Using (formative) assessment to enhance learning: Implications for teachers and learners

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Social science that makes a difference

Anil Kanjee
Centre for Education Quality Improvement

HSRC
Human Sciences Research Council

Key question

- Are there any interventions that are :
  - Easy to understand & implement
  - Cost effective to scale up
  - Does NOT increase workload
- that would bring about <u>significant</u> gains in:
  - Teaching practice and
  - Learner performance

Overview of presentation

- Overview
  - Assessment policy context
  - Assessment for learning
- Challenge?
- Assessment in SA classrooms
- Questioning & Feedback
- Next steps

Assessment in South Africa

- Greater focus on improving quality
- Growing trend on the "use of assessment to improve learning"
  - Move towards census testing
  - Increase focus on classroom assessment (2007 national policy)
- but limited "guidance / support / information" on the "how"

Assessment Policy - 2007

- Significant emphasis towards improving classroom assessment:
  - Greater structure
  - Range of assessment methods
  - Templates for reporting and monitoring

- Limited information on practical strategies for teachers - on the how - i.e. the how to improve learning

- Also - need more evidence on what works best across the different schooling environments that impact on our learners

Challenge

- What are the practical (assessment) strategies that we know will result in improving learning?
- how do we introduce these strategies to our teachers, and ensure effective application?
- How feasible and cost effective are these new strategies?
- What will be the impact on teaching practice, learner performance and most important - improvement in learning?

Some things we know about learning

- Learning is an active process in which self-monitoring and self-regulation are central
- Prior learning can help or hinder new learning and needs to be taken into account
- Learning is both an individual and a social process and is assisted by others (peers & teachers)
- Feedback on learning is important but learners need help and opportunities to improve.
- Motivation and a learner's sense of self are both a condition for, and an outcome of, learning and achievement.

Key assumption

- For assessment to impact on improving learning, its potential to address the formative function of assessment must be fully realised

Key aspects of formative assessment practice

- Making learning goals explicit
- Effective questioning
- Providing appropriate feedback
- Peer and self-assessment

What do students & teachers need?

- Students need to know:
  - where they are in their learning
  - where they are going
  - how to get there
- Teachers need to know
  - where students are in their learning
  - what to do about it
- When assessment supports all these, it is formative

What do teachers need to do?

- **Seek & interpret evidence of existing learning & performance (especially through questioning)**
- **Provide feedback to help learners understand the strengths and weaknesses in their current performance, the standards aimed for, and how they might improve**
- **Provide opportunities for learners to improve their work**
- **Develop learners' own capacity to understand standards and to self-assess using criteria and exemplars**
- **These elements need to be *planned* as part of teaching**

Effect of FA on learning

Clear evidence from international experience on the benefits of effective formative assessment

- **Increase learning gains**
- **Greater participation and dialogue**
- **Improved teacher practices**
- **Improvement in learner performance**

Our challenge

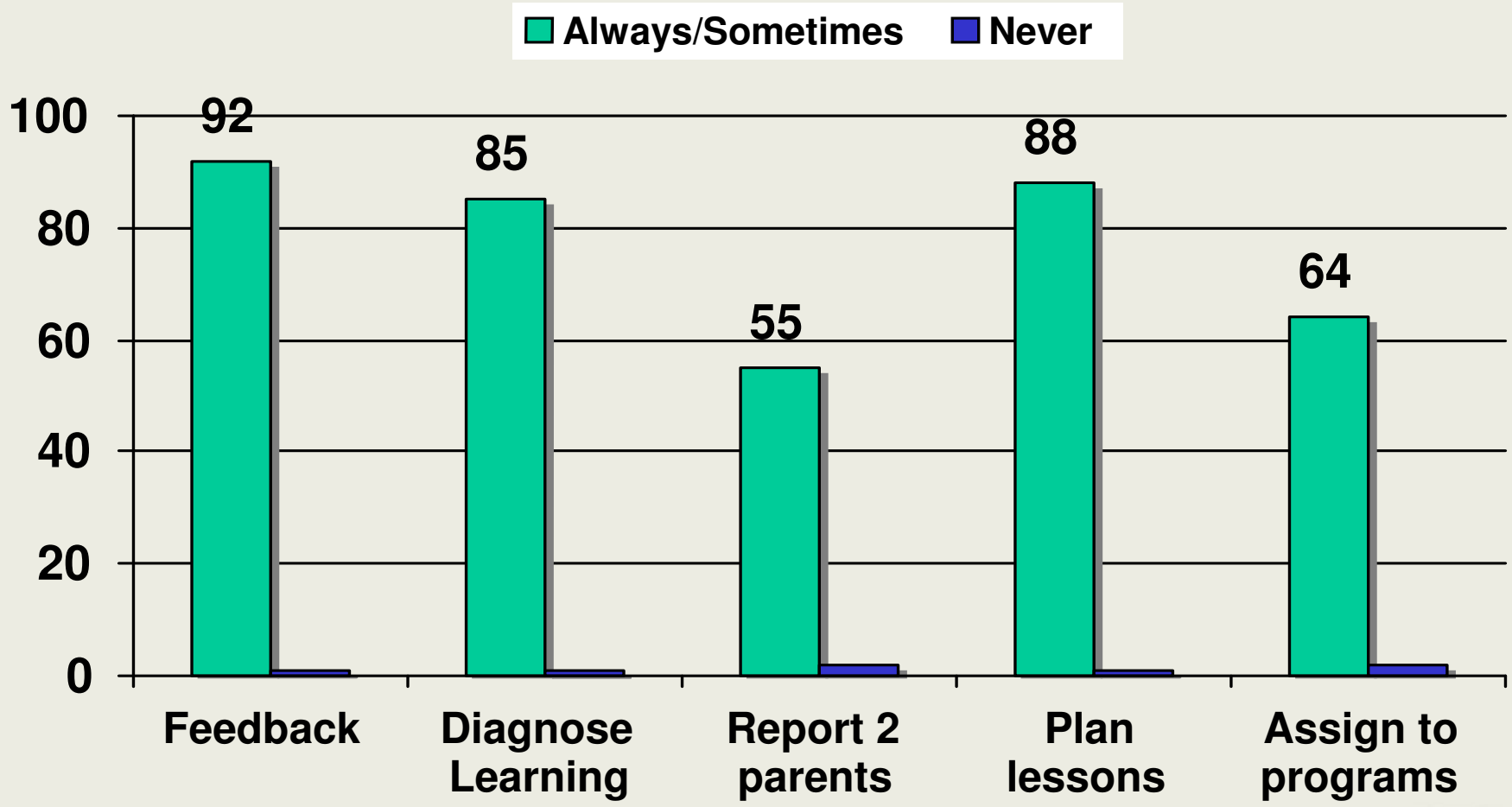
- How do we implement relevant lessons to improve our contexts

- Demonstration projects

Current practice -

Classroom Assessment

Grade 6 teachers use of assessment



Grade 6 SE - 2004

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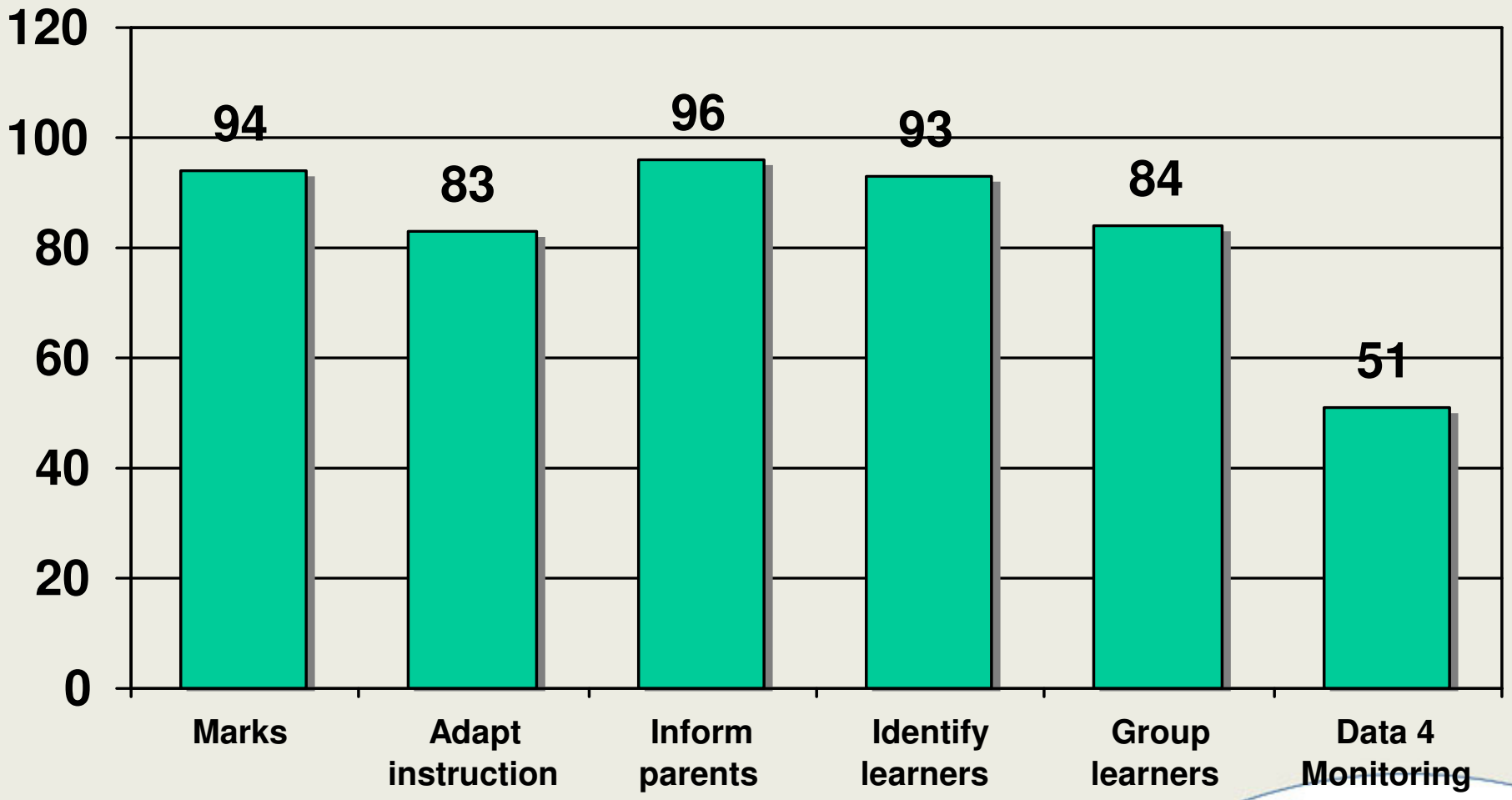
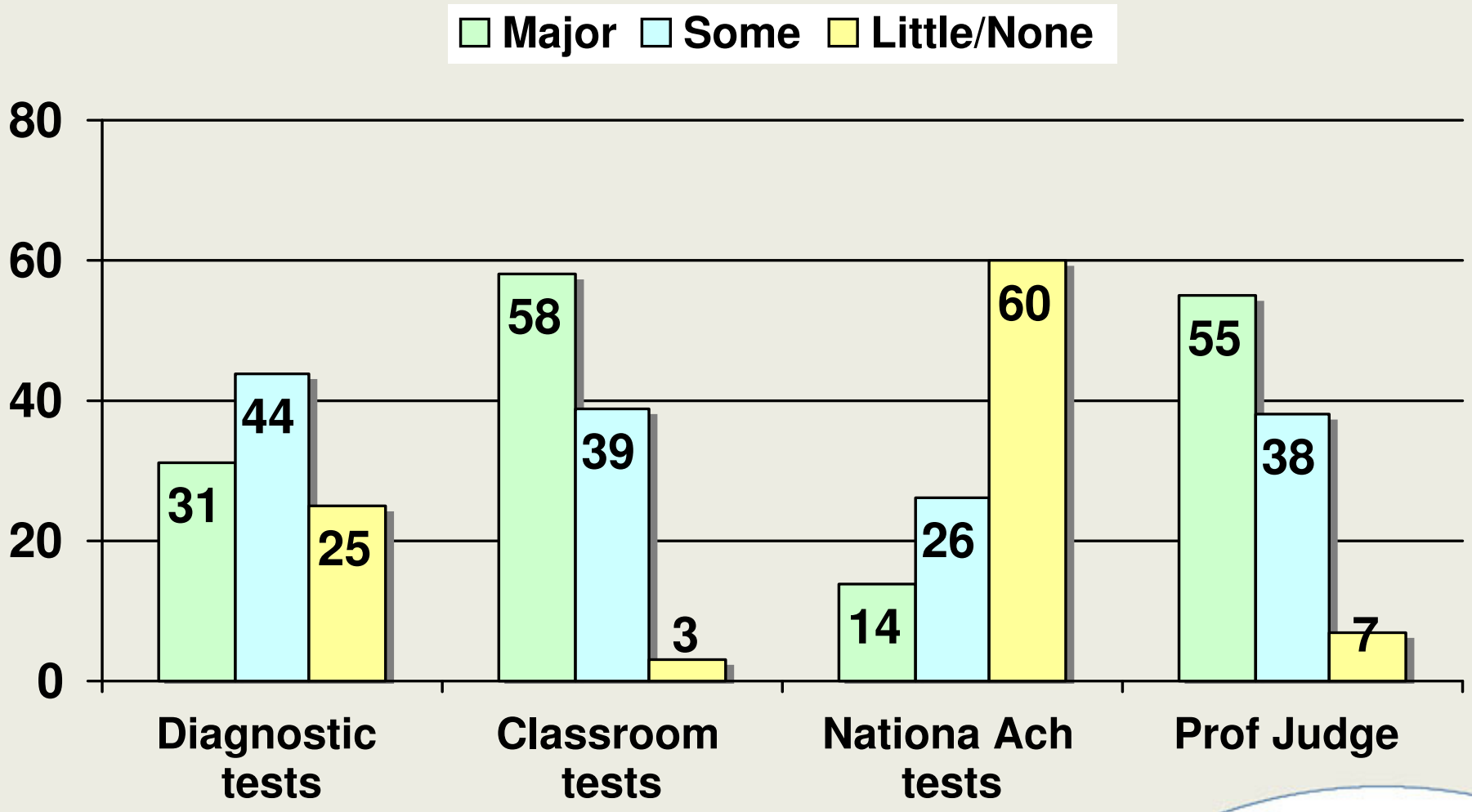
Grade 4 teachers use of assessment



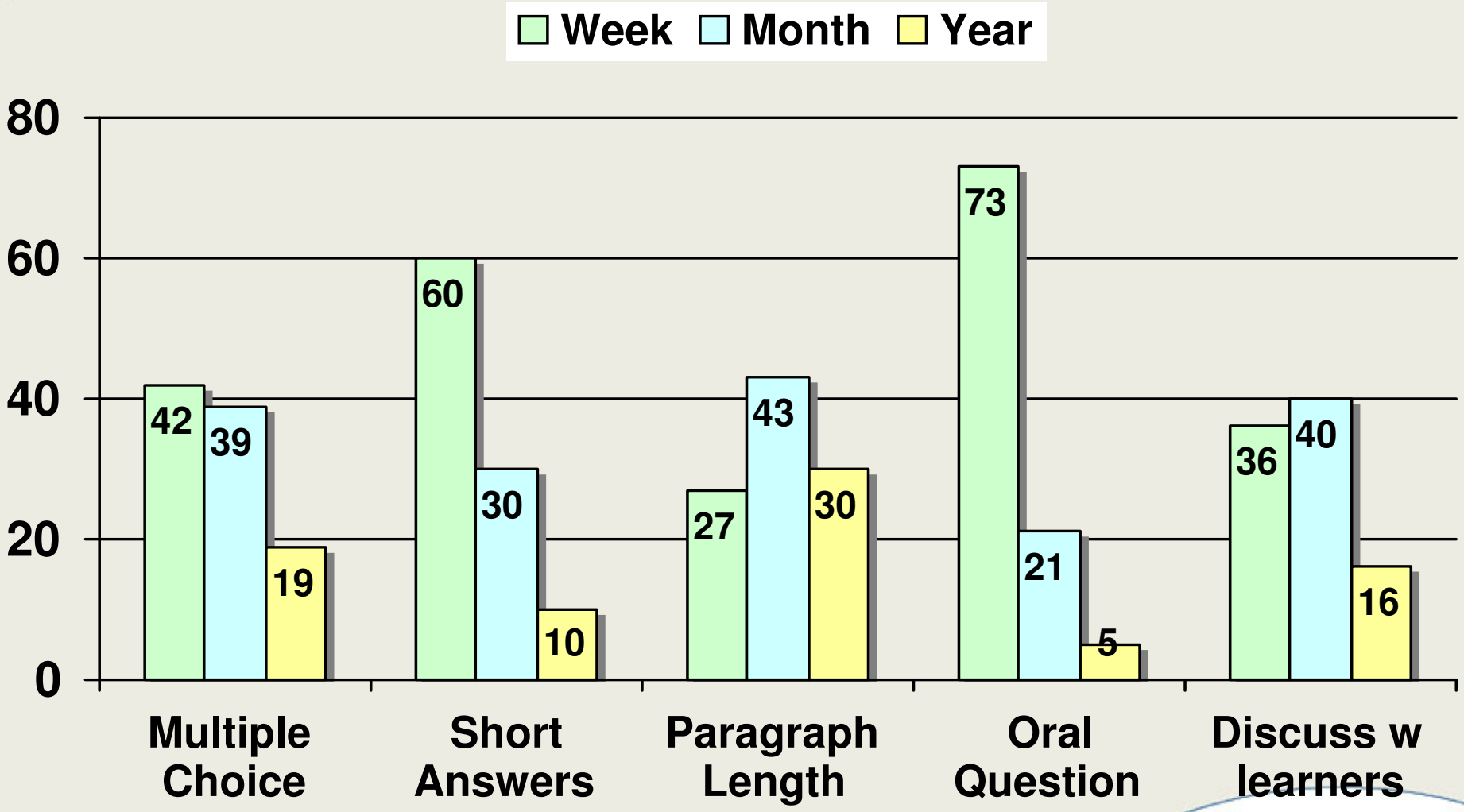
Grade 4 - PIRLS 2006

Teacher emphasis placed on



Grade 4 - PIRLS 2006

Frequency of assessment types

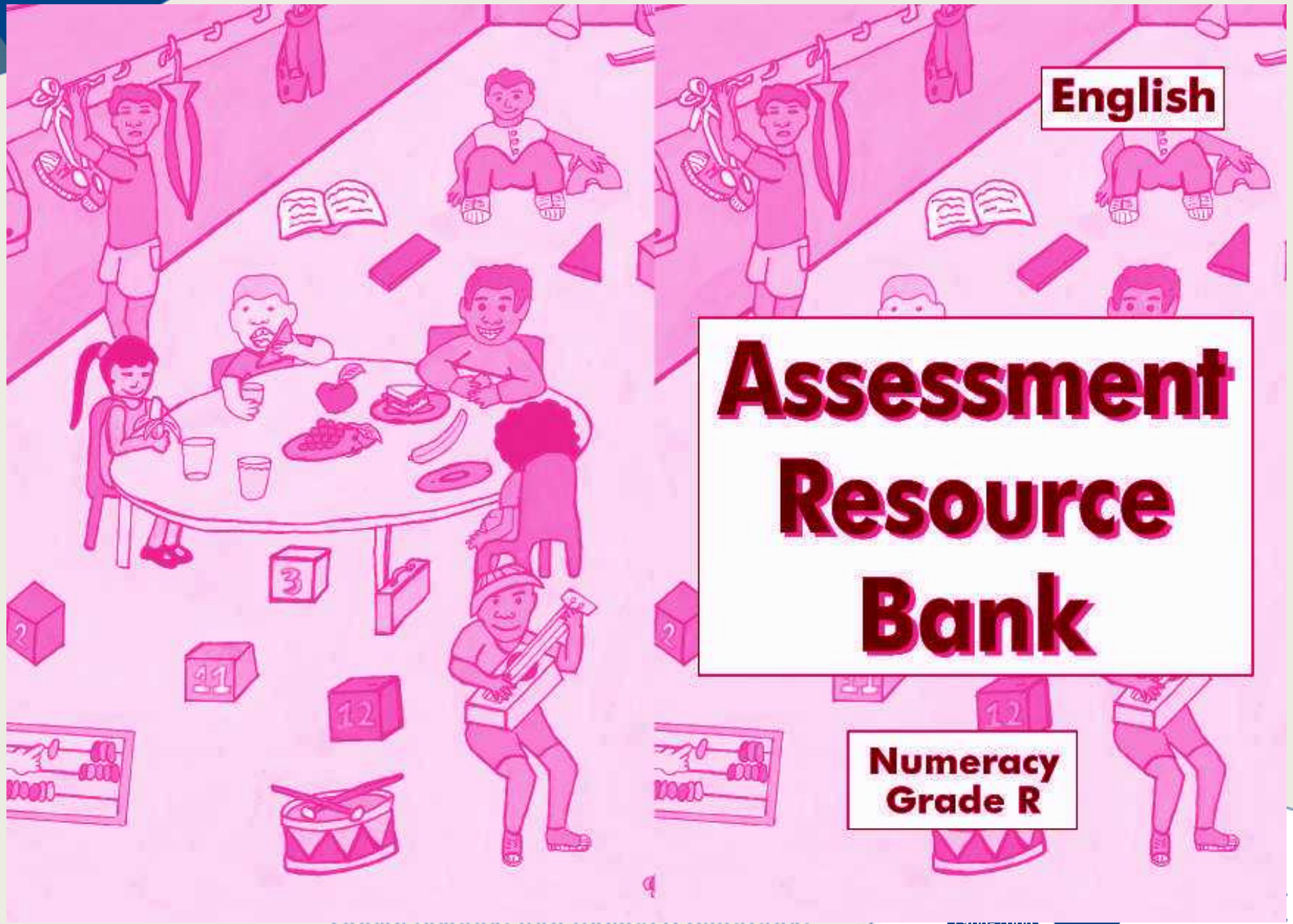


Grade 4 - PIRLS 2006

What we need ?

Strategies to support teachers

- significant gains in learning
- Integrated in teaching practices
- Limited increase in workloads
- Easy to learn and implement
- Limited training required
- Cost effective to implement


English
Assessment Resource Bank
Numeracy Grade R

What are ARB?

- A set of tasks - comprising different “testlets” used to assess specific assessment standards

- Tasks covers ALL assessment standards
- Teacher decides which tasks to administer
- Teacher decides when to administer tasks
- Administered within single period
- Easy to grade and intepret
- Available for Numeracy and Literacy
- Grades R to 6

A. **Task 11**

B. Learning Outcome: 2
The learner is able to recognise, describe and represent patterns and relationships, and solve problems using algebraic language and skills.

C. Assessment Standard
The learner copies and extends simple patterns using physical objects and drawings.

D. Skills
Representation and interpretation.
Reasoning and communication.
Describing and analysing.

E. Degree of difficulty

Easy	Moderate ✓	Difficult

G. Equipment and administration
1. Write the questions of Learner Task 11 on the board or hand out a copy of the task to each learner.
2. Explain to learners how to answer the questions but do not provide them with the correct answers.
3. Learners should have the correct vocabulary of cardinal numbers e.g. first, second, etc. to do question 3.

H. Scoring

Correct answers	Marks
1a) △△○*△△○* 1c). ▧▨△△▧▨△△ 1b) |||○*|||○* 1d) ▭⌂⌂▭⌂⌂	4 marks (1 mark each)
2a) ○◇● 2b) ◎◆◎ 2c) ⬡⬢■	3 marks (1 mark each)
3a) ⬭▭○⬭ 3b) ▭△▭▭ 3c) ○○○⬡ 3d) ○▭▭▭	4 marks (1 mark each)
4) ▭△○✚▭△○✚	2 marks (1 mark for each repetition of the pattern)
Total score	**13**

I. Levels of performance

Score	Level
11 - 13	Fully attained
9 - 10	Satisfactorily attained
6 - 8	Partially attained
0 - 5	Not attained

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Teacher Infor-mation

Learner Task

Learner Task 11

Name: _____ **Date:** _____

1. Draw these patterns in your book and complete each row.

   a) △ △ ○ * △ △

   b) | | | ○ * | | |

   c) ⧅ ⧄ △ △ ⧅

   d) ▭ ⌂ ⌂ ▭

2. Draw the next three shapes of each of these patterns.

   a) ◇ ● ○ ◇ ●

   b) ◆ ● ◆

   c) ■ ⬡ ⬡ ■ ⬡ ⬡ ⬡ ■ ⬡ ⬡

3. Draw the next four shapes of each of these patterns.

   a) ▭ ○ ⬭ ▭ ○ ⬭ ▭ ○ ____ ____ ____ ____

   b) △ ▭ ▭ △ ▭ ▭ △ ▭ ____ ____ ____ ____ ____

   c) ⬡ ○ ⬡ ○ ○ ⬡ ○ ○ ○ ⬡ ○ ____ ____ ____ ____

   d) ○ ○ □ □ □ ○ ○ □ □ □ ○ ____ ____ ____ ____

4. Draw a pattern by using the following shapes in the order as indicated. (Repeat the pattern twice)

   Last object ▭

   Second object △

   Third object ○

   First object ▭

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Poster: Street Scene

Use of ARBs by teachers

- As assessment tasks
- As lesson plans
- As examples for teaching
- As classroom exercises
- As homework exercises
- As exemplars to develop their own items

BUT –

- limited impact on
  - improving learning (learner performance)
  - Improving teaching practice

Back to the Key question

- Are there any interventions that are :
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- that would bring about <u>significant</u> gains in:
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Back to the Key question

- Is there any useful interventions that are relatively easy to understand and implement and one that would bring about significant gains in learning?

Current practice - Questioning

- Dominance of recall questions
  - Close questions - right or wrong answers
- Directed to
  - Mainly whole class
  - Also individuals
- Learners volunteer response - show of hands
- Minimum or no wait time for responses
- Teacher response (feedback) -
  - Praise
  - Redirect questions
  - Provide correct answers

Questioning strategies 1

- No hands up (only to ask questions)
- Allow learners to reflect
  - Increase wait time
  - Discuss response with a partner first
  - Write down response
- Rephrase questions
  - into open-ended questions
  - Provide alternative answers

Questioning strategies 2

- Kinds of questions
  - Balance of closed v open
  - Balance of low-order v high-order
- Brainstorming what students know/believe already
- Training students to pose questions

What next? Demonstration Project

- To determine whether these strategies relevant to our teachers

- Determine how these strategies will work:
  - with South African teachers
  - across the different school types

- Identify implementation challenges (i.e. support)

and

- Identify effect on learning and learner performance

Contact Details

Anil Kanjee
Centre for Education Quality Improvement
Human Sciences Research Council
Private Bag X41, Pretoria, 0001
134 Pretorius Street, Pretoria, 0002
South Africa

Ph ++ 27 12 302 2302
Fax ++ 27 12 302 2304
Cell ++27 83 325 9705
Home ++27 12 370 4987
akanjee@hsrc.ac.za
anil.kanjee@gmail.com
www.hsrc.ac.za

Extra slides

Feedback

- Comment-only marking
  - Comments to *cause thinking*
  - What happens as a result?
- Focused marking
- Explicit reference to criteria
- Suggestions on how to improve
  - 'Strategy cards' ideas for improvement
  - Not giving complete solutions
- Re-timing assessment
  - (eg two-thirds-of-the-way-through-a-topic test)

Sharing criteria with learners

- Explaining learning objectives at start of lesson/unit
- Criteria in students' language
- Posters of key words to talk about learning
  - eg describe, explain, evaluate
- Planning/writing frames
- Annotated examples of different standards to 'flesh out' assessment criteria
- Opportunities for students to design their own tests and marking schemes

Peer and self-assessment

- Students assessing their own/peers' work
  - with marking schemes
  - with criteria
  - with exemplars
- Identifying group weaknesses
- Self-assessment of confidence and uncertainty
  - Traffic lights
  - Smiley faces
- End-of-lesson students' review