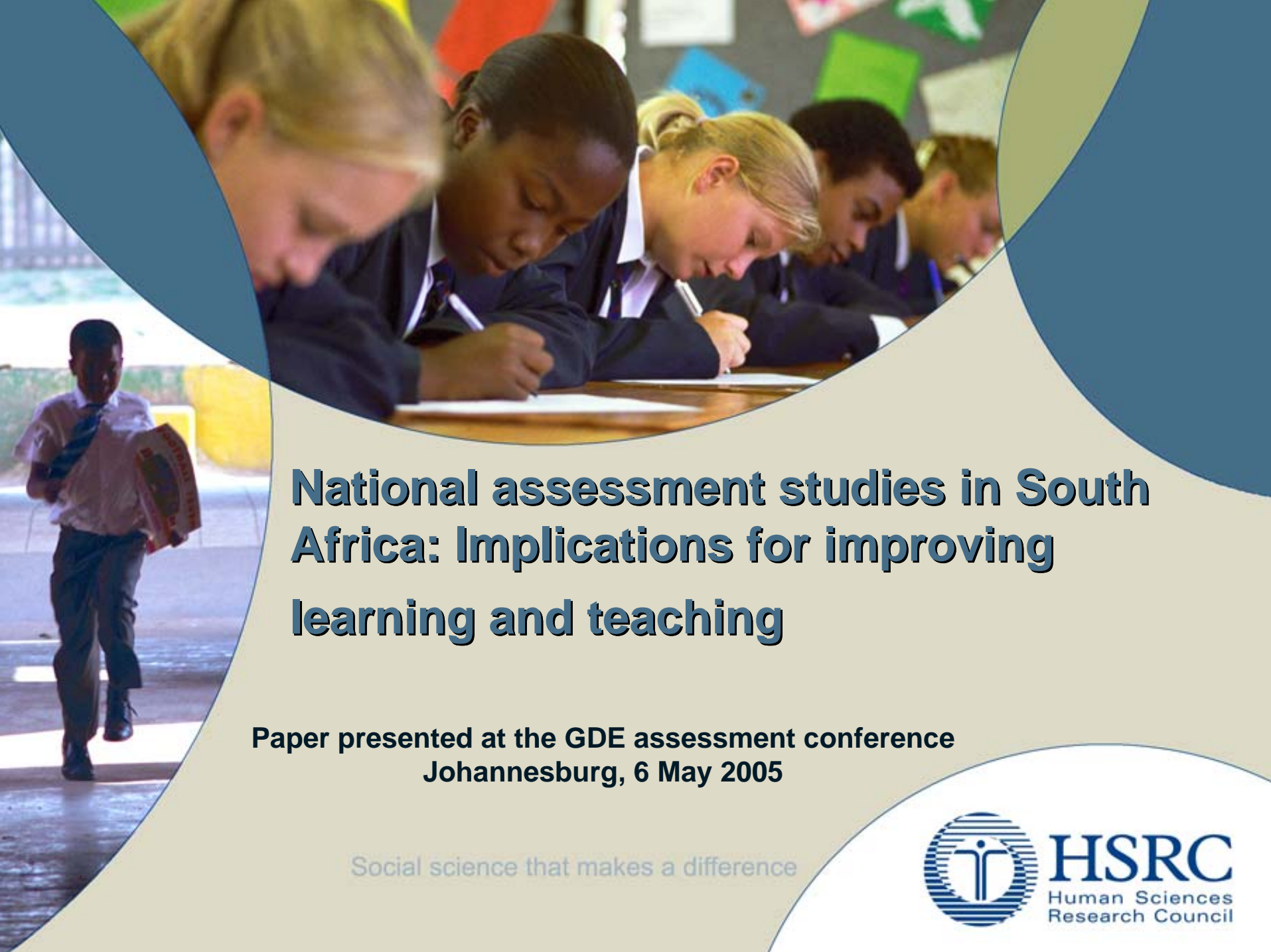
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National assessment studies in South Africa: Implications for improving learning and teaching

**Paper presented at the GDE assessment conference
Johannesburg, 6 May 2005**

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Purpose

- **Part of a larger project**

PROJECT PURPOSE:

- **To explore ways in which National Assessments can be use to improve instruction**

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Outline

- **Why National Assessments?**

- **National assessment:**

  - **Purpose, data collection & analysis, Reporting results**

- **How NA conducted in SA?**

- **Methods for improving L&T**

- **Challenges for improvement**

Why national assessments?

- **Summative and formative role**
- **Cost effective way of obtaining information**
- **Different from international assessments**
- **Generally low stakes**
- **Significant increase in last decade**
- **Likely to increase in future**
- **Limited information on cost-benefits**

Why NA in SA?

- Effective use of NA – significant potential to improve education systems –

- Range of national "monitoring" practices – which might not be reliable & valid

- Limited discourse and research to address specific needs of roleplayers

- Growing interest in the use of assessment for initiating reform

- Identify criteria for conducting district, national and International Assessments

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Overview: NA studies in SA to date

Name of Study	Area of focus	Grade level	Year (s) conducted	Design
Grade 9 Longitudinal Study (HSRC)	Language, Maths and Science	9	1996	National sample
Monitoring Learning Achievement DoE/UNESCO/UNICEF	Numeracy, Literacy, Life Skills	4	1999	
Grade 3 Systemic Evaluation	Numeracy, Literacy, Life Skills	3	2001	
Learner Achievement Monitoring Program – Grade 9	Languages, Maths, Science	9	2002	
Grade 6 Systemic Evaluation	Languages, Maths, Science	6	2004	
Western Cape Provincial Assessments	Maths and Languages	6, 8,	2003, 4, 5	All schools, sample of learners

Definitions of NA

- No consensus on what constitutes NA and how these are defined

- Range of interpretations and different conceptions

- General sense of "confusion"

Definition used in paper

- the process of obtaining relevant information from the entire education system within a nation state to monitor and evaluate the performance of learners and other significant roleplayers as well as the functioning of relevant structures and programs within the system for the purpose of improving learning

- Role of policy makers and teachers the same – improve learning – although functioning at different levels

Current legislative Framework - 1

- the *National Education Policy Act* of 1996 (DoE, 1996) mandates Minister of Education to "direct standards of education provision, delivery and performance throughout the Republic

- *Assessment Policy for General Education and Training* (DoE, 2001) makes provision for 'Systemic Evaluations' to be conducted on a nationally representative sample of learners and learning sites to evaluate all aspects of the school system and learning programmes.

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Systemic Evaluation Framework (2003) seeks to answer the following key questions:

- What is the context in which learning and teaching is taking place?

- What is the level of achievement of the learners at key points of the education system (Grades 3, 6 and 9)?

- What factors affect learner performance?

- **How can the level of achievement be improved?**

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Socio-political context

- Assessment – a political phenomenon – impact by nature and structure of state
- Impact of globalisation
  - Use of measurement for M&E
  - Focus on core skills Maths & Science
- Decentralisation implications
  - While decentralization programs devolve control from the core to the periphery, national assessments may re-concentrate power back to the core. (Benveniste, 2002)
- i.e. promote agenda of the state

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Assessment & political implications

- Holds schools, districts and provinces accountable –
  - System of sanctions and support?
- To "push" for or justify specific policies and practices
  - Address needs of poor schools
- In SA – no evidence of any specific approach – YET? although some eminent signs
  - FET policies?

Reporting, dissemination and utilization of results

- Most instances - reports are meant for policy makers (used by researchers)

- Generally – context of education, learner performance, (sometimes) factors affecting LP

- Rarely – information for teachers

- Limited information on the use of NA and its impact on education practice

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Results from recent studies

- Low levels of average performance
- Clear trends pertaining to
  - language of learning,
  - location of schools,
  - racial group of learners,
  - Ex-department
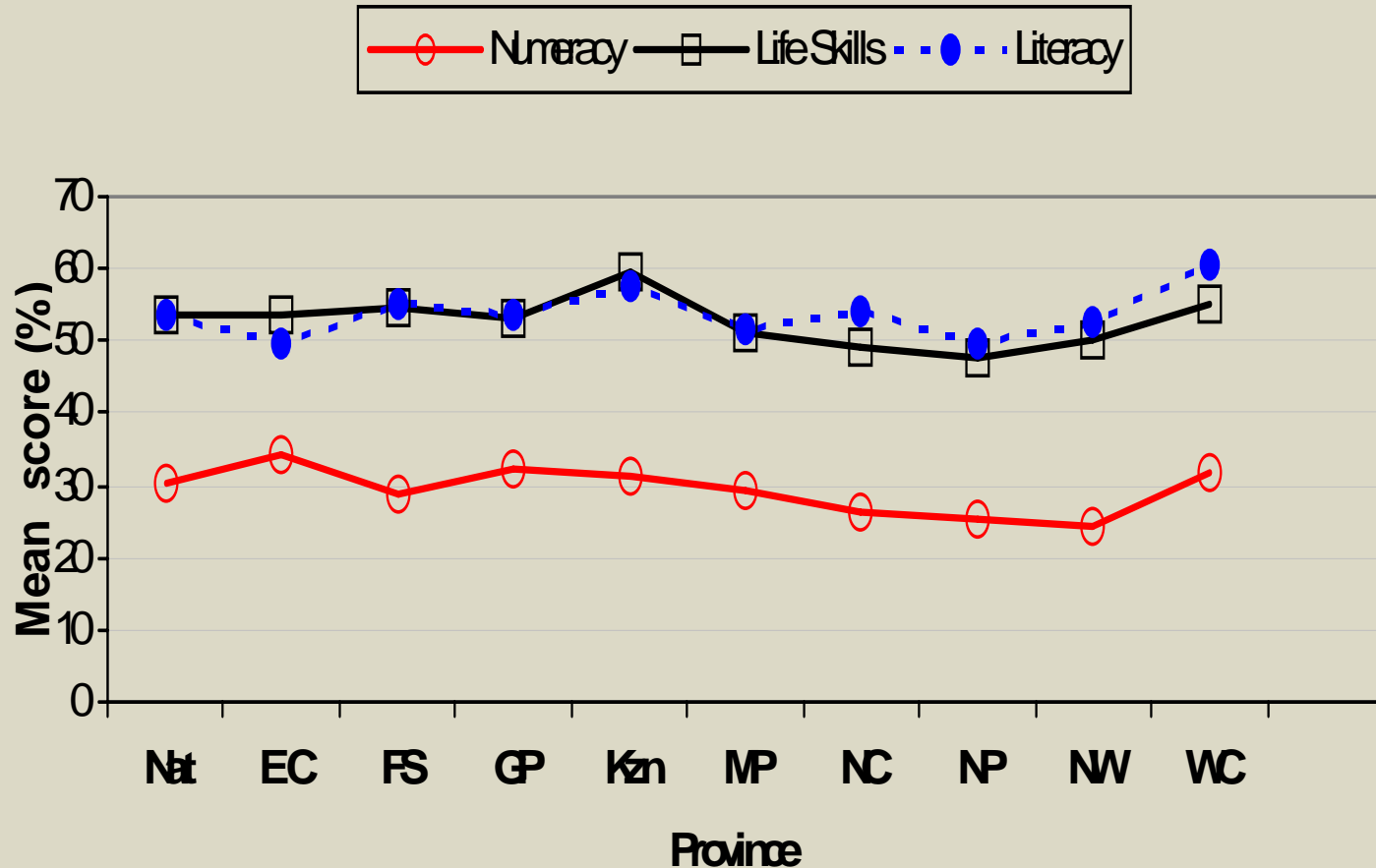
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Grade 3 Systemic Evaluation

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Grade 6 Maths
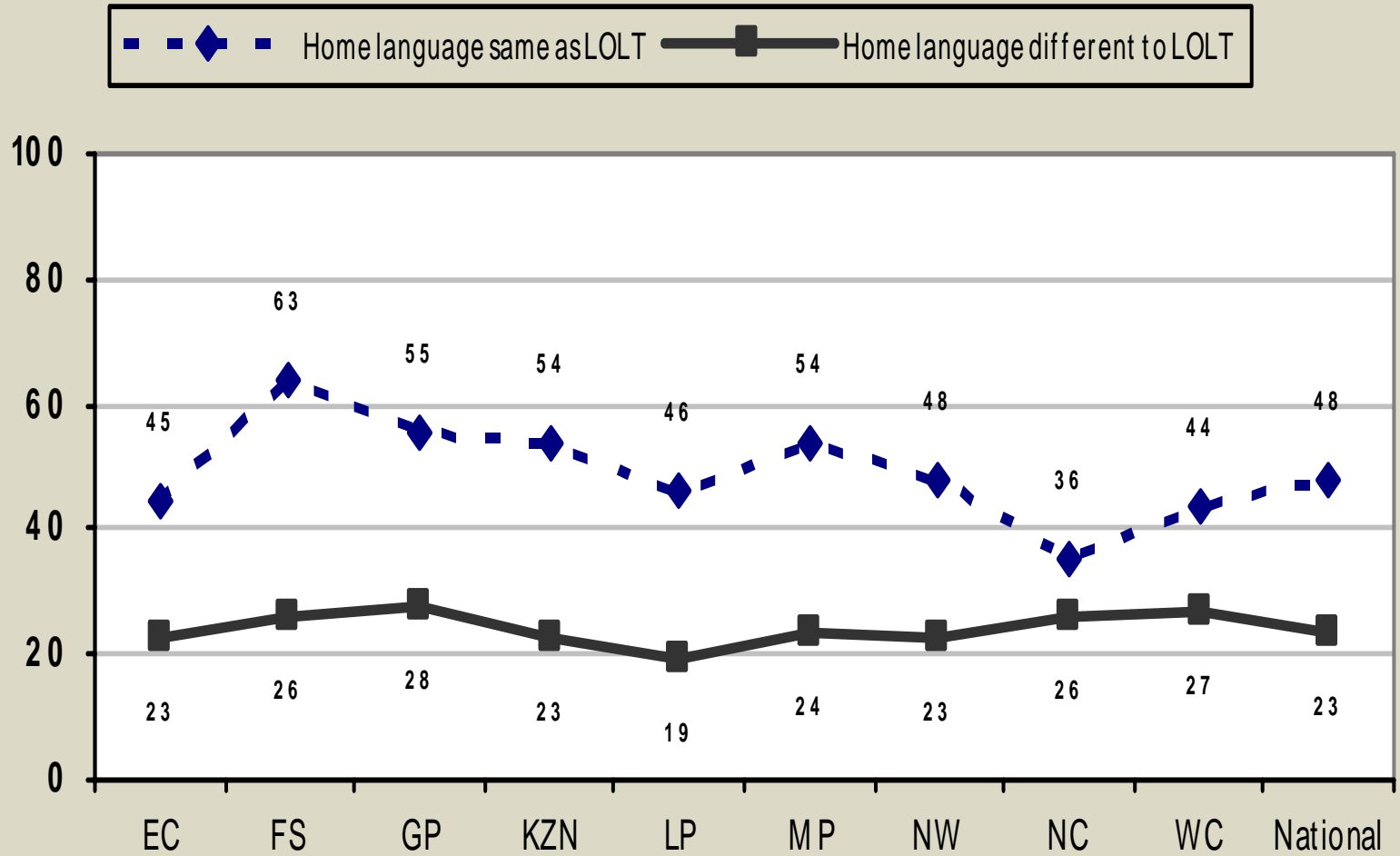
M L A Literacy

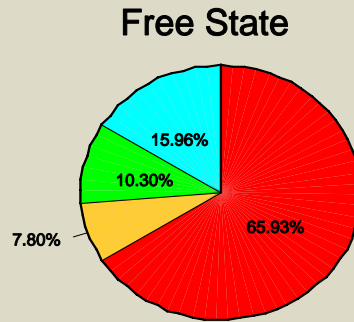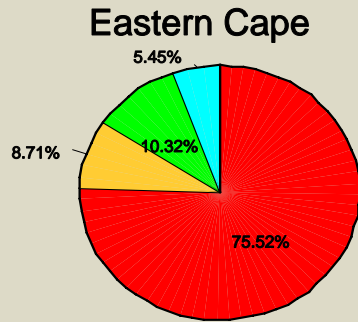Figure 3.4: Performance in the LITERACY task according to the location of schools, MLA 1999
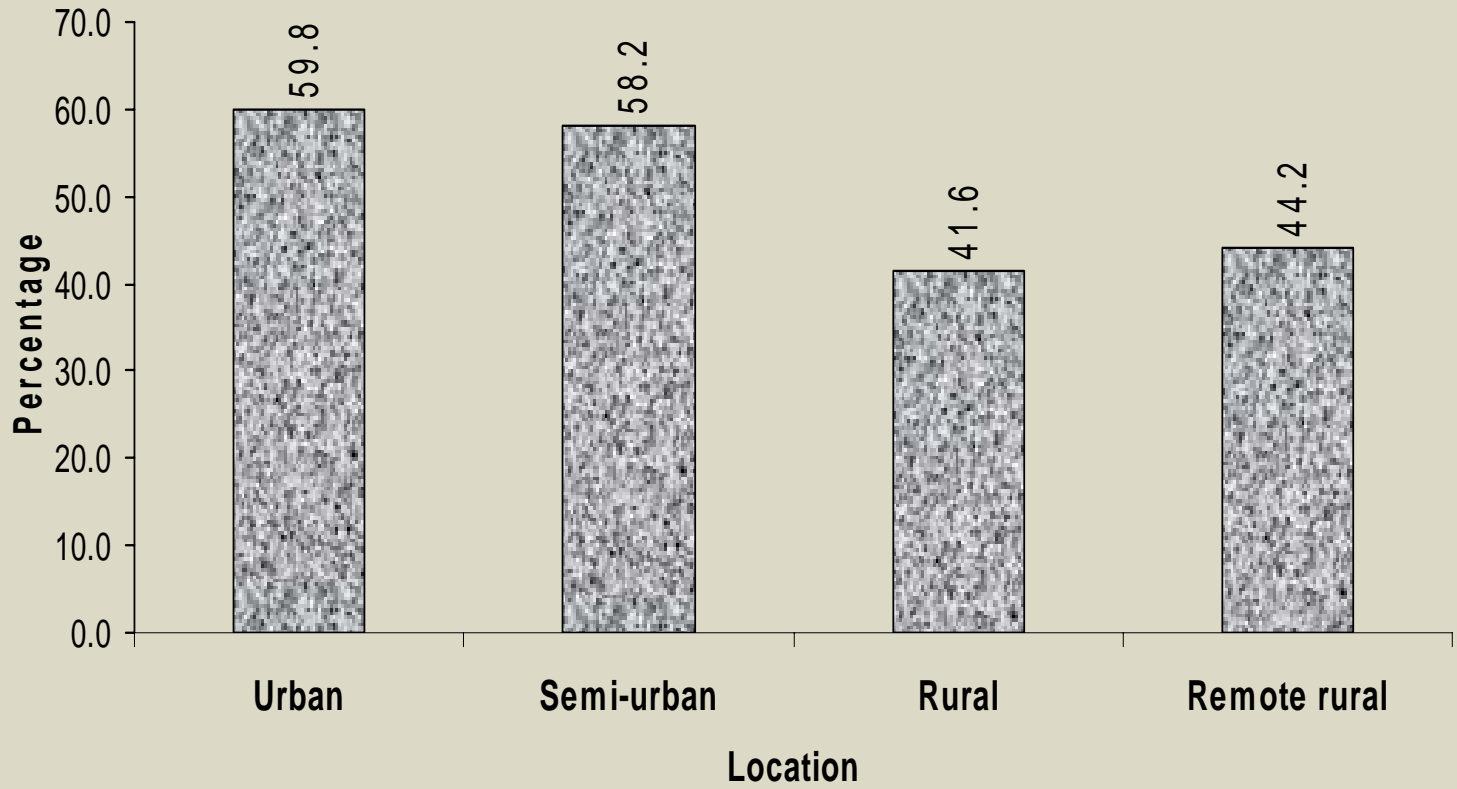
G 6 Language Achievement Levels by Province
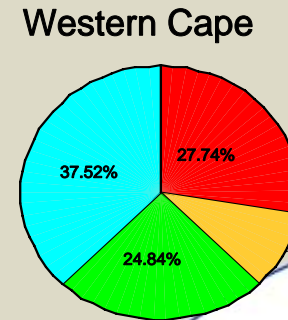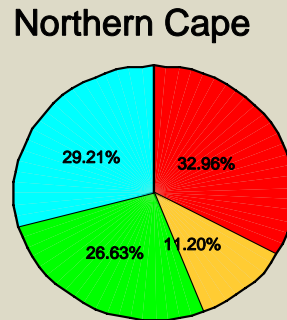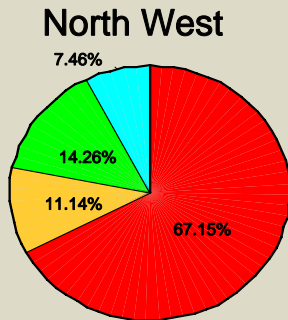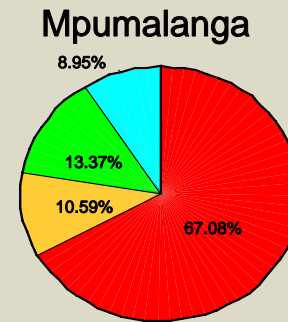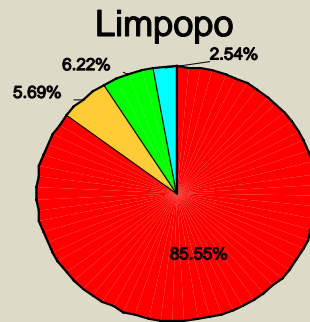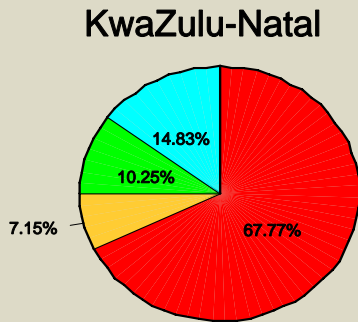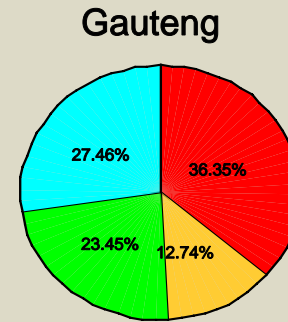
G6 Maths Achievement Levels by Province

Eastern Cape
- 1.99%
- 4.48%
- 6.10%
- 87.43%

Free State
- 6.57%
- 9.68%
- 8.47%
- 75.27%

Gauteng
- 6.80%
- 14.29%
- 11.13%
- 67.78%

KwaZulu-Natal
- 3.57%
- 7.57%
- 7.09%
- 81.77%

Limpopo
- 0.21%
- 1.52%
- 2.95%
- 95.33%

Mpumalanga
- 5.77%
- 1.93%
- 6.73%
- 85.57%

North West
- 1.08%
- 4.86%
- 6.46%
- 87.60%

Northern Cape
- 7.47%
- 12.10%
- 10.31%
- 70.12%

Western Cape
- 12.32%
- 18.93%
- 13.69%
- 55.05%

Maths Ach Levels
- Not Achieved
- Partly Achieved
- Achieved
- Outstanding

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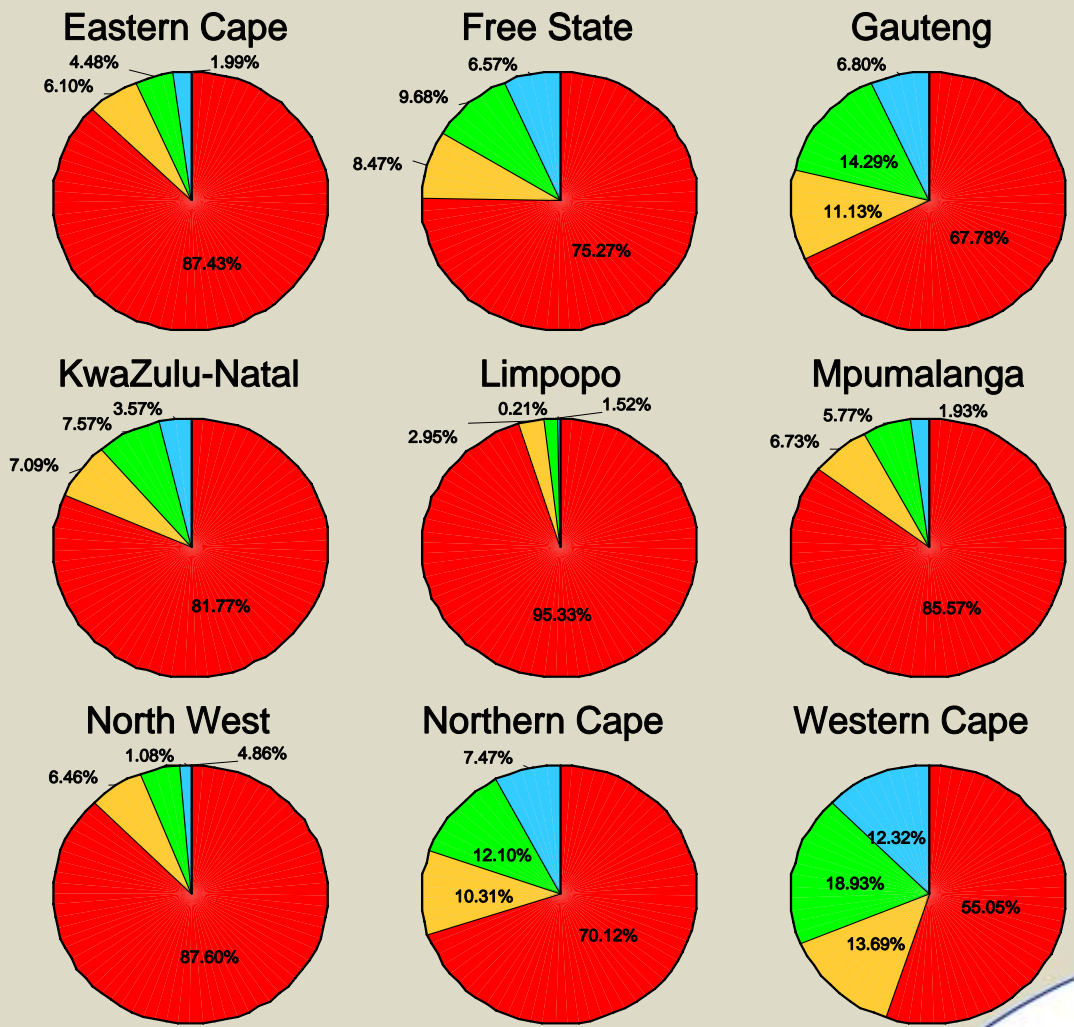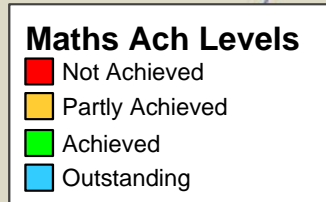
G6 Science: % learners at DoE Achievement Levels

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Eastern Cape
- 3.58%
- 18.21%
- 14.66%
- 63.56%

Free State
- 10.58%
- 23.19%
- 17.80%
- 48.43%

Gauteng
- 16.43%
- 34.81%
- 31.89%
- 16.87%

KwaZulu-Natal
- 8.40%
- 18.82%
- 13.75%
- 59.03%

Limpopo
- 0.75%
- 11.95%
- 13.19%
- 74.11%

Mpumalanga
- 4.98%
- 23.09%
- 20.37%
- 51.56%

North West
- 3.98%
- 21.27%
- 17.18%
- 57.57%

Northern Cape
- 12.38%
- 32.61%
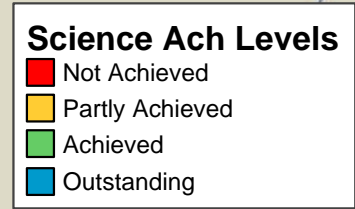- 17.52%
- 37.49%

Western Cape
- 17.48%
- 38.40%
- 15.12%
- 28.99%

Science Ach Levels
- Not Achieved
- Partly Achieved
- Achieved
- Outstanding

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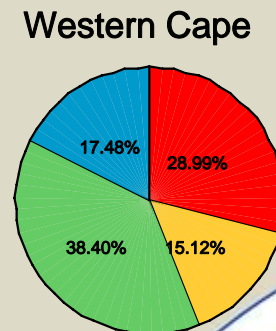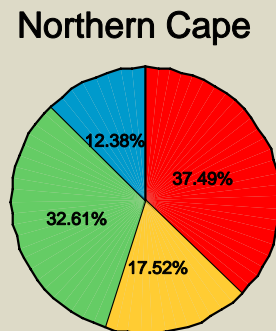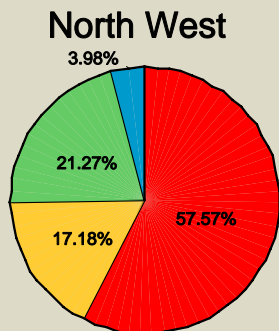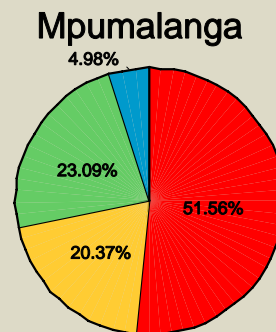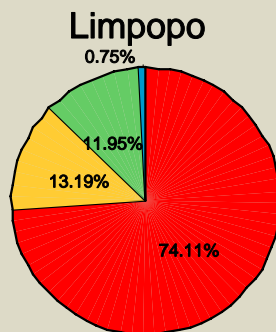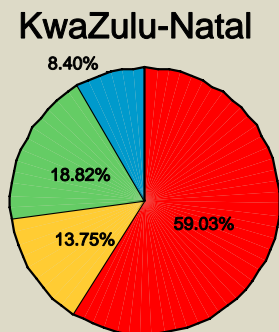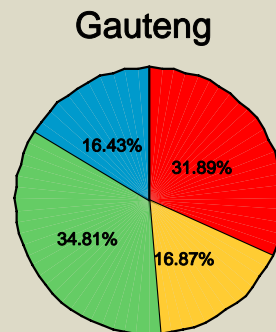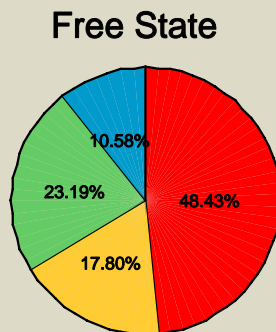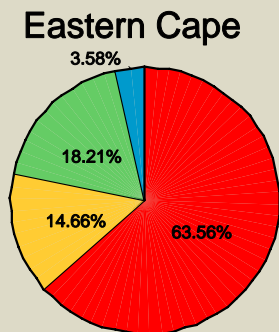
Grade 9 results - Race + Ex-dept

□ English ■ Mathematics □ Natural Sciences

□ Mathematics ■ Column 5 □ Column 8

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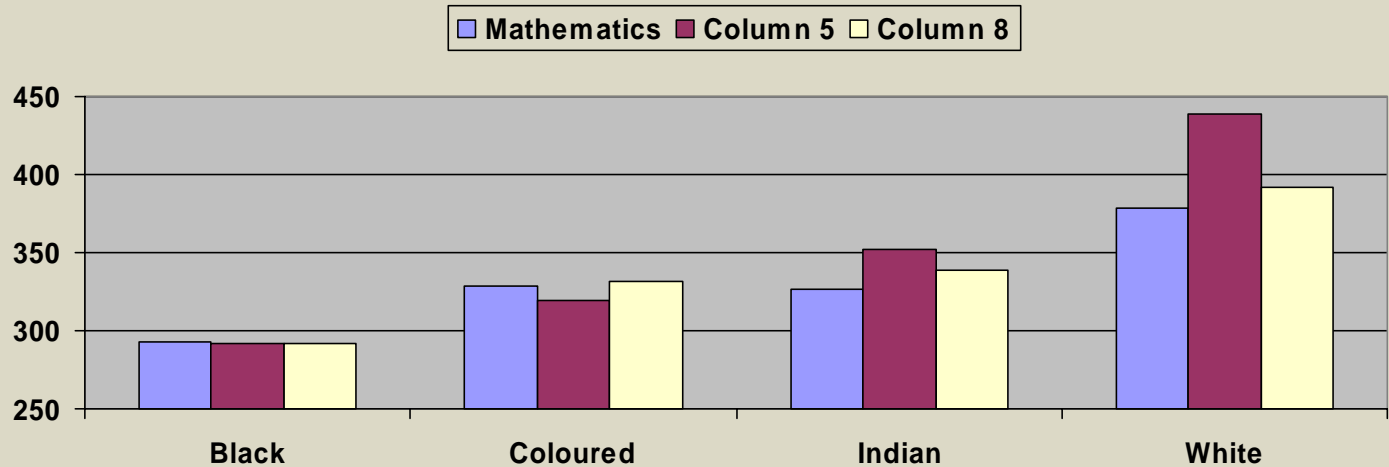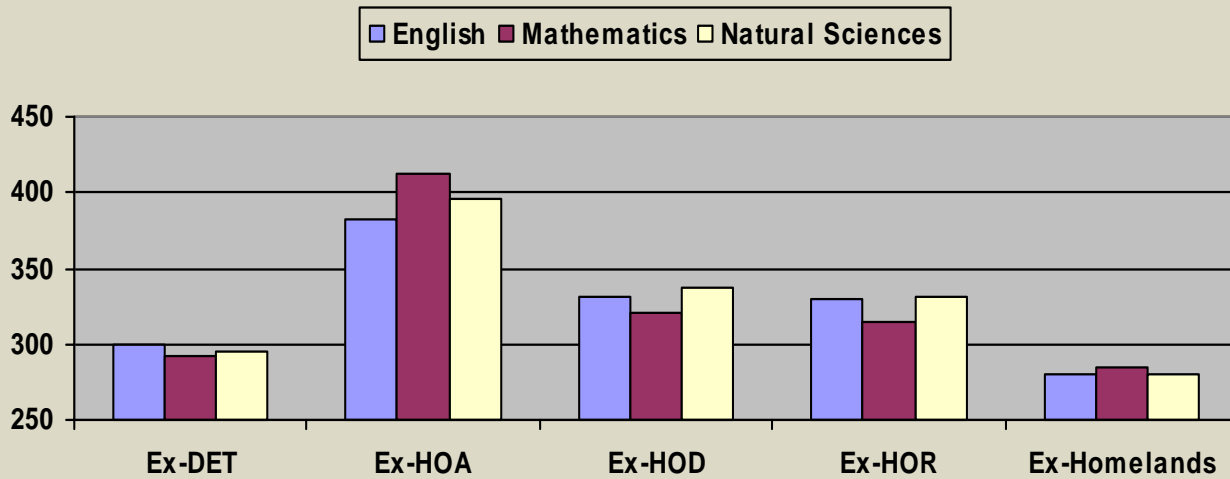
Grade 9 results - Race **BY** Ex-dept

Ex depart	Race	Mean	SE
Ex-DET	Black	297	3.17
	Coloured	302	8.92
Ex-HOA	Black	377	4.10
	Coloured	388	9.35
	White	414	9.51
Ex-HOD	Black	326	6.66
	Indian	354	16.80
Ex-HOR	Black	338	8.89
	Coloured	328	3.61
Ex-Homelands	Black	281	2.21
	Coloured	271	6.71

Suggestions for improvement - 1

- Strategic use of information to transform system
  - Justify focus on "poor" schools
- Improve methodology & designs
  - Synchronise SE & WSE
  - Increase coverage of curriculum
  - Use diagnostic items
  - Track learners over time Gr 3, 6, 9, 12

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Suggestions for improvement – 2

- Explore approaches to assess teacher competencies –
  - self assessment tasks
  - Corresponding development support
- Dissemination and application strategy for NA information
- Strategy for participation in International Studies

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Using NA for L&T: Teacher

<u>FOCUS: On current studies & available data</u>

Many proposed uses for L&T process.

- Mechanisms for PD

- Identifying student strengths & weaknesses

(curricular sub-domain; cognitive process, sub-groups)

- Proposing possible solutions to specific problems

- Provide items for use in classroom

- Exemplars for good assessment practice

- Highlight critical skills that students should master

- Report on whether standards are being met

- Evaluate policy implementation

- Identify areas for additional intervention – which could benefit L&T practices

However – to date limited information on how useful/successful these have been

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Pre-requisites

Need in-depth understanding of:

- specific information needs of teachers that can be addressed by NA

- reporting practices, and associated analysis & collection of data, that would support teachers to improve classroom practice

- how teachers understand and translate information into practice (Brown, 2003; Chapman & Snyder, 2002)

- how students interact with assessment information (Black & Wiliam, etc.)

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Example: issues in SA

- Teacher needs differ by level of experience and school type (location)

e.g. – identify problems areas vs likely solutions

"we don't want information on what problems students are experiencing. We know what problems our students have. What we don't know is how best to address these problems" (Grade 3 teacher – urban school, November 2003)

- Different uses of information from NA

e.g. – use of items in class

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NA to support teachers

- General information on leaner strengths and weaknesses

- ID factors affecting learner performance

- **Support materials - critical**

  - Items for use in class

  - Assessment Resource Tasks

  - Computerised assessment support

  (demo assttle??)

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Conclusion

- National assessments have the potential to provide vital and useful information that can improve classroom practice and lead to improved learning

- The key, however, depends on how we locate and support our teachers

- The responsibility is on all of us here - to develop/identify specific mechanisms and approaches on how best to do this and to ensure that the focus remains on improving learning