FORMAT ON AN ANALOGUE CLOCK- GRADE 5

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INTRODUCTION

In many Western Cape schools, learners are under-performing in the WCED Grade 6 Systemic Tests. The WCED LITNUM results of 2012 (Table 1) shows that only 26.4% of the Grade 6 learners were able to score 50% or more. In contrast, the Grade 3's achieved a pass rate of 51.5%. In this regard, learners generally perform most poorly in MEASUREMENT. Why the drop in learner performance between Grade 3 and Grade 6? We are of the opinion that the drop in performance may in part be attributed to the fact that teachers in the Intermediate Phase (IP) are too quickly adopting teaching strategies that too heavily rely on abstract thought. Our intent of this presentation is to show that, even at the IP level, the pedagogic situation should incorporate the use of concrete apparatus and to give an indication of learner performance in this regard.

Mathematics			
	% pass rate in 2011	% pass rate in 2012	Diff. 2012/2011
Grade 3	47.6%	51.5%	+ 3.9%
Grade 6	23.4%	26.4%	+ 3%
			http://wced.school.za/comms/press/2013/7_14jan.html

Table 1: 2011/2012 WCED LITNUM results

CONTENT

We will then demonstrate how we used various resources to facilitate reading time in 12-hour format on an analogue clock. The activities include:

- A mental exercise on the previous knowledge of the learners regarding time, using questions such as: How many days are there in one year? How many months in a year? How many weeks in a year? How many hours in a day, minutes in an hour, seconds in a minute, etc.?
- Some conversation about the sundial, minute glass and other objects used to tell time e.g. the candle (when daddy came to visit mommy before they were married) was called the "opsitkers";
- The use of diagrams to discuss the ideas 'to the hour' and 'past the hour'

- Introducing an analogue clock (see Figure 1) from the Maths, Science and Technology Kit supplied by WCED - to indicate why it is called analogue & the function of the 'hands'
- How various times are read on the analogue clock, demonstrating how the learners are explicitly and continually involved in lesson.

The worksheet, on which they have to record times indicated on the 'clocks' on the worksheet, will then be discussed

Consolidation activity:

To consolidate the lesson, we play a Loop game that consists of 26 cards (see examples below – Figure 2). These are available on the www.superteacherworksheets.com website. Each card has a representation of a clock indicating a different time, with the time written below. One learner will say "I have ….." and read the time on the clock and then ask "Who has ….?" and then read the time at the bottom. This will continue until all the cards have been read and therefore each learner will have a turn to read his or her time. The answer chain (Figure 3) is shown below.

CONCLUSION

Some outcomes of the lesson:

- learners overcame a general problem where they say "45 minutes past 2 o'clock", instead of "15 minutes to 3 o'clock"
- learners displayed greater confidence in reading analogue time
- learners were able to draw the conclusion that 'adding 12 to each number on the clock' gave the 'pm' times - a consequence of the numbers 13 to 24 on the clock face

The Loop game can be played at any time throughout the year - as a practice activity.

Figure 1

I Have...Who Has...
Clock Reading Game

I have

Who has
11:47 ?

Card A

Super Teacher Worksheets - www.superteacherworksheets.com

I Have...Who Has...
Clock Reading Game

I have

Who has
3:09 ?

Card B

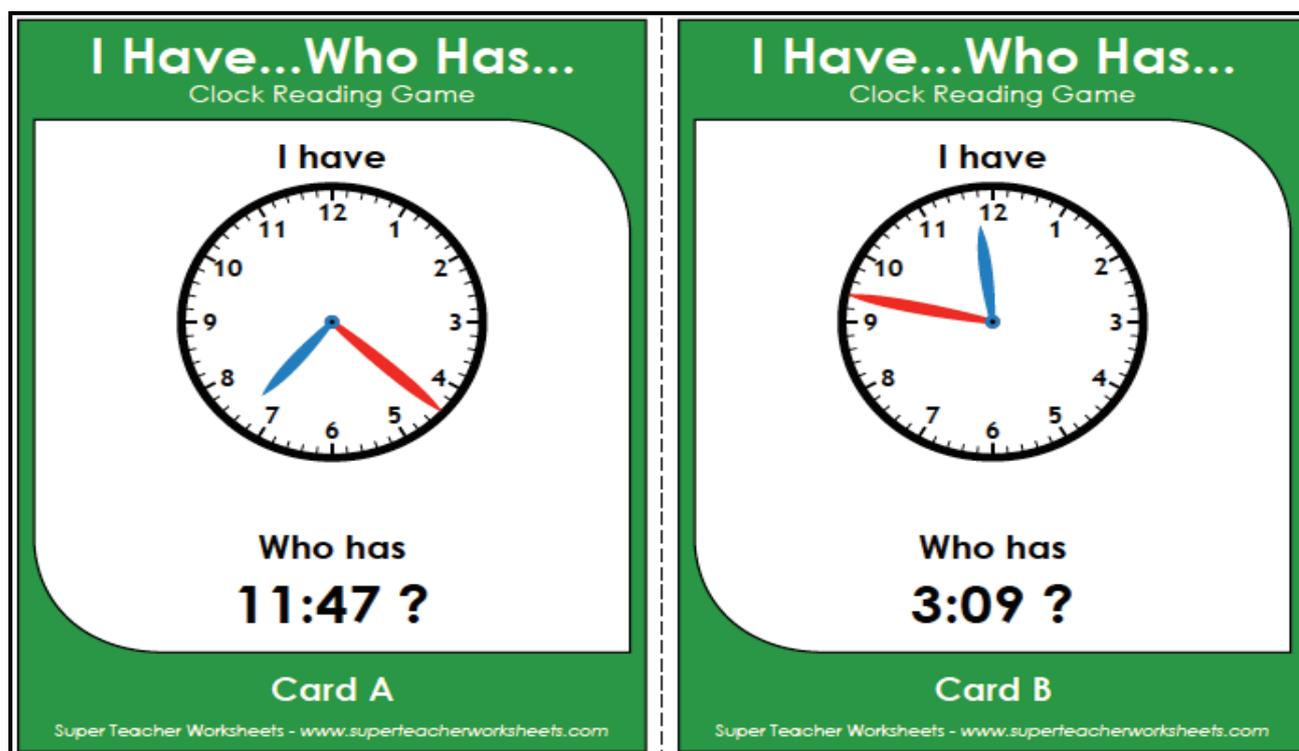Super Teacher Worksheets - www.superteacherworksheets.com

Figure 2

Answer Chain:

A: I have 7:22. Who has 11:47?

B: I have 1:47. Who has 3:09?

C: I have 3:09. Who has 8:35?

D: I have 8:35. Who has 1:17?

E: I have 1:17. Who has 6:42?

F: I have 6:42. Who has 11:29?

G: I have 11:29. Who has 4:45?

H: I have 4:45. Who has 9:39?

I: I have 9:39. Who has 2:06?

J: I have 2:06. Who has 7:56?

K: I have 7:56. Who has 12:30?

L: I have 12:30. Who has 5:24?

M: I have 5:24. Who has 10:43?

N: I have 10:43. Who has 3:33?

O: I have 3:33. Who has 8:14?

P: I have 8:14. Who has 1:48?

Q: I have 1:48. Who has 6:10?

R: I have 6:10. Who has 11:13?

S: I have 11:13. Who has 4:59?

T: I have 4:59. Who has 9:07?

U: I have 9:07. Who has 2:00?

V: I have 2:00. Who has 7:39?

W: I have 7:39. Who has 12:54?

X: I have 12:54. Who has 5:50?

Y: I have 5:50. Who has 10:21?

Z: I have 10:21. Who has 7:22?

Figure 3